

Springbank Reservoir Project Alberta Transportation 1st Floor, 4999 – 98 Avenue Edmonton AB T6B 2X3 Phone: 780-644-7780

December 16, 2019

Jennifer Howe

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Sent via email to: jennifer.howe@canada.ca

Dear Ms. Howe:

Subject: Outcome of the review of Alberta Transportation's responses to federal information requests for the Springbank Off-Stream Reservoir Project

Please find enclosed, Alberta Transportation's submission of responses to *Annex 1 – Gaps identified in CEAA IR Round 1 Part 2* dated August 6, 2019. In addition, the responses to information requests IR3-19, IR3-29, IR3-30, IR3-41 and IR3-42 from *Annex 1 – Gaps identified in CEAA IR Round 1 Part 3* dated August 21, 2019 are also included in this submission. This concludes Alberta Transportation's responses to the Agency's conformity review of the federal information requests for the Springbank Off-Stream Reservoir Project.

We trust the enclosed is satisfactory. Should you have any questions or concerns regarding the submission, kindly contact me at 780-644-7780, or by email at matthew.hebert@gov.ab.ca.

Sincerely,

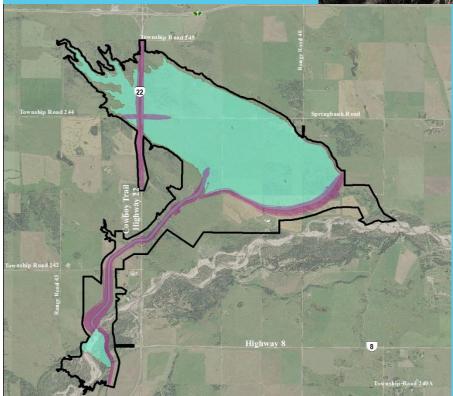
<Original Signed>

Matthew Hebert Executive Director, Transportation Policy Transportation Services Division Alberta Transportation Cc:

Wayne Speller, Golder Associates Ltd.
Laura Friend, Natural Resources Conservation Board
Meghan Jurijew, Alberta Environment and Parks

Springbank Off-stream Reservoir Project





Response to
Agency Conformity
Review of
Round 1 Part 2,
dated August 6, 2019



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Appendix 4-1 Indigenous Participation Plan (IPP)

Appendix 9-1 Draft Guiding Principles and Direction for Future Land Use

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List of Acronyms and Short Forms

ACMSW Alberta Culture, Multiculturalism and Status of Women

AEP Alberta Environment and Parks

AVC animal-safety collision

CEAA Canadian Environmental Assessment Agency

CEAA 2012 Canadian Environmental Assessment Act, 2012

COPC chemical of potential concern

CPUE catch-per-unit-effort

CRA commercial, recreational, and aboriginal fisheries

DFO Fisheries and Oceans Canada

ECCC Environment and Climate Change Canada

ECN Ermineskin Cree Nation

EIA environmental impact assessment

EIS environmental impact statement

ESRD Environment and Sustainable Resource Development

FOS Foothills Ojibway Society

HRA Historical Resources Act

HRIA Historical Resource Impact Assessment

IR information request

IPP Indigenous Participation Plan

GoA Government of Alberta

GPS Global Positioning System

KFN Kainai First Nation/Blood Tribe

KWBZ Key Wildlife and Biodiversity Zones

LAA local assessment area



LBT Louis Bull Tribe

LUA Land Use Area

MFN Montana First Nation

MNAR3 Métis Nation of Alberta, Region 3

NWMP north west mounted police

PDA Project development area

PMF probable maximum flood

PN Piikani Nation

QAES qualified aquatic environmental specialist

RAA regional assessment area

RAP Restricted Activity Period

SARA Species at Risk Act

SEV severity of ill effects

SCN Samson Cree Nation

SCRT Specific Concerns and Response Tables

SN Siksika Nation

SNN Stoney Nakoda Nation

SoC Statements of Concern

SR1, the Project Springbank Off-stream Reservoir Project

TAG Technical Advisory Group

TDR technical data report

TEK traditional ecological knowledge

TLRU traditional land and resource use

TN Tsuut'ina Nation

TSS total suspended sediment



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TUS Traditional Use Study

VC valued component

WMMP Wildlife Mitigation and Monitoring Plan



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Conformity IR2-01

<u>Topic:</u> Impacts to Rights

Sources:

EIS Guidelines Part 2, Section 5

EIS Volume 2

EIS Volume 3A, Sections 14.1.3; 14.5

Piikani Nation – Technical Review of EIS, June 15, 2018 (CEAR #48)

Tsuut'ina First Nation, Ermineskin Cree Nation, and Kainai First Nation – Technical Review of the EIS - Annexes – Combined (CEAR # 46, 47, 50)

Samson Cree Nation – Springbank Off-Stream Reservoir Project Written Submission – June 25, 2018 (CEAR # 52)

Montana First Nation – Review of Springbank Off-Stream Reservoir EIA, June 2018 (CEAR # 51)

Ermineskin Cree Nation and Blood Tribe – Springbank EIS Technical Comments (CEAR # 46, 47)

CEAA Information Requests Related to the Environmental Impact Statement Round 1 Part 2, IR2-01

Alberta Transportation Responses to IR Round 1, SR1 CEAA IR Package 2 and Appendix IR1-1, June 14, 2019

Context and Rationale

In CEAA Information Requests Related to the Environmental Impact Statement Round 1 Part 2, IR2-01, the Agency required additional information to support its understanding of potential impacts to rights. The information request directs the proponent to provide information regarding: the conditions that support the exercise of rights; potential pathways of effects; criteria for assessing the severity of impacts to rights; Indigenous-group specific analysis, discussion, and conclusions on potential impacts to the exercise of rights; and mitigation specific to potential impacts to rights. The Agency's IR2-01 states that assessing impacts to Aboriginal and treaty rights is not limited to assessing environmental effects on the current use of lands and resources for traditional purposes. The cover letter to the information requests and the EIS Guidelines further direct the proponent to present points of disagreement between the views of Alberta Transportation and Indigenous groups, along with a description of efforts undertaken to reconcile these differences and a rationale for conclusions.



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In Alberta Transportation's response to IR2-01 parts a and b, Alberta Transportation provides raw data in the form of excerpts from Indigenous groups' submissions, correspondence, and/or meeting notes pertaining to conditions that support the exercise of rights and potential pathways of effects (Tables IR1-1 through IR1-3). The selection of information included is narrowly scoped to conditions supporting and pathways of effects to current use. This results in the exclusion of other factors that support the exercise of rights and associated pathways of effects such as cultural identity and well-being, governance, and knowledge transmission.

In Alberta Transportation's response to IR2-01 parts c and d, Alberta Transportation repeats information provided in the EIS. The response presents criteria used for the 'Characterisation of Residual Effects of Traditional Land and Resource Use' as the criteria for assessing effects on Section 35 rights and subsequently draws conclusions on potential impacts to rights based on the effects and access to traditional resources and/or traditional use sites. The response also references draft principles of future land use for the Project. However, other than identifying the primary use as flood mitigation, the draft principles included in the response (Annex IR1-02) are vague and do not offer reassurance that impacts to rights will be mitigated through access to the proposed Land Use Area. The discussion of and conclusions drawn on potential impacts to rights do not demonstrate consideration of Indigenous groups' views.

Alberta Transportation's response to IR2-01 part e states that Alberta Transportation considered recommendations and mitigation measures suggested by Indigenous groups in assessing residual environmental effects, but that Alberta Transportation is still in the process of responding to Indigenous groups' concerns.

Alberta Transportation's response to IR2-01 includes Appendix IR1-1. Specific Concerns and Response Tables included in this appendix list numerous concerns raised by Indigenous groups with respect to impacts to rights that are unresolved and the application of inappropriate methodology (i.e., relying on effects to current use). Many of the matters within the Specific Concerns and Response Tables raised by Indigenous groups that are identified as related to impacts to rights are not acknowledged or discussed in the response to IR2-01. As such, there are discrepancies in the information provided throughout the response package as a whole.

Information Requests:

- a) Using the information provided by Indigenous groups, as presented in Alberta
 Transportation's response to IR2-01 and the Specific Concerns and Response Table:
 - Identify and apply the criteria of Indigenous groups for assessing impacts to rights.
 Present a discussion on Indigenous groups' views and conclusions on the proposed mitigation specific or related to impacts to rights, and the residual potential to impacts to rights.
 - Identify and discuss areas of disparity between the views and conclusions of Indigenous
 groups and Alberta Transportation regarding the Project's potential impacts to rights,
 efforts made to reconcile the disparities, and rationale for conclusions on matters for
 which disparity in views remains.



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Response

As stated in Alberta Transportation's response to Round 1 Canadian Environmental Assessment Agency (CEAA) Package 2, information request (IR) IR2-01, Alberta Transportation acknowledges that the specific conditions that support the exercise of rights are best identified by Indigenous groups themselves. To this end, Alberta Transportation has been conducting Indigenous engagement prior to and throughout the environmental assessment process, which includes sharing of Springbank Off-stream Reservoir Project (SR1, the Project) information and updates, on-going communication about the Project, face-to-face meetings, facilitation of site visits, and funding for Project-specific Traditional Use Studies (TUS). However, Alberta Transportation acknowledges that the provision of this information is at the priority and discretion of the participating Indigenous group.

Specific engagement activities conducted with each Indigenous group engaged on the Project are summarized in Table 1-1. Further information about engagement with each Indigenous group is in Volume 1, Section 7 and Volume 4, Appendix B of the environmental impact assessment (EIA).

Table 1-1 Engagement Activities with Each Participating Indigenous Group

Indigenous Group	Engagement Activity		
Kainai First Nation	held 9 meetings		
	 conducted 14 days of facilitated site visits to Project site with Elders and knowledge holders 		
	funded Project-specific TUS		
	 maintain ongoing email and phone communication to share Project information and updates 		
Siksika Nation	held 7 meetings		
	 conducted 8 days of facilitated site visits to Project site with Elders and knowledge holders 		
	funded Project-specific TUS		
	held a traditional land and resource use (TLRU) workshop		
	maintain ongoing email and phone communication to share Project information and updates		
Piikani Nation	held 7 meetings		
	 conducted 14 days of facilitated site visits to Project site with Elders and knowledge holders 		
	funded Project-specific TUS		
	maintain ongoing email and phone communication to share Project information and updates		



Table 1-1 Engagement Activities with Each Participating Indigenous Group

Indigenous Group	Engagement Activity				
Stoney Nakoda	held 12 meetings				
Nations	 conducted 11 days of facilitated site visits to Project site with Elders and knowledge holders 				
	 funded Project-specific TUS (not yet submitted) 				
	held a TLRU workshop				
	 maintain ongoing email and phone communication to share Project information and updates 				
Tsuut'ina Nation	held 18 meetings				
	 conducted 22 days of facilitated site visits to Project site with Elders and knowledge holders 				
	funded Project-specific TUS				
	held a TLRU workshop				
	funded further traditional land use fieldwork				
	 maintain ongoing email and phone communication to share Project information and updates 				
Ermineskin Cree	held 4 meetings				
Nation	 conducted 1 day facilitated site visit to Project site with Elders and knowledge holders 				
	approved funding for Project-specific TUS				
	 maintain ongoing email and phone communication to share Project information and updates 				
Louis Bull Tribe	held 4 meetings				
	 conducted 1 day facilitated site visit to Project site with Elders and knowledge holders 				
	funded Project-specific TUS				
	 maintain ongoing email and phone communication to share Project information and updates 				
Montana First Nation	held 3 meetings				
	approved funding for Project-specific TUS				
	 maintain ongoing email and phone communication to share Project information and updates 				
Samson Cree Nation	held 3 meetings				
	held a TLRU workshop				
	 maintain ongoing email and phone communication to share Project information and updates 				
Métis Nation of	held 5 meetings				
Alberta, Region 3	funded Project-specific TUS				
	held a TLRU workshop				
	maintain ongoing email and phone communication to share Project information and updates				



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Table 1-1 Engagement Activities with Each Participating Indigenous Group

Indigenous Group	Engagement Activity		
Foothills Ojibway	held 2 meetings		
	 maintain ongoing email and phone communication to share Project information and updates 		

Through the Indigenous engagement for the Project, Alberta Transportation has provided numerous opportunities for Indigenous groups to share their views on potential effects to Section 35 rights and provide feedback on how Section 35 rights have been considered in the environmental impact statement (EIS). In addition to regular ongoing engagement activities, these opportunities included:

Funding to Conduct TUS

Alberta Transportation has approved funding for TUS funding from Kainai First Nation, Siksika Nation, Piikani Nation, Tsuut'ina Nation, Stoney Nakoda Nations, Ermineskin Cree Nation, Louis Bull Tribe, Montana First Nation and Métis Nation of Alberta, Region 3. Prior to filing the EIA, Alberta Transportation received a joint interim TUS from Kainai First Nation and Siksika First Nation and a final TUS from Piikani Nation. Since that time, final TUS have been received from Tsuut'ina Nation, Kainai First Nation, Ermineskin Cree Nation, and Métis Nation of Alberta, Region 3.

No requirements, restrictions or requests were placed on the TUS by Indigenous groups, but it has been Alberta Transportation's expectation that the TUS would include a description of traditional use activities and views on Section 35 rights in relation to the Project. As TUS's have been received by Alberta Transportation, these have been reviewed and a written response provided to Indigenous groups addressing their comments and concerns. Alberta Transportation has met with Tsuut'ina Nation, Kainai First Nation, Ermineskin Cree Nation, and Louis Bull Tribe to discuss the response to their TUS. Alberta Transportation will offer to meet with Piikani Nation and Métis Nation of Alberta, Region 3.

Field Visits

As noted in Table 1-1, Alberta Transportation has facilitated 71 days of site visits with 7 Indigenous groups. These site visits provided an opportunity for Indigenous groups to see where the Project will be located, how the Project would be operated, identify traditional use sites, areas, activities and practices that might be intersected by the Project, consider potential mitigation measures, and identify potential impacts to the exercise of Section 35 rights. These site visits have been ongoing since the start of the Project with more planned for the near future.



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Providing Draft TLRU Effects Assessments to Indigenous Groups

Prior to filing the EIS, Alberta Transportation provided drafts of Volume 3A, Section 14.2 and Volume 3B, Section 14.2.2 (TLRU Effects Assessment for Construction and Dry Operations and TLRU Effects Assessment for Flood and Post-flood Operations, respectively) to Indigenous groups for review and comment.

TLRU Workshops

The intention of the TLRU workshops was to to obtain input and feedback on the draft TLRU Effects Assessments (Sections 14 of Volumes 3A and 3B), that had previously been provided to Indigenous groups, obtain input on proposed mitigation measures and discuss how Project-Specific Concerns have been addressed in the assessment of TLRU, including Indigenous groups' perspectives on assessment methodology, proposed mitigation, Project-Specific Concerns and how the Project may affect the exercise of section 35 rights. The TLRU workshops were facilitated by CEAA Project Managers and the structure and format for each workshop was developed through engagement with individual Indigenous groups. Alberta Transportation held workshops with Stoney Nakoda Nations (February 12, 2018), Métis Nation of Alberta, Region 3 (February 22, 2018), Samson Cree Nation (February 23, 2018), Siksika Nation (February 26, 2018), and Tsuut'ina Nation (March 1, 5, 6, and 7, 2018).

Correspondence

On January 29, 2019, Alberta Transportation sent a letter to the Indigenous groups engaged on the Project seeking additional feedback regarding each Indigenous group's views on the exercise of its Section 35 rights. In this letter Alberta Transportation indicated that Indigenous groups' input would be incorporated verbatim into responses to the CEAA information requests (IRs). Only Tsuut'ina Nation, Louis Bull Tribe and Métis Nation of Alberta, Region 3 formally responded to this letter. Tsuut'ina Nation advised that they required more information, especially with respect to potential effects on groundwater and surface water, before they were prepared to identify potential effects on their Section 35 rights. Both Louis Bull Tribe and Métis Nation of Alberta, Region 3 provided information on their views on the nature and extent of their Section 35 and how the Project may adversely affect these rights. Alberta Transportation has reviewed this information and has continued to meet with Louis Bull Tribe and is committed to offering to meet with Métis Nation of Alberta, Region 3 to better understand the potential effects to Section 35 rights and discuss the effectiveness of proposed mitigation measures.

Additionally, Kainai First Nation, Piikani Nation, Tsuut'ina Nation, Ermineskin Cree Nation, Louis Bull Tribe, Montana First Nation, Samson Cree Nation, and Métis Nation of Alberta, Region 3 have presented their views on their Section 35 rights in technical reviews, Statements of Concern (SoCs) or other material submitted to the CEAA. Alberta Transportation has reviewed these submissions and prepared written responses for each Indigenous group. This material was considered in Alberta Transportation's response to Round 1 CEAA Package 2, IR2-01.



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- a) Using the information provided by Indigenous groups, as presented in Alberta Transportation's response to IR2-01 and the Specific Concerns and Response Table:
 - Identify and apply the criteria of Indigenous groups for assessing impacts to rights.
 Present a discussion on Indigenous groups' views and conclusions on the proposed mitigation specific or related to impacts to rights, and the residual potential to impacts to rights.

Information regarding Indigenous groups views of Section 35 rights in relation to the Project obtained by Alberta Transportation through the Indigenous Engagement Program for the Projects and review of Indigenous groups submissions to CEAA were presented in Table IR1-1 contained in Alberta Transportation's response to Round 1 CEAA Package 2, IR2-01. The intent of Table 1-1 was to present Indigenous groups' views on their Section 35 rights in their own words.

Through the Indigenous Engagement Program for the Project as described above, Alberta Transportation received no feedback from Indigenous groups regarding the methodology for the TLRU effects assessment or the approach to assessing impacts to rights prior to filing the EIS. Nor did Indigenous groups identify alternative criteria for assessing impacts to rights prior to filing the EIA. Alberta Transportation notes that the methodology employed for the TLRU Effects Assessment in the EIA, including the assessment of impacts to rights, conforms to the Canadian Environmental Assessment Act, 2012 (CEAA 2012) and the CEAA Guidelines for the Project and reflects standard environmental assessment practice appropriate for the scope and nature of the Project.¹

Subsequent to the filing of the EIA in March 2018, Kanai First Nation and Ermineskin Cree Nation, in separate submissions to CEAA, both reference the Methodology for Assessing Potential Impacts on the exercise of Aboriginal and Treaty Rights of the Proposed Frontier Oil Sands Mine² co-developed between CEAA and a Treaty 8 First Nation as an example of an assessment of impacts to rights (Frontier Oil Sands Mine Project Canadian Environmental Agency Registry (CEAR) #39, available at https://www.ceaa.gc.ca/050/documents/p65505/122764E.pdf). In Round 1 CEAA Package 2, IR2-01, CEAA also referenced the Frontier methodology in the Context and Rationale to the IR.

Tsuut'ina Nation also mentioned this approach in meetings with Alberta Transportation on September 17, 2019, and in correspondence dated October 17, 2019 (received by Alberta Transportation November 8, 2019). As of the date of filing, Alberta Transportation is reviewing the

¹ Standard assessment methods have been developed with reference to federal guidance material for the conduct of federal environmental assessment, including CEAA 2012; CEAA's Draft Technical Guidelines for assessing the Current Use of Lands and Resources for Traditional Purposes under CEAA 2012 (December 2015); CEAA's Considering Aboriginal traditional knowledge in environmental assessments conducted under CEAA -- Interim Principles (2016); CEAA Environmental Impact Statement Guidelines for the Springbank Off Stream Reservoir Project (2016); CEAA's Assessing Cumulative Environmental Effects under the CEAA, 2012, Interim Technical Guidance (March 2018); CEAA's Assessing Cumulative Environmental Effects under the CEAA, 2012, Operational Policy Statement (March 2015); CEAA's Cumulative Effects Assessment Practitioners' Guide (1999); and Table A-3 of the National Energy Board Filing Manual (2017).

² Referred to hereinafter as the Frontier methodology.



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October 17, 2019 letter and intends to offer to meet with Tsuut'ina Nation to understand their perspective further.

Upon receipt of the Round 1 CEAA Package 2, IR2-01 and obtaining Ermineskin Cree Nation and Kainai First Nation's submissions to CEAA, Alberta Transportation closely reviewed the Frontier methodology. Alberta Transportation is committed to working respectfully with Indigenous groups and developing engagement strategies that respond to the needs and interests of individual Indigenous groups. However, Alberta Transportation notes that the Frontier methodology is dated May 25, 2018 (two months after the EIA was submitted) and, therefore, was not available for consideration in the TLRU effects assessment.

While there is much in the proposed methodology to inform future Project assessments, the Frontier methodology has several stated limitations and it does not represent a prescriptive, allencompassing approach that can be routinely applied in all circumstances.

In this regard, Alberta Transportation notes that:

- 1) The Frontier methodology was co-developed with Mikisew Cree First Nation and the CEAA for an oil sands mine on Crown lands in northeastern Alberta. The Frontier Mine underwent an environmental assessment by a Joint Review Panel under CEAA 2012, which is a different process than is used for this Project; Alberta Environment and Park's (AEP's) process to consider an EIA under the Alberta Environmental Protection and Enhancement Act. The Project's assessment methodology complies with the requirements of AEP's final Terms of Reference (issued on February 5, 2015), the CEAA Guidelines for an Environmental Impact Statement (issued on August 10, 2016), and CEAA Annex 2: A) Early Technical Issues and B) Advice to the Proponent (issued December 19, 2017), and followed standard assessment methods appropriate for the scope and nature of the Project.
- 2) The Frontier methodology was intended to provide direction to the Joint Review Panel for determining impacts to Aboriginal and Treaty rights in the Panel Report rather than guidance for proponents in conducting effects assessments.
- 3) The Frontier methodology contains a caveat about use by other parties or for other purposes.³ None of the Indigenous groups on this Project were engaged with the CEAA in developing EIA methodology for this Project, which the Frontier methodology identifies as a key principle for co-developed Crown-Indigenous group EIA methodology. and states: "Consistent with the collaborative approach that led to this methodology and principles contained herein, Mikisew Cree First Nation and CEAA strongly recommend that this methodology not be used in other contexts without prior engagement with potentially affected indigenous groups."

Stantec

³ See "Note Regarding Use of this Methodology by Third Parties or for Purposes Other than the Evaluation of the Frontier Project" p. 26.

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- 4) This Project is predominately situated on private land in southern Alberta that has been used for ranching and agriculture since the late 1800s; therefore, the context for the exercise of Section 35 rights is substantively different than that for which the Frontier methodology was developed.
- 5) The varying nature, scale and setting of each project determine not only the relevant regulatory requirements, but they are also key considerations in the design of proponent-led engagement programs, the identification of project interactions and potential effect pathways. The Indigenous Engagement Program for the Project and the assessment of effects conducted in the EIA are appropriate for the nature, scale, and location of this Project.

The TLRU effects assessment was conducted in accordance with best practices for assessing effects on Indigenous interests and provides a thorough, robust assessment based the best available information. Through the Indigenous Engagement Program for the Project, Alberta Transportation sought direct input from Indigenous groups about their views on the nature and scope of their Section 35 rights, and how the meaningful exercise of rights might be affected by the Project.

Alberta Transportation has further consolidated and analyzed feedback received to date regarding Project-related effects on Section 35 rights and traditional uses, including SoCs, engagement meetings, communications, and TUS reports received. This information has been compiled into Specific Concerns and Response Tables (SCRTs) (provided in Appendix 1-2 of this response). The TUS conducted by Indigenous groups provide most of this information. Alberta Transportation reviewed and analyzed the results of the TUS received and has provided written responses to each Indigenous group that submitted a TUS; these appear in Appendix 1-1 of this response. Alberta Transportation has met with or will meet with each Indigenous group that has submitted a TUS to receive their comment and feedback. Both Ermineskin Cree Nation and Kainai First Nation have advised Alberta Transportation that they would provide a formal written reply. However, Alberta Transportation has not yet received these replies.

Information regarding impacts to rights was not received from Foothills Ojibway Society, Ktunaxa Nation Council, Métis Nation of British Columbia, or Montana First Nation.



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- a) Using the information provided by Indigenous groups, as presented in Alberta Transportation's response to IR2-01 and the Specific Concerns and Response Table:
 - Identify and discuss areas of disparity between the views and conclusions of Indigenous
 groups and Alberta Transportation regarding the Project's potential impacts to rights,
 efforts made to reconcile the disparities, and rationale for conclusions on matters for
 which disparity in views remains.

With respect to areas of disparity, Alberta Transportation acknowledges differences in views on the Project's potential impacts to rights remain between Alberta Transportation and Indigenous groups. These include concerns about using "current use of lands for traditional purposes" as a proxy for evaluation of effects to treaty rights, assessment of intangible values, lack of attention to the historical context of traditional use of the area, and the use of traditional knowledge to inform existing conditions and conclusions about potential effects.

As explained in Round 1 CEAA Package 2, IR2-01, Alberta Transportation's view is that given the context of the Project—predominately situated on private land in southern Alberta that has been used for ranching and agriculture since the late 1800s, and an understanding of the scope of Aboriginal and treaty rights in Alberta as developed through applicable case law—Treaty Rights are generally not exercisable at present within the Project development area (PDA), except for a small portion that is located on Crown land (primarily the beds and shores of Elbow River) and on private lands, with landowner consent. Additionally, Métis communities may hold Aboriginal rights provided that they meet the criteria set out by the Supreme Court of Canada in R. v. Powley; to date, no Métis communities in southern Alberta have demonstrated that they meet the Powley test.

In contrast, as reflected in Table 1-2 below, Indigenous groups describe their rights more broadly indicating that they exercise Aboriginal and Treaty rights within the PDA, including hunting, trapping, fishing, plant gathering, use of trails and travelways, and use of cultural and ceremonial sites. Kainai First Nation, Piikani Nation, Siksika Nation, Tsuut'ina Nation, Ermineskin Cree Nation, Samson Cree Nation, Métis Nation of Alberta, Region 3 have stated that they exercise Aboriginal and/or Treaty rights on private lands with the permission of the landowners.

In technical submissions to CEAA, both Kainai First Nation and Ermineskin Cree Nation maintain that "the assessment of potential impacts to current use of lands for traditional purposes cannot be used as a proxy for the evaluation of potential effects to Treaty rights" (CEAR #46, 47). In considering potential effects to Treaty rights, Alberta Transportation has considered the definition of Aboriginal and Treaty rights provided in the CEAA Guidelines for the Project (CEAA 2016), which reference the *Updated Guidelines for Federal Officials to Fulfill the Duty to Consult* (AANDC 2011). According to this guidance, Treaty rights will be determined by their wording, interpreted in accordance with principles enunciated by the Supreme Court of Canada (AANDC 2011:61-62). Alberta Transportation's understanding of the legal framework for the exercise of Treaty rights in the Project area is set out in detail in the response to Round 1 CEAA Package 2, IR2-01.



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Alberta Transportation also followed the CEAA Guidelines for the Project, which state that the information sources, methodology and findings of the assessment of current use may be used to inform the assessment of potential effects on Section 35 rights, title and related interests, recognizing that there may be distinctions between the adverse impacts on Section 35 rights, title and related interests and current use (CEAA 2016:19). As stated in Volume 3A, Section 14.1.3.1 of the EIA, the assessment of potential effects to Treaty rights recognizes a correspondence between practice-based rights and traditional uses and the current use of lands and resources for traditional purposes. Effects on Treaty rights may be considered to occur to the extent that the Project has a residual effect on traditional resources necessary for the exercise of Treaty rights or where lands accessed for traditional uses are disturbed. Therefore, Alberta Transportation is of the opinion that the assessment of potential effects on Treaty rights is appropriate, given the character of Treaty rights as understood through applicable case law and the context of the Project.

With respect to disparities about consideration of intangible values, Indigenous groups have expressed concerns that effects to cultural transmission, cultural values, connection to plants and animals, ceremonial and spiritual values have not been fully assessed. Kainai First Nation and Ermineskin Cree Nation have suggested in their technical submissions (CEAR #46, 47) that Alberta Transportation has excluded intangible values from the TLRU assessment. In fact, Volume 3A, Section 14.1.3.3 of the EIA states that intangible values "are not amenable to conventional residual effects characterizations which were developed for the assessment of objective, measurable phenomena from a Western scientific perspective" and "can only be meaningfully evaluated by individuals and communities experiencing these values in their cultural context". It is impractical to attempt to quantify, measure, or evaluate the effects of the Project on intangible values using residual effects criteria. That is, criteria such as magnitude, duration, geographic extent, and reversibility cannot be meaningfully or defensibly applied to intangible values such as spiritual belief or cultural transmission. However, Alberta Transportation agrees that intangible values can and should be considered in environmental assessments, where Indigenous groups have identified an effect or concern about intangible values. Concerns received by Alberta Transportation through the Indigenous groups prior to filing the EIA in March 2018 were considered narratively in Volume 3A, Section 14.7 and Volume 3A, Section 14.8. Information about intangible values provided by Indigenous groups through TUS submitted after filing of the EIA have been reviewed and considered in the written responses that appear here in this response in Appendix 1-1.

The third disparity relates to the extent the historical, pre-contact use of an area is relevant. Indigenous groups have indicated that a broader historical context is necessary than that offered by Alberta Transportation in the EIA. Kainai First Nation and Ermineskin First Nation stated that the historical context does not sufficiently describe each Nation's connection to the Project area (CEAR #46, 47). Piikani Nation stated that the Project needs to be understood in the context of the settlement of the traditional territory of the Blackfoot Confederacy. Tsuut'ina Nation discussed the importance of the connection to the lands, waters, and resources in their traditional territory which are relied upon for livelihoods, language, culture, and community.



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Métis Nation of Alberta, Region 3 expressed concerns about the potential for the Project to alter landscapes and disrupt the connections of members who use the area to the lands and waters of the area.

As noted in the response to Round 1 CEAA Package 2, IR2-01, Alberta Transportation discusses the conditions that support each community's exercise of Section 35 rights in the regional context for the Project in Volume 3A, Section 14.2.3 of the EIA. Alberta Transportation recognizes the Project is in an area that has been substantially modified, since the signing of Treaty 7 in 1877, by existing physical activities, including land taken up for agricultural purposes, creation of transportation networks, pipeline rights-of-way and utility corridors, tourism and recreation activities, and commercial and residential development. The regional and historic context for the Project provided by Alberta Transportation considers how historic, existing and approved activities have affected conditions for the current use and the exercise of Treaty rights, as required by the CEAA Guidelines for the Project. However, Alberta Transportation acknowledges that Indigenous groups advocate a broader regional and historic context that situates the Project within the context of their traditional territories and considers changes in their connections to the land prior to Euro-Canadian settlement.

The fourth disparity relates to the extent to which traditional knowledge was used to inform existing conditions and conclusions about potential effects. Indigenous groups remarked that not enough information was gathered from Indigenous groups, that species harvested and traditional use in the Project area may be underrepresented, and that the assessment should not rely solely on scientific techniques. The use of traditional knowledge in the assessment is discussed more fully in the response to CEAA Conformity IR 2-06. Alberta Transportation reiterates here that traditional knowledge that was available through the Indigenous Engagement Program for the Project prior to filing was included in the EIA, that funding for TUS was provided to Indigenous groups, and Alberta Transportation facilitated site tours for Indigenous groups. TUS's submitted to Alberta Transportation following filing of the EIA have been reviewed in the manner described in the response to CEAA Conformity IR2-06 and a written response provided to Indigenous groups isincluded here as Appendix 1-1.

Efforts to reconcile areas of disparity that may remain with respect to consideration of Indigenous and community knowledge and concerns raised by Indigenous groups may occur, generally, through the provision of Project information, the incorporation of feedback that results in changes to Project planning or mitigation and through commitment to further exploring an issue, concern or recommendation. For example, as of September 2019 Alberta Transportation has provided a written response for each TUS received, apart from Piikani Nation and Métis Nation of Alberta, Region 3, which will receive written responses to their TUS in December 2019. Alberta Transportation has met with or will meet with each Indigenous group that has submitted a TUS to receive their comment and feedback. The written responses that Alberta Transportation has provided to Tsuut'ina Nation, Kainai First Nation, Louis Bull Tribe, and Ermineskin Cree Nation have been included in Appendix 1-1 of this response. Alberta Transportation reiterates that its engagement with Indigenous groups is ongoing. As such, Appendix 1-1 also describes both Alberta Transportation's efforts to date and planned commitments to reconcile areas of



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disparity between the views and conclusions of Indigenous groups and Alberta Transportation regarding the Project's potential effects on Section 35 rights and traditional uses. As noted in response to CEAA Conformity IR2-01, through the engagement process that included feedback from First Nations, a draft direction on principles of future land use for the Project has been developed (see the response to CEAA Conformity IR2-09, Appendix 9-1).

The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The Government of Alberta (GoA) will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the Land Use Area (LUA). The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites First Nations and stakeholders to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.

Alberta Transportation is committed to working with interested Indigenous groups to try to seek mutually acceptable solutions to the issues, concerns or recommendations identified and those that remain unresolved will be tracked through Alberta Transportation's ongoing engagement.

REFERENCES

- AANDC (Aboriginal Affairs and Northern Development Canada). 2011. Aboriginal Consultation and Accommodation Updated Guidelines for Federal Officials to Fulfill the Duty to Consult March 2011. Available at: http://www.aadnc-aandc.gc.ca/eng/1100100014664/1100100014675.
- CEAA (Canadian Environmental Assessment Act). 2012. Canadian Environmental Assessment Act, 2012. Available at: https://laws-lois.justice.gc.ca/eng/acts/C-15.21/
- CEAA (Canadian Environmental Assessment Agency). 2016. Guidelines for the Preparation of an Environmental Impact Statement pursuant to the Canadian Environmental Assessment Act, 2012, Springbank Off-Stream Reservoir Project.





Table 1-2 Indigenous Group Views on the Project's Potential Impacts to Rights

Views related to Potential Effects on Rights	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
Kainai First Nation/Blood Tribe (KFN)			
 KFN is concerned that the Proponent has not made adequate efforts to obtain information about the traditional territory of KFN and has failed to adequately assess the impacts to the current use of lands for traditional purposes and potential impacts to KFN rights. The proponent has failed to understand the scope of Treaty rights held by KFN (pursuant to 7). Those rights include rights to use lands and resources in the Project area for traditional purposes, but their rights are not limited to such practices and the assessment of potential impacts to current use of lands for traditional purposes cannot be adopted as a proxy for the evaluation of potential effects to Treaty rights. The proponent unreasonably narrows the scope of information it could have collected to inform the analysis of potential effects to Treaty rights by characterizing any aspect of the exercise of treaty rights as relating to "Intangible components" which are "subjective, experiential, and conditional, and are not readily amenable to assessment and residual effects criteria because they cannot be realistically measured or mitigated." No meaningful efforts have been made to gather information from KFN in regard to the exercise of their Treaty rights and the potential impact of the Project on their continued ability to exercise rights, pass on their culture and sustain their way of life. Moreover, such assessment is not, as asserted by the proponent, impossible to conduct. The proponent should be referred to a recent approach co-developed by CEAA and a Treaty 8 First Nation and directed to engage in the assessment methodology proposed in that document (http://www.ceaa.gc.ca/050/documents/p65505/122764E.pdf) in collaboration with ECN and KFN. Most critically, the proponent should be directed to gather information to identify the conditions, and identifying the importance of the Project's location in relation to the exercise of Treaty rights, understanding how historic, existing and approved land use	 Letter from KFN to Alberta Transportation, January 5, 2018 Letter from JFK Law Corporation to CEAA June 25, 2018 KFN TUS 2018 (CEAR #47) (cited in KFN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #1, 3, & 59) KFN 2018 (CEAR#47) 	Alberta Transportation has been engaged with KFN since 2014 to understand how the Project potentially impacts rights and traditional uses including offering and funding site visits and TUS studies. Alberta Transportation considers that given the context of the Project—predominately situated on private land in southern Alberta that has been used for ranching and agriculture since the late 1800s, and an understanding of the scope of Aboriginal and treaty rights in Alberta as developed through applicable case law—Treaty Rights are generally not exercisable within the PDA, except for a small portion that is located on Crown land (primarily the beds and shores of Elbow River) and on private lands, with landowner consent. Alberta Transportation acknowledges that KFN may access private lands in the PDA for traditional uses with permission of the landowners. The ElA submitted in March 2018 considered best available TLRU information, including information about the potential impacts to rights. The assessment methods are defensible and reliable and appropriate for the scope and nature of the Project. The ElA, Volume 3A, Section 14.5 concludes that no effects on potential or established Aboriginal or Treaty rights are expected to occur as a result of the Project.	Alberta Transportation has provided multiple opportunities for KFN to provide information about potential impacts to rights and traditional uses. Alberta Transportation provided drafts of the updated TLRU Effects Assessment sections of the ELA (Volumes 3A and 3B), which were provided February 5, 2018, for KFN review and input. Alberta Transportation offered a TLRU workshop in January 2018 with KFN to obtain input and feedback on the draft TLRU Effects Assessments, including KFN's perspectives on assessment methodology, proposed mitigation, Project-Specific Concerns and how the Project may adversely affect the exercise of Section 35 rights. Alberta Transportation has met with KFN on 9 occasions to share Project information and obtain KFN views on the Project. KFN Elders and knowledge holders participated in 14 days of site visits facilitated by Alberta Transportation. Results of the site visits were reported in the KFN interim TUS study submitted to Alberta Transportation on March 13, 2017 jointly with SN. The results of the interim TUS were considered in the ElA. However, permission to use the spatial information from the interim TUS has not been received from KFN by Alberta Transportation, therefore the information regarding sites and areas has been generalized for use in the ElA and exact locations, including those in the PDA, are not provided. A final TUS was submitted to Alberta Transportation on June 25, 2018. Alberta Transportation provided a written response to KFN addressing the concerns and issues raised in the TUS and met with KFN on October 17, 2019 to discuss the response. Alberta Transportation sent a letter dated January 28, 2019 that requested the KFN provide its views and perspectives on its Aboriginal and Treaty rights, cultural and experiential values, and country foods. The letter listed four specific topics that Alberta Transportation was requesting input on to help answer CEAA IRs. KFN has not provided a response. The construction and management of the off-stream reservoir presents a



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	Views related to Potential Effects on Rights	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
•	The proponent has failed to gather and include adequate baseline information relating to KFN use of the assessment area for traditional purposes. Instead, the proponent has relied heavily on outdated information gleaned from a literature review and very limited site visits. KFN have prepared traditional land use reports and the proponent should be directed to use these reports to identify baseline information relating to the exercise of rights and use of this area for the current use of lands for traditional purposes, and incorporate this information into the effects assessment in every applicable respect.			Alberta Transportation by letter dated October 22, 2019 introduced the new approach to land use. Under cover dated November 15, 2019, Alberta Transportation provided the latest land use principles and more detail on the LUA engagement process and offered to meet with KFN to discuss next steps. Alberta Transportation has met with KFN on October 17, 2019 and November 21, 2019 and further discussed the LUA. In December 2019, Alberta Transportation provided written responses to the KFN Technical Review dated June 2018, which included these concerns as Questions 6, 7, 15 and 16 Alberta Transportation has offered to meet with KFN regarding the written responses.
•	KFN is concerned that there is a lack of historical context to the nature of KFNs connection to the Project areas, and that Traditional Land and Resource use is too narrow for valid assessment.	 KFN TUS 2018 (CEAR #47) Email from KFN (January 31, 2017) 	Alberta Transportation acknowledges KFN's views that the cultural and archaeological sites identified by KFN are important markers of identity, use, and occupancy in the region. Six campsites have been identified within the PDA. Most of these	Alberta Transportation committed to cross reference the sites in the KFN's TUS Report and those identified in the Historical Resources Impact Assessment (HRIA); to confirm the risks to these sites; and propose possible mitigation measures for these sites. Alberta Transportation has
•	KFN are concerned about impacts this Project will have on cultural and ceremonial location sites by SR1 during and after construction and are concerned about their history being erased due to growth and development and how this would be accommodated.	 Letter from JFK Law Corporation to DEMA (June 24, 2018) (cited in KFN SR1 SCRT Aug 2014- Aug 2019; Specific 	sites are small and have been heavily disturbed by cultivation or erosion. One undisturbed precontact campsite identified in the treed uplands adjacent to the Elbow River is considered to have heritage value and Alberta Culture, Multiculturalism and Status of Women (ACMSW) is requiring standard mitigation (see Alberta	committed to overlay the Global Positioning System (GPS) coordinates with the PDA to determine sites at risk. Alberta Transportation is awaiting the GPS coordinates from KFN. A final TUS was submitted to Alberta Transportation on June 25, 2018. Alberta Transportation considered the locations described in the TUS
•	KFN is concerned about the effects to sites of archaeological, historical, spiritual, ceremonial and cultural importance and the loss of access to these sites. These include camps and trails. KFN is concerned regarding the absence of maps depicting location sites of potential historical, archaeological, or cultural interests of KFNs current use of the lands.	 Concern #3, 8, 12, 48) KFN 2018 (CEAR#47) KCO & SCO 2017 TUS Research Study Joint Interim Report, 2017 	Transportation's response to Round 1 CEAA Package 2, IR 2-10). The Project is expected to result in restricted access to areas within the PDA and development of a permanent portage for the Elbow River. Fencing of infrastructure would restrict KFN's access to traditional resources or current use sites or areas for a small portion of Elbow River. Sites and areas located outside the PDA are not	and potential effects to these areas as a result of the Project. Alberta Transportation provided a written response to KFN addressing the concerns and issues raised in the TUS and met with KFN on October 17, 2019 to discuss the response (see Appendix 1-1 of this response). In December 2019, Alberta Transportation provided written responses to the KFN Technical Review dated June 2018, which included some of
•	Potential negative effects of the Project on KFN traditional use and traditional knowledge, and the traditional way of life and culture of its people. The Proponent should discuss programming within the community to strengthen the transmission of KFN way of life and culture to future generations.		anticipated to be directly affected by the Project. Mitigation measures identified in Alberta Transportation's response to Round 1 CEAA Package 2, IR2-01 will be implemented to reduce potential adverse effects of the Project on current use sites and areas.	these concerns in Question 34. Alberta Transportation will offer to meet with KFN regarding the written responses.
•	KFN expressed concerns that the traditional Blackfoot camp associated with the North-South Trail would be partially or completely destroyed. KFN stated that loss of use of this site due to access restrictions or the destruction of the site during construction would "constitute a significant adverse effect on the Blood Tribe."			
•	KFN expressed concerns that the traditional winter camp along the banks of Val Vista Creek would be at risk of partial or complete destruction. KFN stated that loss of use of the site during construction would "constitute a significant, adverse effect" on KFN cultural heritage.			
•	KFN identified Elbow River as important for fishing, as a gathering area, and as generally important for traditions and culture.			



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Views related to	otential Effects on Rights	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
upon which they depend for high-quality hunting and bit that the Proponent invite KIT particularly for big game sure. KFN has expressed concern traditional and ceremonial protected or relocated, as underwater when the Projection of the KFN is concerned regarding natural prairie grassland, movetlands which are suitable gathering. Additionally, the in flooded areas has not be requested that the Propone medicinal plants, particular KFN is concerned that in the damage existing plant hab medicines. KFN indicated that the Projection of trees, shrubs, and grasses medicinal, ceremonial, cor KFN identified species of intincluding elk, moose, white grouse, sharp-tailed grouse merganser duck. KFN indicated that the Elbot species would occur in the the KFN traditional food profeed dozens of community hunting, food processing, at KFN indicated that the Elbot species of game that KFN receremonial purposes. KFN in approved, and sites be mad the area to exercise their rig white-tailed and mule deer KFN indicated that agreement in the PDA to provide accessubsistence hunting. The Project area is a good in the Proj	s for the potential impact to medicinal, clants, which would need to be either they would be destroyed or at is completed. The loss of access to high quality sed wood and coniferous forests, and for medicinal plant and food long-term loss of traditional use plants en considered. As a result, KFN has ant invite KFN land users to harvest y along the river. The event of a flood, flood waters will that, including plants that KFN value as act area is conducive to a wide variety that are used for subsistence, struction, artisanal, and fuel use. The erest in relation to the Project, tailed deer, mule deer, rabbit, ruffed. Canada goose, mallard duck and ated that the hunting of big game fall and early winter and is "a pillar of visioning system" and that KFN hunters members on a regular basis from their and sharing practices. We River Valley is habitat for many members hunt for subsistence and adicated that should the Project be de accessible, that they intend to use that to hunt, particularly for elk, moose, and grouse. The entire potential place with local landowners are in place with local landowners of the purposes of cotential place to hunt and a good all food for the hunters due to the	 KFN 2018 (CEAR # 47) Letter from JFK Law Corporation to DEMA (June 25, 2018) KCO & SCO 2017 KFN 2018 (CEAR #47); (cited in KFN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #26, 31, 32, 36) KFN TUS 2018 (CEAR#47) 	The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the regional assessment area (RAA) is unlikely (see the EIA, Volume 3A, Section 11.4.2). Portions of the hunting areas identified by KFN that are located within the designated construction footprint will be directly affected by construction activities and fencing of infrastructure will restrict access to certain areas of the Project. Mitigation measures identified in the Alberta Transportation's response to Round 1 CEAA Package 2, IR2-01 will be implemented to reduce potential adverse effects of the Project on current use sites and areas. Alberta Transportation acknowledges that KFN may access private lands in the PDA for traditional uses with permission of the landowners. The Project is expected to result in restricted access to areas within the PDA and development of a permanent portage for the Elbow River. Fencing of infrastructure would restrict KFN's access to traditional resources or current use sites or areas for a small portion of Elbow River. Current use sites and areas located outside the PDA are not anticipated to be directly affected by the Project. Mitigation measures identified in the response to Round 1 CEAA Package 2, IR2-01 will be implemented to reduce potential adverse effects of the Project on current use sites and areas. Traditionally used plant species within the PDA will be directly affected due to vegetation removal and grading associated with construction, affecting 168 ha associated with permanent Project infrastructure and approximately 566 ha of temporary workspace. Although individual pla	Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction. At the end of construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded to meet AEP reclamation requirements. Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important. A final TUS was submitted to Alberta Transportation on June 25, 2018. KFN provided the locations of some TLRU areas and Alberta Transportation considered the locations and potential effects to these areas as a result of the Project. Alberta Transportation provided a written response to KFN addressing the concerns and issues raised in the TUS and met with KFN on October 17, 2019 to discuss the response (see Appendix 1-1 of this response). The draft Indigenous Participation Plan (IPP) was provided to KFN on November 12, 2019. Opportunities for KFN to participate in harvesting plants pre-construction and revegetation post-construction was discussed during the November 21, 2019 meeting.



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Table 1-2 Indigenous Group Views on the Project's Potential Impacts to Rights

	Views related to Potential Effects on Rights	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
•	KFN requested that justification for how the removal of access to areas does not constitute a long-term loss of available resources or access to roads and recommend mitigation measures to allow for access during construction.	 KFN 2018 (CEAR #47) Letter from JFK Law Corporation to DEMA (June 25, 2018) 	Since filing the EIA, Alberta Transportation has evolved the land use planning for the Project and is no longer contemplating establishing Areas A, B, and C. The construction and management of the off-stream reservoir presents a unique opportunity with the conversion of private land to Crown land for future use by First	The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood
•	The Proponent should attempt to ensure that areas of the PDA are accessible to KFN members for traditional use purposes and negotiate access during dry operations for traditional gathering, hunting, ceremonial use, and for traditional cultural and heritage camps involving Elders and youth. The Proponent should also work with private managers to ensure maximum access for KFN hunters to the area.	 KFN TUS 2018 (CEAR #47) KCO & SCO 2017 TUS Research Study Joint Interim Report, 2017; (cited in KFN SR1 SCRT Aug 2014-Aug 2019; 	Nations and stakeholders. Through the engagement process that included feedback from Indigenous groups, a draft principles of future land use for the Project has been developed. Alberta Transportation considers that given the context of the Project—predominately situated on private land in southern Alberta that has been used for ranching and agriculture since the	mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites KFN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.
•	The proposed uses of Area A following construction are vague and do not allow for an assessment of the impact of this land use designation on current uses for traditional purposes. It is unclear whether KFN would be permitted to engage in hunting practices in this area. Moreover, the reference to "low impact recreation" suggests that activities such as hunting may not be compatible within this area. The proponent should be asked to clarify what TLRU activities would be permitted within Area A.	Specific Concern #58) • KFN 2018 (CEAR #47)	late 1800s, and an understanding of the scope of Aboriginal and treaty rights in Alberta as developed through applicable case law—Treaty Rights are generally not exercisable within the PDA, except for a small portion that is located on Crown land (primarily the beds and shores of Elbow River) and on private lands, with landowner consent. Given that access is dependent upon landowner consent, overall the Project will increase rather than diminish access.	Alberta Transportation by letter dated October 22, 2019 introduced the new approach to land use. Under cover dated November 15, 2019, Alberta Transportation provided the latest land use principles and more detail on the LUA engagement process and offered to meet with KFN to discuss next steps. Alberta Transportation has met with KFN on October 17, 2019 and November 21, 2019 and further discussed the LUA.
•	The proponent should be directed to examine the KFN TUS reports and identify the potential access restrictions that would be imposed during all phases of the Project to assess the impacts to current use and on KFN's treaty rights.		Alberta Transportation provided funding to KFN for a TUS, which was received on June 25, 2018, following submission of the EIA. Alberta Transportation has reviewed the KFN TUS, including information provided about KFN access to private land for	A final TUS was submitted to Alberta Transportation on June 25, 2018. KFN provided the locations of some TLRU areas and Alberta Transportation considered the locations and potential effects to these areas as a result of the Project. Alberta Transportation provided a
•	KFN expressed concern to areas which remain uncultivated native grassland. KFN stated that the "traditional use potential of this area has been maintained, preserved and enhanced by the efforts of local landowners to protect native grasslands, wetlands and riparian areas".		traditional purposes and provided a written response to KFN.	written response to KFN addressing the concerns and issues raised in the TUS and met with KFN on October 17, 2019 to discuss the response (see Appendix 1-1 of this response). In December 2019, Alberta Transportation provided written responses to the KFN Technical Review dated June 2018, which included these
	The proponent has failed to gather baseline information regarding the location of Crown and private lands over which KFN access to exercise Treaty rights and carry out current use of lands for traditional purposes. Though the proponent has been long informed as to the location of private lands where landowners permit access by KFN, the proponent has failed to identify these areas, incorporate this information into its effects assessment, or propose mitigation measures to partially or fully address the limitations to be imposed on that access by the Project. The proponent should be directed to incorporate the information provided in the attached traditional land use studies and engage with KFN in regard to the design of effective mitigation measures.			concerns as Questions 8 and 10 through 13. Alberta Transportation will offer to meet with KFN regarding the written responses.
•	The proponent should be directed to examine the attached traditional land use reports and identify additional mitigation measures to allow access to KFN during construction and dry operations to the PDA, including Areas B, C and D, subject to safety considerations.			



Table 1-2 Indigenous Group Views on the Project's Potential Impacts to Rights

Views related to Potential Effects on Rights	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
Piikani Nation (PN)			
 PN requests ongoing mitigation after the finalization of the SR1 Project to ensure no further derogation of Treaty and Aboriginal Rights are infringed upon in the designated SR1 Project area. PN indicated the Project will impact the rights and interests of their members and the natural resources upon which they depend. 	 PN TUS 2017 Letter from PN to Alberta Transportation, (June 15, 2018) (cited in PN SR1 SCRT Aug 2014- 	Letter from PN to Alberta Transportation, (June 15, 2018) (cited in PN SR1 SCRT Aug 2014- Aug 2019; Specific Concern #7) PN 2018 (CEAR#48) Meeting between PN and Alberta Transportation (December 17, 2018) (cited in PN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #7) Alberta Transportation considers that given the context of the Project—predominately situated on private land in southern Alberta that has been used for ranching and agriculture since the late 1800s, and an understanding of the scope of Aboriginal and treaty rights in Alberta as developed through applicable case law—Treaty Rights are generally not exercisable within the PDA, except for a small portion that is located on Crown land (primarily the beds and shores of Elbow River) and on private lands, with landowner consent. Alberta Transportation acknowledges that PN may access private lands in the PDA for traditional uses with permission of the	Alberta Transportation has provided multiple opportunities for PN to provide information about potential impacts to rights. Alberta Transportation provided drafts of the updated TLRU Effects Assessment sections of the EIA (Volumes 3A and 3B), which were provided February 5, 2018, for PN review and input.
 PN requests that Alberta Transportation discuss how issues of concern to PN, their Treaty and Aboriginal Rights, traditional knowledge, and its traditional and contemporary land uses has been used in Project planning and site selection. PN indicated that no consultation has yet occurred with Alberta or 	Concern #7) PN 2018 (CEAR#48) Meeting between PN		Alberta Transportation offered a TLRU workshop in January 2018 with PN to obtain input and feedback on the draft TLRU Effects Assessments, including PN's perspectives on assessment methodology, proposed mitigation, Project-Specific Concerns and how the Project may adversely affect the exercise of Section 35 rights.
Canada. PN requests direct consultation to address the Project specific and cumulative loss of lands and natural resources and	Transportation (December 17, 2018)		Alberta Transportation has met with PN on 7 occasions to share Project information and obtain PN views on the Project.
resulting loss of meaningful opportunities for the exercise of PN Treaty and Aboriginal rights and interests. • PN expressed concerns that their concerns would not be taken	Aug 2014-Aug 2019;		PN Elders and knowledge holders participated in 14 days of site visits facilitated by Alberta Transportation. Results of the site visits were
into account.	• PN 2018 (CEAR #48)		reported in the PN TUS study submitted to Alberta Transportation on February 22, 2017. Permission to use the spatial information from the TUS has not been received from PN by Alberta Transportation, therefore the information regarding sites and areas has been generalized for use in the EIA. Alberta Transportation has provided a written response to PN addressing the concerns and issues raised in the TUS and offered to
 PN states that the Aboriginal and Treaty rights of Siksikaitsitapii have already been impacted and restricted before the SR-1 Project was contemplated and indicates the Project needs to be understood in the context of the settlement of the traditional 			
territory of the Blackfoot Confederacy.			meet with PN regarding the written responses.
 PN indicated they have the following rights to the use and enjoyment of their traditional lands: "Piikani activities, practices, and traditions that are integral to our culture and protected by section 35 of the Constitution Act, 1982" 			Alberta Transportation sent a letter dated January 28, 2019 that requested the PN provide its views and perspectives on its Aboriginal and Treaty rights, cultural and experiential values, and country foods. The letter listed four specific topics that Alberta Transportation was requesting input on to help answer CEAA IRs. PN has not provided a
 "the right to hunt, trap and harvest natural resources within our traditional territory, to our way of life, to the use, enjoyment and control of lands reserved for us and the right to a livelihood and cultural and spiritual practices from our traditional lands" 			response. The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites PN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a
 " the right to sufficient lands, and access to them, within our traditional territory, of a quality and nature sufficient to support the meaningful exercise of their [Piikani Nation's] treaty rights" 			
 "The right to hunt for food in all seasons pursuant to the Natural Resources Transfer Agreement (being schedule 2 of the Constitution Act, 1930)" 			
 "The right to be consulted and accommodated with respect to potential adverse effects on our rights and the interests secured by these rights" 			positive change to the ability to exercise Section 35 rights. Alberta Transportation by letter dated October 22, 2019 introduced the
 "The right to use and enjoyment of our reserve lands pursuant to section 18(1) of the <i>Indian Act</i> (R.S. 1985, c. 1-5)" 			new approach to land use. Under cover dated November 15, 2019, Alberta Transportation provided the latest land use principles and mo detail on the LUA engagement process and offered to meet with PN
 "The statutory right to hunt, fish and trap on Crown lands pursuant to the Hunting, Fishing and Trapping Heritage Act 			discuss next steps.



Table 1-2 Indigenous Group Views on the Project's Potential Impacts to Rights

	Views related to Potential Effects on Rights	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
				In December 2019, Alberta Transportation provided written responses to the PN Technical Review dated June 2018, which included some of these concerns as Question 46. Alberta Transportation will offer to meet with PN regarding the written responses.
to promint of promint	remarked that the EIA did not make any specific commitments protect/avoid TLRU and cultural sites, or any specific mmitments to mitigate or accommodate tangible and angible cultural impacts to Blackfoot culture, traditions and actices that will occur as a result of the Project. raised concerns related to impacts on cultural sites by the SR1 ring and after construction. indicated the presence of a <i>uppiimaan</i> four pole covered oke lodge among a concentration of half circle stones. And ted that a lodge was located a short distance from tipi rings d a campsite, and other habitation evidence such as mpsites and fire hearth stones. expressed concern that the Project would "desecrate and stroy all traces of the original people's existence". would like to perform a ceremonial sweat at the site of the tipi gs and perform other ceremonies before construction.	 Site visits August 8, 16, 30, 31, 2016 & Meeting between PN and Alberta Transportation (January 18, 2017) (cited in PN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #10, &13) PN 2018 CEAR #48) PN TUS 2017 Meeting between PN and Alberta Transportation (December 17, 2018) (cited in PN SR1 SCRT Aug 2014-Aug 2019 SCRT; Specific Concern #53) 	Alberta Transportation acknowledges PN views that the cultural and archaeological sites identified by PN are important markers of identity, use, and occupancy in the region. No sites of high significance, such as effigies, medicine wheels, graves, pottery or tipi rings have been identified in the PDA to date. Six campsites have been identified within the PDA, most of these sites are small and have been heavily disturbed by cultivation or erosion. One undisturbed precontact campsite identified in the treed uplands adjacent to the Elbow River is considered to have heritage value and Alberta Culture, Multiculturalism and Status of Women (ACMWS) is requiring standard mitigation (see Alberta Transportation's response to Round 1 CEAA Package 2, IR2-10). Intangible values can only be meaningfully evaluated by individuals and communities experiencing these values in their cultural context. To date PN has not suggested mitigation measures for intangible values. Alberta Transportation will continue to work with PN to better understand Project effects to intangible values and identify practical mitigation measures.	Alberta Transportation must follow mitigation for archaeological sites as mandated by ACMWS. Standard mitigation includes photography, mapping, documentation and mitigative excavation, to preserve the knowledge of the site. Depending upon its significance, other mitigation may include additional consultation, Indigenous participation in the assessment and mitigation program and Indigenous monitoring during construction. The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites PN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights. Alberta Transportation by letter dated October 22, 2019 introduced the new approach to land use. Under cover dated November 15, 2019, Alberta Transportation provided the latest land use principles and more detail on the LUA engagement process and offered to meet with PN to discuss next steps. A final TUS was submitted to Alberta Transportation on February 22, 2017. PN provided the locations of some TLRU areas and Alberta Transportation considered the locations and potential effects to these areas as a result of the Project. At the meeting held on December 17, 2018, Alberta Transportation provided a written response to PN addressing the concerns and issues raised in the TUS and offered to meet with PN regarding the written response (see Appendix 1-1 of this respo



Table 1-2 Indigenous Group Views on the Project's Potential Impacts to Rights

	Views related to Potential Effects on Rights	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps														
•	PN are concerned that the impact assessment for traditional use plant species is misleading for the loss of traditional plant species	 PN 2018 (CEAR #48); (cited in PN SR1 SCRT August 2014-Aug 2019; Specific Concern #17; 27, 28, 30, & 62) PN TUS 2017 	(cited in PN SR1 SCRT August 2014-Aug 2019; Specific Concern #17; 27, 28, 30, & 62) understand how the Project potentially impacts rights and traditional uses including offering and funding site visits and TUS studies. The Project is anticipated to result in a change in the availability of	Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction.														
•	and other vegetation during Flood and Post-Flood Operations. PN requested that the Proponent consult with members of all potentially affected Indigenous groups to: (I) validate lists of traditionally important wildlife species, (ii) add unique or			At the end of construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded to meet AEP reclamation requirements.														
	overlooked species of traditional importance, and (iii) identify if Indigenous members have specific knowledge about wildlife patterns within the LAA.			Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important. A final TUS was submitted to Alberta Transportation on February 22, 2017. PN provided the locations of some TLRU areas and Alberta Transportation considered the locations and potential effects to these areas as a result of the Project. Alberta Transportation provided a written response to PN addressing the concerns and issues raised in the TUS and offered to meet with PN regarding the written response (see Appendix 1-1). Alberta Transportation commits to ongoing engagement with PN and other Indigenous groups regarding traditionally used plants in the PDA. In December 2019, Alberta Transportation provided written responses to the PN Technical Review dated June 2018, which included some of these concerns as Questions 28 and 29. Alberta Transportation will offer to meet with PN regarding the written responses. The draft IPP was provided to PN on November 15, 2019, which includes														
•	PN commented that Alberta Transportation did not consult with PN members to: include rare traditional plants in the rare surveys, determine if the rare species identified in the RAA and LAA were traditionally important plants, or develop species-specific																	
•	mitigation plans for the three species of management concern that might be removed by the Project. PN advised that Alberta Transportation should consult members of all Indigenous groups to ensure accuracy of conclusions in the EIA		Portions of the hunting areas that may be located within the designated construction footprint will be directly affected by construction activities and fencing of infrastructure will restrict access to certain areas of the Project. Mitigation measures															
	for traditional use plants and the completeness of the underlying data and analysis.	identified be imple Project of The P	identified in the response to Round 1 CEAA Package 2, IR2-01 will be implemented to reduce potential adverse effects of the Project on current use sites and areas. The Project is expected to result in restricted access to areas within the PDA and development of a permanent portage for the Elbow River. Fencing of infrastructure would restrict PN's access to the the PN these to me traditional resources or current use sites or areas for a small portion Albert other															
•	PN is concerned they were not consulted about rare plants and requests Alberta Transportation work with PN to identify rare species that are traditionally important and develop mitigation measures. PN recommends engaging with Indigenous communities to validate traditional plant inventories and identify if they are being used by Indigenous people.																	
•	PN requested that Alberta Transportation discuss the availability of vegetation, fish and wildlife species for food, traditional medicine and cultural purposes; and develop a monitoring plan with PN to assess Project effects on hunting, trapping, fishing, plant harvesting and cultural use.																of Elbow River. Current use sites and areas located outside the PDA are not anticipated to be directly affected by the Project. Mitigation measures identified in Alberta Transportation's response to Round 1 CEAA Package 2, IR2-01 will be implemented to reduce potential adverse effects of the Project on current use sites and areas.	opportunities for PN to participate in harvesting plants pre-construction and revegetation post-construction.
•	PN indicated the presence of several culturally important plants which would experience considerable impact.		Traditionally used plant species within the PDA will be directly affected due to vegetation removal and grading associated with construction, affecting 168 ha associated with permanent Project infrastructure and approximately 566 ha of temporary workspace. Although individual plants will be removed from the PDA, none of the traditionally used species identified will be lost in the LAA, nor will vegetation communities supporting traditionally used plants be lost from the PDA (see Volume 3A, Section 10.4 of the EIA).															
			Alberta Transportation is committed to Indigenous participation in the Project, including training, employment, and contracting opportunities. To this end, Alberta Transportation is preparing a draft IPP with the goal to create training, employment, monitoring, and contracting opportunities with interested Indigenous groups by the Project, including PN. Alberta Transportation aims to obtain Indigenous comment and feedback on the draft IPP, the final draft of which will identify how that feedback was incorporated.															



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Views related to Potential Effects on Rights	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
 PN expressed concern that a change in river flow will result in loss of use to traditional clan homelands, harvesting and recreation areas and use by their people. PN is not clear on how member access would be coordinated to carry out ceremonies in multi-use areas with access by recreational users. PN is concerned with access to plants, animals for bundles and ceremony. 	 Meeting between PN and Alberta Transportation (September 18-19, 2018); (cited in PN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #63, 64) PN 2018 (CEAR #48) PN Report 2017 	Since filing the EIA, Alberta Transportation has evolved the land use planning for the Project and is no longer contemplating establishing Areas A, B, and C. The construction and management of the off-stream reservoir presents a unique opportunity with the conversion of private land to Crown land for future use by First Nations and stakeholders. Through the engagement process that included feedback from Indigenous groups, a draft principles of future land use for the Project has been developed.	The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites PN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights. Alberta Transportation by letter dated October 22, 2019 introduced the new approach to land use. Under cover dated November 15, 2019, Alberta Transportation provided the latest land use principles and more detail on the LUA engagement process and offered to meet with PN to discuss next steps. Alberta Transportation will facilitate ceremonies with PN at the site prior to and during construction. The development of procedures and protocols for the coordination of ceremonies during dry operations will be determined though engagement with First Nations on the LUA. In December 2019, Alberta Transportation provided written responses to the PN Technical Review dated June 2018, which included some of these concerns as Questions 38. Alberta Transportation will offer to meet with PN regarding the written responses.
Siksika Nation (SN)			
 SN stated the Project will have substantial impacts on SN traditional use rights and interests, and heritage sites protected by Section 35 of the constitution. The SN consultation team expressed interest in having monitors in place during construction so they could observe the work being undertaken and to protect Blackfoot artifacts. SN stated: "Our First Nation rights of hunting and ceremony are cut off because of these land use plans." 	 Letter from SN to Alberta Transportation (May 20, 2016) Site visit August 10, 2016 Meeting between SN and Alberta Transportation (September 15, 2016) (cited in SN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #1, 5, & 21) KCO & SCO 2017 TUS Research Study Joint Interim Report, 2017 	Alberta Transportation considers that given the context of the Project—predominately situated on private land in southern Alberta that has been used for ranching and agriculture since the late 1800s, and an understanding of the scope of Aboriginal and treaty rights in Alberta as developed through applicable case law—Treaty Rights are generally not exercisable within the PDA, except for a small portion that is located on Crown land (primarily the be ds and shores of Elbow River) and on private lands, with landowner consent. Landowner consent is limited and can also be withdrawn. Volume 3A, Section 14.5 concludes that no effects on potential or established Aboriginal or Treaty rights are expected to occur as a result of the Project. Alberta Transportation is committed to Indigenous participation in the Project including through potential training and contracting opportunities. As such, Alberta Transportation is preparing an IPP for the Project. The goal of this IPP is to create training and contracting opportunities with interested Indigenous groups by the Project, including SN. These opportunities may include monitoring.	The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites SN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights. Alberta Transportation by letter dated October 22, 2019 introduced the new approach to land use. Under cover dated November 15, 2019, Alberta Transportation provided the latest land use principles and more detail on the LUA engagement process and offered to meet with SN to discuss next steps.



Table 1-2 Indigenous Group Views on the Project's Potential Impacts to Rights

Views related to Potential Effects on Rights	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
 Views related to Potential Effects on Rights SN has expressed concern on SR1 construction and its impact to animals and their homes, such as the beavers. SN is concerned with the potential impact to medicinal and ceremonial plants. They have stated that they will need the plants to be protected and/or relocated. The animals and fish living in and around the Elbow River near the Project rely heavily on the sloughs that exist just off the Elbow River. These sloughs must be protected to prevent undue impacts to all living creatures. SN wants to have their Elders involved when medicinal plants and TK is being assessed, they expressed their interest in completing a Traditional Use Study of the Project area. 	• Meetings between SN and Alberta Transportation (October 27, 2014, September 15, 2016, January 18, 2017, April 16, 2018) (cited in SN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #8, 10, 12 14, & 22) • KCO & SCO 2017 TUS Research Study Joint Interim Report, 2017 • SN letter to Alberta Transportation (May 20, 2016) (cited in SN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #1)	The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see Volume 3A, Section 11.4.2 of the EIA). Portions of the hunting areas that may be located within the designated construction footprint will be directly affected by	Efforts to Consult/Engage/Reconcile and Next Steps Alberta Transportation has provided funding to SN to complete a TUS. A joint interim TUS was submitted with KFN on March 13, 2017 and considered in the EIA. A final SN TUS has not been received. Alberta Transportation has met with SN on 7 occasions to share Project information and obtain SN views on the Project, including wildlife studies, and effects on fish and fish habitat and vegetation. On March 23, 2018, Alberta Transportation sent detailed responses to Specific Concerns raised to date by providing a copy of Table 7-5 SR1 Project Specific Concerns and Responses - Siksika Nation from the March 2018 EIA Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction.
 SN would like to monitor before and after a flood to understand what is growing in the Project area. Some plants may not grow back, and they do not want to over harvest. SN has requested further information on wildlife studies where the back up of water would occur. SN is concerned about the impact on fish and fish habitat resulting from the Project. Given the importance of Elbow River, SN expects that effects on traditional use will be substantial. 		construction activities and fencing of infrastructure will restrict access to certain areas of the Project. Mitigation measures identified in the response to Round 1 CEAA Package 2, IR2-01 will be implemented to reduce potential adverse effects of the Project on current use sites and areas. The Project is expected to result in restricted access to areas within the PDA and development of a permanent portage for the Elbow River. Fencing of infrastructure would restrict SN's access to traditional resources or current use sites or areas for a small portion of Elbow River. Current use sites and areas located outside the PDA are not anticipated to be directly affected by the Project. Mitigation measures identified in the response to Round 1 CEAA, Package 2, IR2-01 will be implemented to reduce potential adverse effects of the Project on current use sites and areas. Traditionally used plant species within the PDA will be directly affected due to vegetation removal and grading associated with construction, affecting 168 ha associated with permanent Project infrastructure and approximately 566 ha of temporary workspace. Although individual plants will be removed from the PDA, none of the traditionally used species identified will be lost in the LAA, nor will vegetation communities supporting traditionally used plants be lost from the PDA (see the EIA Volume 3A, Section 10.4). Alberta Transportation is committed to Indigenous participation in the Project including through potential training and contracting opportunities. As such, Alberta Transportation is preparing an IPP for the Project. The goal of this IPP is to create training and contracting opportunities with interested Indigenous groups potentially affected by the Project, including SN. These opportunities may include monitoring.	At the end of construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded to meet AEP reclamation requirements. Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important.



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Table 1-2 Indigenous Group Views on the Project's Potential Impacts to Rights

Views related to Potential Effects on Rights	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
 SN requested to hunt and harvest in Area B and explore uses of Area C. SN reported that landowners grant permission to SN members to hunt on that land. 	Meeting between SN and Alberta Transportation (April 26, 2018) (cited in SN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #23) KCO & SCO 2017 TUS Research Study Joint Interim Report, 2017	Alberta Transportation acknowledges that SN may access private lands in the PDA for traditional uses with permission of the landowners. Since filing the EIA, Alberta Transportation has evolved the land use planning for the Project and in no longer contemplating establishing Areas A, B, and C.	The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites SN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights. Alberta Transportation invites SN to participate in the engagement process for the LUA. Alberta Transportation by letter dated October 22, 2019 introduced the new approach to land use. Under cover dated November 15, 2019,
			Alberta Transportation provided the latest land use principles and more detail on the LUA engagement process and offered to meet with SN to discuss next steps.
Stoney Nakoda Nations (SNN)			T
 SNN expressed concerns about their Treaty Rights and traditional uses of lands in the Project area. Concerns were expressed about the SNN cultural practices, their current use of lands and resources for traditional purposes, the effect on water and wetlands for wildlife, fish, birds, and vegetation. SNN would like to undertake a cultural assessment to mark the importance of it and place animal and plant studies into one cultural assessment as the topics related to certain stories and wildlife behaviour, instead of relying solely on scientific techniques. SNN stated that the Project impacts SNN Treaty Rights and Traditional Uses in the proposed Project area. As signatories to Treaty Number 7 in 1877, the SNN have Aboriginal and treaty rights entitlement throughout the 50,000 square miles encompassing Treaty 7 territory, and beyond. SNN have historic trails, campsites, hunting areas, fishing waters, ceremonial and spiritual sites, trade routes, grave sites, and gathering areas throughout their historical territory. 	Meeting between SNN and Alberta Transportation (June 4, 2018); Letter from SNN to Alberta Transportation (June 8, 2016) (cited in SNN SR1 Aug 2014-Aug 2019; Specific Concern #1, 3, & 4) Letter from SNN to Alberta Transportation (September 19, 2014)	Alberta Transportation has been engaged with SNN since 2014 to understand how the Project potentially impacts rights and traditional uses including offering and funding site visits and TUS studies. Alberta Transportation acknowledges SNN views that the camping, ceremonial sites, grave sites, and spiritual sites mentioned by SNN are important markers of identity, use, and occupancy in the region. No sites of high significance, such as effigies, medicine wheels, graves, pottery or tipi rings have been identified in the PDA to date. Six campsites have been identified within the PDA, most of these sites are small and have been heavily disturbed by cultivation or erosion. One undisturbed precontact campsite identified in the treed uplands adjacent to the Elbow River is considered to have heritage value and ACMWS is requiring standard mitigation (see Alberta Transportation's response to Round 1 CEAA Package 2, IR2-10). Alberta Transportation considers that given the context of the Project—predominately situated on private land in southern Alberta that has been used for ranching and agriculture since the late 1800s, and an understanding of the scope of Aboriginal and treaty rights in Alberta as developed through applicable case law—Treaty Rights are generally not exercisable within the PDA, except for a small portion that is located on Crown land (primarily the beds and shores of Elbow River) and on private lands, with landowner consent.	Alberta Transportation has provided funding to SNN to complete a TUS. Alberta Transportation has invited SNN to provide a TUS, however, SNN verbally advised that they do not intend to provide a TUS. If SNN submits one at a later date, Alberta Transportation will review and provide SNN with a written response. Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction. At the end of construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded to meet AEP reclamation requirements. Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important. The draft IPP was provided to SNN on November 12, 2019 which includes opportunities for revegetation. The IPP was discussed during the November 19, 2019 meeting. Alberta Transportation must follow mitigation for archaeological sites as mandated by ACMWS. Standard mitigation includes standard mitigation will be applied, including photography, mapping, documentation and mitigative excavation, to preserve the knowledge of the site. Depending upon its significance, other mitigation may include additional consultation, Indigenous participation in the assessment and mitigation program and Indigenous monitoring during construction.



Table 1-2 Indigenous Group Views on the Project's Potential Impacts to Rights

Views related to Potential Effects on Rights	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
		The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see the EIA, Volume 3A, Section 11.4.2).	The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites SNN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.
			Alberta Transportation by letter dated October 22, 2019 introduced the new approach to land use. Under cover dated November 15, 2019, Alberta Transportation provided the latest land use principles and more detail on the LUA engagement process and offered to meet with SNN to discuss next steps. Alberta Transportation has met with SNN on November 19, 2019 and further discussed the LUA.
SNN is concerned that Crown Land should be set aside to replace lands taken for SR1. There is a concern from the SNN that the land they practice their Treaty rights on is getting smaller because of an increase in development. The SR1 area was used for traditional activities such as hunting and camping which will be permanently altered by the Project.	Meetings between SNN and Alberta Transportation (September 14, 2017, June 4, 2018, February 22, 2019 (cited in SNN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #18)	Since filing the EIA, Alberta Transportation has evolved the land use planning for the Project and is no longer contemplating establishing Areas A, B, and C. The construction and management of the off-stream reservoir presents a unique opportunity with the conversion of private land to Crown land for future use by First Nations and stakeholders. Through the engagement process that included feedback from Indigenous groups, a draft principles of future land use for the Project has been developed.	The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites SNN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.
			Alberta Transportation by letter dated October 22, 2019 introduced the new approach to land use. Under cover dated November 15, 2019, Alberta Transportation provided the latest land use principles and more detail on the LUA engagement process and offered to meet with SNN to discuss next steps. Alberta Transportation has met with SNN on November 19, 2019 and further discussed the LUA.
The fish species that SNN rely upon such as the mountain white fish, bull trout, and cutthroat trout should be included in the discussion on fish and their habitat. Lands included in SR1 were used as camping spots to access these fish resources. Moreover, SNN are noticing a decrease in water levels which will have a further detriment on fish habitat.	Meeting between SNN and Alberta Transportation (June 4, 2018) (cited in SNN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #14, & 15)	The Project is expected to result in restricted access to areas within the PDA and development of a permanent portage for the Elbow River. Fencing of infrastructure would restrict SNN's access to traditional resources or current use sites or areas for a small portion of Elbow River. Current use sites and areas located outside the PDA are not anticipated to be directly affected by the Project.	The fish species and fish habitat identified by SNN have been assessed in Volume 3A, Section 8 of the EIA. Alberta Transportation has held 12 meetings with SNN to share Project information, including potential effects on fish and fish habitat and the proposed mitigation measures.



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Views related to Potential Effects on Rights	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
		Mitigation measures identified in Alberta Transportation's response to Round 1 CEAA Package 2, IR2-01 will be implemented to reduce potential adverse effects of the Project on current use sites and areas.	
		The Project is expected to result in restricted access to areas within the PDA and development of a permanent portage for the Elbow River. Fencing of infrastructure would restrict SNN's access to traditional resources or current use sites or areas for a small portion of Elbow River. Current use sites and areas located outside the PDA are not anticipated to be directly affected by the Project.	
Tsuut'ina Nation (TN)			
TN stated that: "Our citizens hold Aboriginal rights as well as rights under Treaty 7 and Inherent rights. At the heart of these constitutionally protected rights is a connection to the lands, waters, and resources in our traditional territory which we rely on to maintain our livelihoods, language, culture, and community. The Project is located squarely within our traditional territory, in an area	 TN TUS 2018 TN 2018 (CEAR #50) Letter from TN to CEAA (May 30, 2016) Meeting between TN, Alberta Transportation 	Alberta Transportation has been engaged with TN since 2014 to understand how the Project potentially impacts rights and traditional uses including offering and funding site visits and TUS studies. Alberta Transportation considers that given the context of the Project—predominately situated on private land in southern	Alberta Transportation has provided multiple opportunities for TN to provide information about potential impacts to rights. Alberta Transportation provided drafts of the updated TLRU Effects Assessment sections of the EIA (Volumes 3A and 3B), which were provided February 5, 2018, for TN review and input. Alberta Transportation offered a TLRU workshop with TN to obtain input
 where our citizens exercise their Aboriginal, Treaty and Inherent rights." The people of TN are concerned about impacts this Project will have in regard to their rights as Treaty people. These include hunting and fishing rights, including barriers to access, habitat loss, changes in behavior of animals, the abundance and availability 	Alberta Transportation and Stantec, (September 21, 2018); (cited in TN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #1)	Alberta that has been used for ranching and agriculture since the late 1800s, and an understanding of the scope of Aboriginal and treaty rights in Alberta as developed through applicable case law—Treaty Rights are generally not exercisable within the PDA, except for a small portion that is located on Crown land (primarily the beds and shores of Elbow River) and on private lands, with landowner consent. Alberta Transportation acknowledges that TN may access private lands in the PDA for traditional uses with permission of the landowners. The EIA considered best available TLRU information, including information about the potential impacts to rights. The assessment methods are defensible and reliable and appropriate for the scope and nature of the Project.	and feedback on the draft TLRU Effects Assessments, including TN's perspectives on assessment methodology, proposed mitigation, Project-Specific Concerns and how the Project may adversely affect the exercise of Section 35 rights. Alberta Transportation met with TN to discuss in December 2018.
of animals, and the change in the health and flow of water.			Alberta Transportation has met with TN on 18 occasions to share Project information and obtain TN views on the Project.
			TN Elders and knowledge holders participated in 22 days of site visits facilitated by Alberta Transportation. Results of the site visits were reported in the TN TUS study submitted to Alberta Transportation on April 3, 2018.
			Alberta Transportation has provided a written response to the TN TUS (in November 2018) to TN addressing the concerns and issues raised in the TUS and met with TN in December 2018 to discuss the response.
	Volume 3A, Section 14.5 concludes that no effects on potential or established Aboriginal or Treaty rights are expected to occur as a result of the Project.	Alberta Transportation sent a letter dated January 28, 2019 that requested the TN provide its views and perspectives on its Aboriginal and Treaty rights, cultural and experiential values, and country foods. The letter listed four specific topics that Alberta Transportation was requesting input on to help answer CEAA IRs. TN provided a response in February 2019 declining to provide the information requested.	
			The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites TN to participate in the engagement



Table 1-2 Indigenous Group Views on the Project's Potential Impacts to Rights

Views related to Potential Effects on Rights	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
			process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights. Alberta Transportation by letter dated October 22, 2019 introduced the new approach to land use. Under cover dated November 15, 2019, Alberta Transportation provided the latest land use principles and more detail on the LUA engagement process and offered to meet with TN to discuss next steps.
 TN expressed concern over the adverse impacts to the habitat of various cultural keystone species which are necessary for their engagement in spiritual practices such as offerings, prayer, and ceremony. The changes to the landscape for the Project will affect many species they rely upon such as deer, grizzly bears, beaver, eagles, etc. TN stated that the Project has the potential to affect them socioeconomically affecting their ability to harvest medicinal plants, and affecting ceremony held at the pow wow grounds. TN Elders describe deep cultural connections with plant gathering and specific medicinal and ceremonial plants within their territory. Development in their territory has led to the disappearance of culturally important plants at traditional sites. There is a particular concern for the health of sweetgrass in the area which was abundant in the past and is now scarce due to increasing development in the area. TN members are concerned about impacts to medicinal and cultural plants that cannot be found anywhere but the proposed affected area. The Proponent fails to identify or assess potential impacts to TN's ability to hunt in the Project area. As referenced by the proponent in Section 14.3.2.1 TN has reported that the Project may affect their citizens' ability to hunt in the Project area. Specific Concerns have been raised by TN about impacts to winter ungulate habitat and the migratory herds of elk in the Project area. TN currently has access to private lands in the Project area for hunting activities. As such, the Proponent's assessment is incomplete. 	 Letter from TN to CEAA (May 30, 2016) TN TUS 2018 Meeting between TN and Alberta Transportation (September 21, 2018); (cited in TN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #1) TN 2018 (CEAR#50) 	Alberta Transportation has been engaged with TN since 2014 to understand how the Project potentially impacts rights and traditional uses including offering and funding site visits and TUS studies. The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see Volume 3A, Section 11.4.2 of the EIA). Portions of the hunting areas that may be located within the designated construction footprint will be directly affected by construction activities and fencing of infrastructure will restrict access to certain areas of the Project. Mitigation measures identified in Alberta Transportation's response to Round 1 CEAA Package 2, IR2-01 will be implemented to reduce potential adverse effects of the Project on current use sites and areas. The Project is expected to result in restricted access to areas within the PDA and development of a permanent portage for the Elbow River. Fencing of infrastructure would restrict TN's access to traditional resources or current use sites or areas for a small portion of Elbow River. Current use sites and areas located outside the PDA are not anticipated to be directly affected by the Project. Mitigation measures identified in Alberta Transportation's response to Round 1 CEAA Package 2, IR2-01 will be implemented to reduce potential adverse effects of the Project on current use sites and areas. Traditionally used plant species within the PDA will be directly affected due to vegetation removal and grading associated with construction, affecting 168 ha associated with permanent Project infrastructure and approximately 566 ha of tempo	Alberta Transportation recognizes areas of disparity may remain. Alberta Transportation is committed to ongoing consultation with TN to try to resolve any disparity in views that may remain with respect to consideration of Indigenous and knowledge and concerns raised by TN. Alberta Transportation has met with TN on 18 occasions to share Project information and obtain TN views on the Project, including potential impacts on hunting and traditional use in the PDA. A TUS was submitted to Alberta Transportation on April 3, 2018. TN provided the locations of some TLRU areas and Alberta Transportation considered the locations and potential effects to these areas as a result of the Project. Alberta Transportation provided a written response to TN addressing the concerns and issues raised in the TUS and met with TN on December 6, 2018 to receive comment and feedback on the response (see Appendix 1-1 of this response). Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction. At the end of construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded to meet AEP reclamation requirements. Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important. The draft IPP was provided to TN on November 12, 2019 which includes opportunities for revegetation. Alberta Transportation funded additional site visits in July-August 2019 and has agreed to facilitate additional site visits with TN. In December 2019, Alberta Transportation provided written responses to the TN Technical Review dated June 2018, which included some of these concerns as Question 3-9. Alberta Transportation will offer to meet with TN regarding the written responses.



Table 1-2 Indigenous Group Views on the Project's Potential Impacts to Rights

	Views related to Potential Effects on Rights	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
			Although individual plants will be removed from the PDA, none of the traditionally used species identified will be lost in the LAA, nor will vegetation communities supporting traditionally used plants be lost from the PDA (see Volume 3A, Section 10.4 of the EIA).	
•	TN members are concerned about restrictions to access, to medicinal and cultural plants that cannot be found anywhere but the proposed affected area.	• TN TUS 2018 • TN 2018 (CEAR #50)	Since filing the EIA, Alberta Transportation has evolved the land use planning for the Project and is no longer contemplating establishing Areas A, B, and C. The construction and management of the off-stream reservoir presents a unique opportunity with the acquisition of private land by Crown. Through the engagement process that included feedback from Indigenous groups, a draft principles of future land use for the Project has been developed. Traditionally used plant species within the PDA will be directly affected due to vegetation removal and grading associated with construction, affecting 168 ha associated with permanent Project infrastructure and approximately 566 ha of temporary workspace. Although individual plants will be removed from the PDA, none of the traditionally used species identified will be lost in the LAA, nor will vegetation communities supporting traditionally used plants be lost from the PDA (see Volume 3A, Section 10.4 of the EIA). Seventy-seven traditionally used plant species were identified through the Indigenous Engagement Program for the Project and a review of relevant publicly available sources. Forty-one of the traditionally used plant species or genus identified were observed within the PDA during field survey. All, but one of the identified traditionally used plants are common species. The one rare species, red cedar (<i>Thuja plicata</i>), is not expected in the PDA as it grows at higher elevations with greater precipitation. None of the identified traditionally used plant species are only found in the PDA.	Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction. At the end of construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded to meet AEP reclamation requirements. Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important. The draft IPP was provided to TN on November 12, 2019 which includes opportunities for revegetation. The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites TN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights. Alberta Transportation by letter dated October 22, 2019 introduced the new approach to land use. Under cover dated November 15, 2019, Alberta Transportation provided the latest land use principles and more detail on the LUA engagement process and offered to meet with TN to discuss next steps.
•	TN are concerned that their ability to pursue their traditional land use practices will be threatened by development with foreseeable impacts on TN reserve lands and water. TN has raised concerns about their ability to pursue traditional land use practices. These include historic trails and pathways, historic resource sites, tipi rings, medicine wheels, burial grounds, campsites, and buffalo jumps. TN expressed concerns about effects on cultural sites in the Project area, including fire pits and tipi rings, as well as any cultural sites that are likely to be present in undisturbed areas.	• TN TUS 2018	Alberta Transportation acknowledges TN's view that the cultural and archaeological sites identified by TN are important markers of identity, use, and occupancy in the region. No sites of high significance, such as effigies, medicine wheels, graves, pottery or tipi rings have been identified in the PDA to date. Six campsites have been identified within the PDA, most of these sites are small and have been heavily disturbed by cultivation or erosion. One undisturbed precontact campsite identified in the treed uplands adjacent to the Elbow River is considered to have heritage value and ACMWS is requiring standard mitigation (see Alberta Transportation's response to Round 1 CEAA Package 2, IR2-10).	Alberta Transportation must follow mitigation for archaeological sites as mandated by ACMSW. Standard mitigation includes photography, mapping, documentation and mitigative excavation, to preserve the knowledge of the site. Depending upon its significance, other mitigation may include additional consultation, Indigenous participation in the assessment and mitigation program and Indigenous monitoring during construction. The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including



Table 1-2 Indigenous Group Views on the Project's Potential Impacts to Rights

Views related to Potential Effects on Rights	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
		Alberta Transportation committed to cross reference the sites in the TN's TLRU Report and those identified in the HRIA; to confirm the risks to these sites; and propose possible mitigation measures for these sites. Alberta Transportation has committed to overlay the GPS coordinates with the PDA to determine sites at risk. Alberta Transportation is awaiting the GPS coordinates from TN. The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see the EIA, Volume 3A, Section 11.4.2).	traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites TN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights Alberta Transportation by letter dated October 22, 2019 introduced the new approach to land use. Under cover dated November 15, 2019, Alberta Transportation provided the latest land use principles and more detail on the LUA engagement process and offered to meet with TN to discuss next steps. A TUS was submitted to Alberta Transportation on April 3, 2018. TN provided the locations of some TLRU areas and Alberta Transportation considered the locations and potential effects to these areas as a result of the Project. Alberta Transportation provided a written response to TN addressing the concerns and issues raised in the TUS and met with TN on December 6, 2018 to receive comment and feedback on the response (see Appendix 1-1 of this response). Alberta Transportation funded additional site visits in July-August 2019 and has agreed to facilitate additional site visits with TN.
Ermineskin Cree Nation (ECN)	T		
 The proponent has failed to understand the scope of Treaty rights held by ECN (pursuant to 7). Those rights include rights to use lands and resources in the Project area for traditional purposes, but their rights are not limited to such practices and the assessment of potential impacts to current use of lands for traditional purposes cannot be adopted as a proxy for the evaluation of potential effects to Treaty rights. The proponent unreasonably narrows the scope of information it could have collected to inform the analysis of potential effects to Treaty rights by characterizing any aspect of the exercise of treaty rights as relating to "Intangible components" which are "subjective, experiential, and conditional, and are not readily amenable to assessment and residual effects criteria because they cannot be realistically measured or mitigated." No meaningful efforts have been made to gather information from ECN in regard to the exercise of their Treaty rights and the potential impact of the Project on their continued ability to exercise rights, pass on their culture and sustain their way of life. Moreover, such assessment is not, as asserted by the proponent, impossible to conduct. The proponent should be referred to a recent approach co-developed by CEAA and a Treaty 8 First Nation and directed to engage in the assessment methodology proposed in that document (http://www.ceaa.gc.ca/050/documents/p65505/122764E.pdf) in collaboration with ECN. 	ECN 2018 (CEAR #46) ECN TUS 2018 (CEAR #46) p. 14	Alberta Transportation has been engaged with ECN since 2014 to understand how the Project potentially impacts rights and traditional uses including offering and funding site visits and TUS studies. Alberta Transportation considers that given the context of the Project—predominately situated on private land in southern Alberta that has been used for ranching and agriculture since the late 1800s, and an understanding of the scope of Aboriginal and treaty rights in Alberta as developed through applicable case law—Treaty Rights are generally not exercisable within the PDA, except for a small portion that is located on Crown land (primarily the beds and shores of Elbow River) and on private lands, with landowner consent. Alberta Transportation acknowledges that ECN may access private lands in the PDA for traditional uses with permission of the landowners. The EIA considered best available TLRU information, including information about the potential impacts to rights. The assessment methods are defensible and reliable and appropriate for the scope and nature of the Project. The EIA, Volume 3A, Section 14.5 concludes that no effects on potential or established Aboriginal or Treaty rights are expected to occur as a result of the Project.	Alberta Transportation has provided multiple opportunities for ECN to provide information about potential impacts to rights. Alberta Transportation provided drafts of the updated TLRU Effects Assessment sections of the EIA (Volumes 3A and 3B), which were provided February 5, 2018, for ECN review and input. Alberta Transportation offered a TLRU workshop in January 2018 with ECN to obtain input and feedback on the draft TLRU Effects Assessments, including ECN's perspectives on assessment methodology, proposed mitigation, Project-Specific Concerns and how the Project may adversely affect the exercise of Section 35 rights. ECN did not respond. Alberta Transportation has met with ECN on 4 occasions to share Project information and obtain ECN views on the Project. ECN Elders and knowledge holders participated in 1 day of site visits facilitated by Alberta Transportation. Results of the site visits were reported in the ECN TUS report submitted to Alberta Transportation on June 25, 2018. Alberta Transportation provided a written response to ECN addressing the concerns and issues raised in the TUS and met with ECN on September 16, 2019 to receive comment and feedback on the response (see Appendix 1-1). Alberta Transportation sent a letter dated January 28, 2019 that requested the ECN provide its views and perspectives on its Aboriginal and Treaty rights, cultural and experiential values, and country foods. The letter listed four specific topics that Alberta Transportation was requesting input on to help answer CEAA IRs. ECN has not provided a response.



Table 1-2 Indigenous Group Views on the Project's Potential Impacts to Rights

	Views related to Potential Effects on Rights	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
•	Most critically, the proponent should be directed to gather information to identify the conditions that support the exercise of Treaty rights, understanding how historic, existing and approved land uses have affected those conditions, and identifying the importance of the Project's location in relation to the exercise of rights.			In December 2019, Alberta Transportation provided written responses to the ECN Technical Review dated June 2018, which included some of these concerns as Questions 6, 10 and 15. Alberta Transportation will try to offer to meet with ECN regarding the written responses.
•	The proponent should be directed to examine the attached traditional land use reports and identify the potential access restrictions that would be imposed during all phases of the Project to assess the impacts to current use and on ECN's treaty rights.			
•	The measuring parameters exclusion of "potential use of land" is not included here. This impact on Aboriginal Treaty Rights is therefore underestimated.			
•	ECN stated: "Our Treaty rights are not the same as 'recreational activities'. Our Treaty rights enable us to survive on the land."			
•	The Proponent should attempt to ensure that Areas B, C and D of the PDA are accessible to ECN for traditional purposes, subject to safety considerations related to flooding. The Proponent should work with ECN to design an access management plan for Areas B and C. Such a plan could support ECN access to the area for hunting and other traditional purposes. ECN members are concerned about the potential impacts for the loss of an indefinite time of access to the planned development area over the life of the Project, which includes their ability to consume wild meat, and transmit their traditional way of life, culture, and knowledge to future generations.	 ECN TUS 2018 (CEAR #46) ECN 2018 (CEAR #46) 	Since filing the EIA, Alberta Transportation has evolved the land use planning for the Project and is no longer contemplating establishing Areas A, B, and C. The construction and management of the off-stream reservoir presents a unique opportunity with the conversion of private land to Crown land for future use by First Nations and stakeholders. Through the engagement process that included feedback from Indigenous groups, a draft principles of future land use for the Project has been developed.	The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites ECN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.
				Alberta Transportation by letter dated October 22, 2019 introduced the new approach to land use. Under cover dated November 15, 2019, Alberta Transportation provided the latest land use principles and more detail on the LUA engagement process and offered to meet with ECN to discuss next steps. Alberta Transportation has met with ECN on September 16, 2019 and November 18, 2019 and further discussed the LUA. In December 2019, Alberta Transportation provided written responses to the ECN Technical Review dated June 2018, which included some of these concerns as Questions 8 and 11. Alberta Transportation will offer to meet with ECN regarding the written responses.



Table 1-2 Indigenous Group Views on the Project's Potential Impacts to Rights

Views related to Potential Effects on Rights	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
 ECN expressed concerns over the potential destruction of plant species for medicinal and spiritual use, the reduction of wetland habitat for breeding and nesting and its effect on wildlife species, the migration routes for wildlife, and the impacts on sensitive species that have cultural importance to ECN and its members. ECN requests that prior to the construction of the Project the Proponent invites ECN land users to hunt in the Project development area, harvest medicinal plants along the river, and create an access management plan to support ECN access to the area for hunting and other traditional practices. The proponent has failed to gather and include adequate baseline information relating to ECN use of the assessment area for traditional purposes. Instead, the proponent has relied heavily on outdated information gleaned from a literature review and very limited site visits. ECN have prepared traditional land use reports and the proponent should be directed to use these reports to identify baseline information relating to the exercise of rights and use of this area for the current use of lands for traditional purposes, and incorporate this information into the effects assessment in every applicable respect. The Proponents conclusion regarding potential residual effects to current uses are unreliable. This is due to the fact that TLU data gathered by ECN was not incorporated. ECN depends on access to areas in the PDA that will be restricted by the Project to access elk populations. The proponent has failed to gather baseline information regarding the location of Crown and private lands over which ECN access to exercise Treaty rights and carry out current use of lands for traditional purposes. Though the proponent has been long informed as to the location of private lands where landowners permit access by ECN, the proponent has failed to identify these areas, incorporate this information into its effects assessment, or propose mitigation measures to partially of	• ECN TUS 2018 (CEAR #46) • ECN 2018 (CEAR #46, 47)	The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see Volume 3A, Section 11.4.2 of the EIA). Portions of the hunting areas that may be located within the designated construction footprint will be directly affected by construction activities and fencing of infrastructure will restrict access to certain areas of the Project. Mitigation measures identified in Alberta Transportation's response to Round 1 CEAA Package 2, IR2-01 will be implemented to reduce potential adverse effects of the Project on current use sites and areas. Current use sites and areas located outside the PDA are not anticipated to be directly affected by the Project. Mitigation measures identified in Alberta Transportation's response to Round 1 CEAA Package 2, IR2-01 will be implemented to reduce potential adverse effects of the Project on current use sites and areas. Traditionally used plant species within the PDA will be directly affected due to vegetation removal and grading associated with construction, affecting 168 ha associated with permanent Project infrastructure and approximately 566 ha of temporary workspace. Although individual plants will be removed from the PDA, none of the traditionally used species identified will be lost in the LAA, nor will vegetation communities supporting traditionally used plants be lost from the PDA (see Volume 3A, Section 10.4 of the EIA).	Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction. At the end of construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded to meet AEP reclamation requirements. Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important. The draft IPP was provided to ECN on November 12, 2019 which includes opportunities for harvesting plants pre-construction and revegetation post-construction. The IPP was discussed during the November 18, 2019 meeting. The ECN TUS report was submitted to Alberta Transportation on June 25, 2018. Alberta Transportation provided a written response to ECN addressing the concerns and issues raised in the TUS and met with ECN on September 16, 2019 to receive comment and feedback on the response (see Appendix 1-1 of this response). In December 2019, Alberta Transportation provided written responses to the ECN Technical Review dated June 2018, which included some of these concerns as Question 7. Alberta Transportation will offer to meet with ECN regarding the written responses.



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Table 1-2 Indigenous Group Views on the Project's Potential Impacts to Rights

Views related to Potential Effects on Rights	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
 ECN is concerned with the historical resources that could be affected by the development of the Project, such as tipi rings, campgrounds, and burial sites, and the presence of spiritual, ceremonial sites. The risks and impacts to these sites are not clear and mitigation measures do not provide adequate information. ECN and its members are concerned about the impact on sites of historical and spiritual significance, particularly the southeastern and southwestern portions of the PDA. "[Traditional use] transcends subsistence or recreational resource use because its practices connect the material to the ideational realm of cultural norms and wellbeing, identity formation and spirituality, as well as family and community bonds and provides critical and increasingly scarce opportunities to transmit knowledge and cultural practices to the younger generations." 	• ECN TUS 2018 (CEAR #46) • ECN 2018 (CEAR #46)	Alberta Transportation acknowledges ECN's views that the cultural and archaeological sites identified by ECN are important markers of identity, use, and occupancy in the region. No sites of high significance, such as effigies, medicine wheels, graves, pottery or tipi rings have been identified in the PDA to date. Six campsites have been identified within the PDA, most of these sites are small and have been heavily disturbed by cultivation or erosion. One undisturbed precontact campsite identified in the treed uplands adjacent to the Elbow River is considered to have heritage value and ACMWS is requiring standard mitigation (see Alberta Transportation's response to Round 1 CEAA Package 2, IR2-10). Intangible values can only be meaningfully evaluated by individuals and communities experiencing these values in their cultural context. To date ECN has not suggested mitigation measures for intangible values. Alberta Transportation will continue to work with ECN to better understand Project effects to intangible values and identify practical mitigation measures.	Alberta Transportation must follow mitigation for archaeological sites as mandated by ACMSW. Standard mitigation includes standard mitigation will be applied, including photography, mapping, documentation and mitigative excavation, to preserve the knowledge of the site. Depending upon its significance, other mitigation may include additional consultation, Indigenous participation in the assessment and mitigation program and Indigenous monitoring during construction. The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites ECN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights. Alberta Transportation by letter dated October 22, 2019 introduced the new approach to land use. Under cover dated November 15, 2019, Alberta Transportation provided the latest land use principles and more detail on the LUA engagement process and offered to meet with ECN to discuss next steps and further discussed the LUA. Alberta Transportation has since met with ECN on September 16, 2019 and will be November 18, 2019. The ECN TUS report was submitted to Alberta Transportation on June 25, 2018. Alberta Transportation provided a written response to ECN addressing the concerns and issues raised in the TUS and met with ECN on September 16, 2019 to receive comment and feedback on the response (see Appendix 1-1 of this
Foothills Ojibway Society (FOS)		,	
FOS has concerns regarding traditional use area near Camp Kiwanis where members of the FOS historically visited to perform sweats and other activities.	Meetings between FOS and Alberta Transportation (May 7, 2018 and October 28, 2019) (cited in FOS SR1 SCRT Oct 2016-Sept 2019; Specific Concern #1)	Alberta Transportation acknowledges FOS's views that the cultural sites identified by FOS are important markers of identity, use, and occupancy in the region. FOS has not provided the specific location of the site referred to, but if it is outside the PDA it is not anticipated to be affected by the Project.	The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses would include access for other activities in the LUA. Alberta Transportation is available to meet with FOS to discuss the LUA. At the meeting held on October 28, 2019, Alberta Transportation agreed to facilitate a ceremony with FOS in Spring 2020.



Table 1-2 Indigenous Group Views on the Project's Potential Impacts to Rights

Views related to Potential Effects on Rights	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
FOS is concerned for the animals in the area.	Meetings between FOS and Alberta Transportation (May 7, 2018 and October 28, 2019) (cited in FOS SR1 SCRT Oct 2016-Sept 2019; Specific Concern #2)	The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see the EIA, Volume 3A, Section 11.4.2 of the EIA). Portions of the hunting areas that may be located within the designated construction footprint will be directly affected by construction activities and fencing of infrastructure will restrict access to certain areas of the Project. Mitigation measures identified in Alberta Transportation's response to Round 1 CEAA Package 2, IR2-01 will be implemented to reduce potential adverse effects of the Project on current use sites and areas. Current use sites and areas located outside the PDA are not anticipated to be directly affected by the Project. Mitigation measures identified in Alberta Transportation's response to Round 1 CEAA Package 2, IR2-01 will be implemented to reduce potential adverse effects of the Project on current use sites and areas.	 Alberta Transportation will implement the following measures to mitigate potential effects on wildlife and biodiversity: Pre-construction surveys will be conducted to identify wildlife features (e.g., nests, dens) and appropriate site-specific mitigation developed. Where possible, construction activities during the Restricted Activity Period (RAP) for the Key Wildlife Diversity Zone (KWBZ) identified along Elbow River (December 15 to April 30) will be avoided or reduced. This will limit potential sensory disturbance to wintering ungulates (ESRD 2015, GoA 2017). If construction activities must occur during this time period, a wildlife mitigation and monitoring plan will be developed in consultation with regulators, which will include monitoring ungulate habitat use and response to human disturbance. Restrict all construction activities to the approved construction footprint. Where possible, temporary workspaces and access roads will be in areas that avoid wildlife features and native vegetation (e.g., shrubland, treed areas, wetlands). Existing access roads and previously disturbed areas will be used, where feasible. Where fencing is proposed to restrict livestock access to Project structures (e.g., diversion channel), wildlife-friendly fencing will be installed to allow ungulate passage. Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods. Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction land access management. At the meeting held on October 28, 2019, Alberta Transportation discussed wildlife mitigation measures and provided figures relating to wildlife (e.g., location of w



Table 1-2 Indigenous Group Views on the Project's Potential Impacts to Rights

Views related to Potential Effects on Rights	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
Louis Bull Tribe (LBT)			
 LBT expressed concerns relating to development in the Project area and potential impacts to Aboriginal and Treaty rights. The greatest concern for LBT is related to the cumulative effects and increased impacts to Aboriginal and treaty rights. Cumulative effects and incremental impacts to the health and abundance of resources provided under LBT Aboriginal and Treaty rights. LBT expressed concern over loss of accessible Crown lands on which to practice Aboriginal and Treaty Rights and stated this may be a long-term residual impact relating to this Project. LBT stated: "Generally, traditional use rights can only be exercised on reserve, on Crown lands, or on private lands through arrangements with the landowner, a fairly limited geographic scope. Further, historical limitations on the movement of Alberta's Aboriginal peoples off reserve, and government actions to prevent the practice of traditional land use activities, have reduced the number of active practitioners. While this is changing today, use of recent historical and current use of lands as a metric for Aboriginal and Treaty Rights is inherently biased. Current use may not necessarily reflect past patterns of use, or the interests of a community in the health of ecosystems that could support growing interest in traditionally or culturally practices. These constraints on the ability to exercise Aboriginal and Treaty Rights within LBT Traditional Territory, and the interests of an Indigenous community in maintaining the ecological health of those natural resources to which they have legal access must be acknowledged when assessing impacts of any project". 	 Meeting between LBT and Alberta Transportation (November 22, 2018); (cited in LBT SR1 SCRT Oct 2016-Sept 2019; Specific Concern #1) LBT 2018 (CEAR #49) Solstice Environmental Management 2019 	Alberta Transportation has been engaged with LBT since 2016 to understand how the Project potentially impacts rights and traditional uses including offering and funding site visits and TUS studies. Alberta Transportation considers that given the context of the Project—predominately situated on private land in southern Alberta that has been used for ranching and agriculture since the late 1800s, and an understanding of the scope of Aboriginal and treaty rights in Alberta as developed through applicable case law—Treaty Rights are generally not exercisable within the PDA, except for a small portion that is located on Crown land (primarily the beds and shores of Elbow River) and on private lands, with landowner consent. Alberta Transportation acknowledges that LBT may access private lands in the PDA for traditional uses with permission of the landowners. The EIA submitted in March 2018 considered best available TLRU information, including information about the potential impacts to rights. The assessment methods are defensible and reliable and appropriate for the scope and nature of the Project. Volume 3A, Section 14.5 concludes that no effects on potential or established Aboriginal or Treaty rights are expected to occur as a result of the Project. Since filing the EIA, Alberta Transportation has evolved the land use planning for the Project and is no longer contemplating establishing Areas A, B, and C. The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by the Crown. The Government of Alberta will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the Land Use Area (LUA).	The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites LBT to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights. Alberta Transportation by letter dated October 22, 2019 introduced the new approach to land use. Under cover dated November 13, 2019, Alberta Transportation provided the latest land use principles and more detail on the LUA engagement process. Alberta Transportation has met with LBT on November 14, 2019 and further discussed the LUA.
 LBT noted concerns regarding local wildlife populations including moose, deer, cougars, coyotes, wolves, beaver, and muskrat and their loss of habitat from the Project. LBT suggested mitigation measures including adhering to the RAPs, reductions of the Project footprint and limitations on the uses of chemicals. LBT stated concerns regarding fish and wildlife during construction, most notably the impacts to fish and loss of fish habitat. LBT noted ceremonial plants in the construction area and suggested mitigation measures, including root retention, limitation of chemical herbicides, retention of riparian species, and harvest prior to construction were suggested. Members of LBT expressed concerns about people losing their lands to this Project. Members of LBT expressed concerns over loss of access to Crown land. 	 Meeting between LBT and Alberta Transportation (November 6, 2018); (cited in LBT Oct 2016-Sept 2019; Specific Concern #3) LBT TUS 2018 (CEAR #1228) LBT Open House (November 19, 2018) (cited in LBT Oct 2016-Sept 2019; Specific Concern #3, 4, 5, 6, 10, 11,12, & 13) 	The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see the EIA, Volume 3A, Section 11.4.2). Portions of the hunting areas that may be located within the designated construction footprint will be directly affected by construction activities and fencing of infrastructure will restrict access to certain areas of the Project.	Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction At the end of construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded to meet AEP reclamation requirements. Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important. A final TUS was submitted to Alberta Transportation on November 22, 2018. Alberta Transportation has provided a written response to LBT addressing the concerns and issues raised in the TUS and met with LBT on November 14, 2019 to receive LBT comments and feedback on the response (see Appendix 1-1 of this response).



Table 1-2 Indigenous Group Views on the Project's Potential Impacts to Rights

Views related to Potential Effects on Rights	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
 LBT expressed concerns over using the areas for traditional use and grazing, as grazing cattle make it difficult to practice traditional uses. LBT stated that "due to extensive development and alteration of the natural landscape LBT members have to travel further and further from the Tribe Reserve lands to practice constitutionally protected Aboriginal and Treaty rights". 	Solstice Environmental Management 2019	Mitigation measures identified in Alberta Transportation's response to Round 1 CEAA Package 2, IR2-01 will be implemented to reduce potential adverse effects of the Project on current use sites and areas. The Project is expected to result in restricted access to areas within the PDA and development of a permanent portage for the Elbow River. Fencing of infrastructure would restrict LBT's access to traditional resources or current use sites or areas for a small portion of Elbow River. Current use sites and areas located outside the PDA are not anticipated to be directly affected by the Project. Mitigation measures identified in Alberta Transportation's response to Round 1 CEAA Package 2, IR2-01 will be implemented to reduce potential adverse effects of the Project on current use sites and areas. Traditionally used plant species within the PDA will be directly affected due to vegetation removal and grading associated with construction, affecting 168 ha associated with permanent Project infrastructure and approximately 566 ha of temporary workspace. Although individual plants will be removed from the PDA, none of the traditionally used species identified will be lost in the LAA, nor will vegetation communities supporting traditionally used plants be lost from the PDA (see the EIA, Volume 3A, Section 10.4). At the end of construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded to meet AEP reclamation requirements. Alberta Transportation's analysis of information brought forward by LBT and the detailed mitigation measures proposed to address potential effects on traditional resources, areas and activities were communicated to LBT on August 8, 2019 in Alberta Transportation's response to the LBT TLRU report (see Appendix 1-1 of this response).	The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites LBT to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights. Alberta Transportation by letter dated October 22, 2019 introduced the new approach to land use. Under cover dated November 15, 2019, Alberta Transportation provided the latest land use principles and more detail on the LUA engagement process and offered to meet with LBT to discuss next steps. Alberta Transportation has since met with LBT on November 14, 2019 and further discussed the LUA. Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction. The draft IPP was provided to LBT on November 12, 2019 which includes opportunities for harvesting plants pre-construction and revegetation post-construction. The IPP was discussed during the November 14, 2019 meeting.



Table 1-2 Indigenous Group Views on the Project's Potential Impacts to Rights

Views related to Potential Effects on Rights	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps			
Montana First Nation (MFN)						
 MFN is concerned that the assessment of impacts on MFN traditional use has not adequately been considered becaus information in the EIA use information from publicly available reports rather than discussing potential impacts with MFN dir MFN does not support use of MFN traditional land and resour use information available to the public domain, particularly vinformation used is of no relevance to the study area and have been verified by MFN. As stated in Treaty 6: "Her Majesty further agrees with her said Indians that they, the said Indians, shall have right to pursue avocations of hunting and fishing throughout the tract surrendered as herein before described, subject to such regulations as may from time to time be made by her Gover of her Dominion of Canada and saving and excepting such as may from time to time be required or taken up for settlem mining, lumbering or other purposes by her said Government the Dominion of Canada or by any of the subjects thereof, authorized therefore, by the said Government These prom were reinforced in 1982, when the Constitution Act included Section 35, which covers the Rights of the Aboriginal Peoples Canada". 	e ectly. rce when as not d their rmment tracts nent, t of duly nises	Alberta Transportation has been engaged with MFN since 2016 to understand how the Project potentially impacts rights and traditional uses including offering and funding site visits and TUS studies. Alberta Transportation considers that given the context of the Project—predominately situated on private land in southern Alberta that has been used for ranching and agriculture since the late 1800s, and an understanding of the scope of Aboriginal and treaty rights in Alberta as developed through applicable case law—Treaty Rights are generally not exercisable within the PDA, except for a small portion that is located on Crown land (primarily the beds and shores of Elbow River) and on private lands, with landowner consent. Alberta Transportation acknowledges that MFN may access private lands in the PDA for traditional uses with permission of the landowners. The EIA submitted in March 2018 considered best available TLRU information, including information about the potential impacts to rights. The assessment methods are defensible and reliable and appropriate for the scope and nature of the Project. Volume 3A, Section 14.5 concludes that no effects on potential or established Aboriginal or Treaty rights are expected to occur as a result of the Project.	Alberta Transportation has provided multiple opportunities for MFN to provide information about potential impacts to rights. Alberta Transportation provided drafts of the updated TLRU Effects Assessment sections of the EIA (Volumes 3A and 3B), which were provided February 5, 2018, for MFN review and input. Alberta Transportation offered a TLRU workshop with MFN to obtain input and feedback on the draft TLRU Effects Assessments, including MFN's perspectives on assessment methodology, proposed mitigation, Project-Specific Concerns and how the Project may adversely affect the exercise of Section 35 rights. MFN did not respond. Alberta Transportation has met with MFN on 3 occasions to share Project information and obtain MFN views on the Project. Alberta Transportation has approved funding for MFN to complete a TUS. Alberta Transportation understands this remains in progress. Alberta Transportation sent a letter dated January 28, 2019 that requested the MFN provide its views and perspectives on its Aboriginal and Treaty rights, cultural and experiential values, and country foods. The letter listed four specific topics that Alberta Transportation was requesting input on to help answer CEAA IRs. MFN has not provided a response. In December 2019, Alberta Transportation provided written responses to the MFN Technical Review dated June 2018, which included some of these concerns as Question 15. Alberta Transportation will offer to meet with MFN regarding the written responses.			
MFN requests that further detailed rationale and justification provided as to how Alberta Transportation concluded impact TLRU as not significant given that change in "access to tradit resources" and in "current use site areas or areas within the of permanent structures" were given a high magnitudes and considered irreversible.	cts to tional area	Since filing the EIA, Alberta Transportation has evolved the land use planning for the Project and is no longer contemplating establishing Areas A, B, and C. The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The Government of Alberta will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the Land Use Area (LUA).	The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites MFN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights. Alberta Transportation by letter dated October 22, 2019 introduced the new approach to land use. Under cover dated November 15, 2019, Alberta Transportation provided the latest land use principles more detail on the LUA engagement process and offered to meet with MFN to discuss next steps. In December 2019, Alberta Transportation provided written responses to the MFN Technical Review dated June 2018, which included this concern as Question 15. Alberta Transportation will offer to meet with MFN regarding the written responses.			



Table 1-2 Indigenous Group Views on the Project's Potential Impacts to Rights

Views related to Potential Effects on Rights	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
MFN expressed concerns regarding medicinal and ceremonial plants in the area.	Meeting between MFN and Alberta Transportation (June 27, 2018) (cited in MFN SR1 SCRT Oct 2016-Sept 2019; Specific Concern #16)	Traditionally used plant species within the PDA will be directly affected due to vegetation removal and grading associated with construction, affecting 168 ha associated with permanent Project infrastructure and approximately 566 ha of temporary workspace. Although individual plants will be removed from the PDA, none of the traditionally used species identified will be lost in the LAA, nor will vegetation communities supporting traditionally used plants be lost from the PDA (see the EIA, Volume 3A, Section 10.4).	At the end of construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded to meet AEP reclamation requirements. Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important. Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction. The draft IPP was provided to MFN on November 15, 2019 which includes opportunities for revegetation.
Samson Cree Nation (SCN)			
 SCN expressed particular concern about the destruction of fish habitat as SCN continues to exercise fishing rights. SCN requests the description of potential effects of erosion and sedimentation on watercourses on SCN sites of importance, including fishing and spiritual sites. SCN indicates that potential environmental effects did not consider effects to Indigenous communities (such as changes in culture or spirituality) related to the Project. 	• SCN 2018 (CEAR #52)	The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see Volume 3A, Section 11.4.2 of the EIA). Portions of the hunting areas that may be located within the designated construction footprint will be directly affected by construction activities and fencing of infrastructure will restrict access to certain areas of the Project. Mitigation measures identified Alberta Transportation's response to Round 1 CEAA Package 2, IR2-01 will be implemented to reduce potential adverse effects of the Project on current use sites and areas. The Project is expected to result in restricted access to areas within the PDA and development of a permanent portage for the Elbow River. Fencing of infrastructure would restrict SCN's access to traditional resources or current use sites or areas for a small portion of Elbow River. Current use sites and areas located outside the PDA are not anticipated to be directly affected by the Project. Mitigation measures identified in Alberta Transportation's response to Round 1 CEAA Package 2, IR2-01 will be implemented to reduce potential adverse effects of the Project on current use sites and areas. Traditionally used plant species within the PDA will be directly affected due to vegetation removal and grading associated with construction, affecting 168 ha associated with permanent Project infrastructure and approximately 566 ha of temporary workspace.	Alberta Transportation offered a TLRU workshop with SCN to obtain input and feedback on the draft TLRU Effects Assessments, including SCN's perspectives on assessment methodology, proposed mitigation, Project-Specific Concerns and how the Project may adversely affect the exercise of Section 35 rights. This was held on February 23, 2018 and SCN directed that none of the the information collected at the TLRU workshop could be used for any purpose or Project. Alberta Transportation respects the restrictions SCN has placed on the use of their information. Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction At the end of construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded to meet AEP reclamation requirements. Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important. The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites SCN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.



Table 1-2 Indigenous Group Views on the Project's Potential Impacts to Rights

Views related to Potential Effects on Rights	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
		Although individual plants will be removed from the PDA, none of the traditionally used species identified will be lost in the LAA, nor will vegetation communities supporting traditionally used plants be lost from the PDA (see the EIA, Volume 3A, Section 10.4). Intangible values can only be meaningfully evaluated by individuals and communities experiencing these values in their cultural context. To date SCN has not suggested mitigation measures for intangible values. Alberta Transportation will continue to work with SCN to better understand Project effects to intangible values and identify practical mitigation measures.	Alberta Transportation by letter dated October 22, 2019 introduced the new approach to land use. Under cover dated November 15, 2019, Alberta Transportation provided the latest land use principles more detail on the LUA engagement process and offered to meet with SCN to discuss next steps. Alberta Transportation has met with SCN on November 26, 2019 and further discussed the LUA. In November 2019, Alberta Transportation provided written responses to the SCN Technical Review dated June 2018, which included some of these concerns as Questions 1 and 2. Alberta Transportation will offer to meet with SCN regarding the written responses.
 The EIS provides inadequate assessments of Project impacts on SCN Section 35 rights. SCN's Section 35 rights do interact with some of the referenced valued components (VCs); however, they also go far beyond those components to include other important matters, including spiritual, legal and social dimensions that are not captured in the assessment of impacts. Such an assessment must be completed. The Agency must direct Alberta to properly engage with SCN with a view to obtaining relevant traditional use and knowledge information, which must be submitted to the Agency before any authorizations or approvals. SCN requests that the Agency direct Alberta to develop, in consultation with SCN, a report on addressing impacts to SCN Section 35 rights, and provide to the Agency for approval. This report should: (2) consider information on past, present and future use of the area, (ii) consider third party sources of information on past, present and future use of the area recommended by SCN, (iii) consider how those uses may be affected by the Project, (iv) identify how such impacts will be avoided, mitigated or otherwise addressed, (v) identify any outstanding concerns raised by SCN, and (vi) specify how any outstanding concerns were or are proposed to be addressed. SCN has not been involved directly with Alberta in identifying mitigation measures to reduce or eliminate potential adverse environmental effects or impacts to SCN Section 35 rights. Accordingly, the mitigation measures proposed by Alberta in the EIS may not be appropriate or adequate to address potential impacts on SCN Section 35 rights. 	• SCN 2018 (CEAR #52)	Alberta Transportation has been engaged with SCN since 2016 to understand how the Project potentially impacts rights and traditional uses including holding a TLRU workshop. Alberta Transportation considers that given the context of the Project—predominately situated on private land in southern Alberta that has been used for ranching and agriculture since the late 1800s, and an understanding of the scope of Aboriginal and treaty rights in Alberta as developed through applicable case law—Treaty Rights are generally not exercisable within the PDA, except for a small portion that is located on Crown land (primarily the beds and shores of Elbow River) and on private lands, with landowner consent. Alberta Transportation acknowledges that SCN may access private lands in the PDA for traditional uses with permission of the landowners. The ElA submitted in March 2018 considered best available TLRU information, including information about the potential impacts to rights. The assessment methods are defensible and reliable and appropriate for the scope and nature of the Project. The ElA, Volume 3A, Section 14.5 concludes that no effects on potential or established Aboriginal or Treaty rights are expected to occur as a result of the Project.	Alberta Transportation offered a TLRU workshop with SCN to obtain input and feedback on the draft TLRU Effects Assessments, including SCN's perspectives on assessment methodology, proposed mitigation, Project-Specific Concerns and how the Project may adversely affect the exercise of Section 35 rights. This was held on February 23, 2018 and SCN directed that none of the the information collected at the TLRU workshop could be used for any purpose or Project. Alberta Transportation respects the restrictions SCN has placed on the use of their information. Alberta Transportation has provided multiple opportunities for SCN to provide information about potential impacts to rights. Alberta Transportation provided drafts of the updated TLRU Effects Assessment sections of the EIA (Volumes 3A and 3B), which were provided February 5, 2018, for SCN review and input. Alberta Transportation has met with SCN on 3 occasions to share Project information and obtain SCN views on the Project. Alberta Transportation sent a letter dated January 28, 2019 that requested the SCN provide its views and perspectives on its Aboriginal and Treaty rights, cultural and experiential values, and country foods. The letter listed four specific topics that Alberta Transportation was requesting input on to help answer CEAA IRs. SCN has not provided a response. In November 2019, Alberta Transportation provided written responses to the SCN Technical Review dated June 2018, which included some of these concerns as Questions 13 and 14. Alberta Transportation will offer to meet with SCN regarding the written responses.



Table 1-2 Indigenous Group Views on the Project's Potential Impacts to Rights

Views related to Potential Effects on Rights	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
 SCN members continue to hunt in and around the Project area. SCN has and continues to exercise their hunting rights. SCN expressed particular concern to the potential destruction of wildlife habitats. In addition, it is likely that SCN's hunting rights will be impacted during the construction and operation of the Project. SCN requests that Alberta Transportation establish the link between impacts on wildlife and wildlife habitat and the impact on Indigenous people's Section 35 hunting rights during construction and operation of the Project; and describe how Indigenous communities including SCN will be involved in monitoring of wildlife and wildlife habitat during those periods. SCN requests that Alberta Transportation establish the link between impacts on fish and fish habitat and the impact on Indigenous group's Section 35 rights. SCN requests an assessment of the Project's impacts specifically on Indigenous fisheries, including SCN fisheries, and the providing of a description of the proponent's plan to mitigate the impacts on Section 35 rights relating to fisheries. 	• SCN 2018 (CEAR #52)	The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see the EIA, Volume 3A, Section 11.4.2). Portions of the hunting areas that may be located within the designated construction footprint will be directly affected by construction activities and fencing of infrastructure will restrict access to certain areas of the Project. Mitigation measures identified in Alberta Transportation's response to Round 1 CEAA Package 2, IR2-01 will be implemented to reduce potential adverse effects of the Project on current use sites and areas. The Project is expected to result in restricted access to areas within the PDA and development of a permanent portage for the Elbow River. Fencing of infrastructure would restrict SCN's access to traditional resources or current use sites or areas for a small portion of Elbow River. Current use sites and areas located outside the PDA are not anticipated to be directly affected by the Project. Mitigation measures identified in Alberta Transportation's response to Round 1 CEAA Package 2, IR2-01 will be implemented to reduce potential adverse effects of the Project on current use sites and areas. Traditionally used plant species within the PDA will be directly affected due to vegetation removal and grading associated with construction, affecting 168 ha associated with permanent Project infrastructure and approximately 566 ha of temporary workspace. Although individual plants will be removed from the PDA, none of the traditionally used species identified will be lost in the LAA, nor will vegetation communities supporting traditio	Alberta Transportation offered a TLRU workshop with SCN to obtain input and feedback on the draft TLRU Effects Assessments, including SCN's perspectives on assessment methodology, proposed mitigation, Project-Specific Concerns and how the Project may adversely affect the exercise of Section 35 rights. This was held on February 23, 2019 and SCN directed that none of the the information collected at the TLRU workshop could be used for any purpose or Project without permission. Alberta Transportation respects the restrictions SCN has placed on the use of their information. Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction. At the end of construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded to meet AEP reclamation requirements. Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important. The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites SCN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights. Alberta Transportation by letter dated October 22, 2019 introduced the new ap



Table 1-2 Indigenous Group Views on the Project's Potential Impacts to Rights

Views related to Potential Effects on Rights	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
		Given the context of the Project—predominately situated on private land in southern Alberta that has been used for ranching and agriculture since the late 1800s, and the fact that the Project is not predicted to threaten to the long-term persistence and viability of hunted species in the RAA, no effects on SCN's Section 35 hunting rights are expected to occur as a result of the Project.	
Métis Nation of Alberta, Region 3 (MNAR3)			
 MNAR3 stated that members "have agreements with landowners to access the private lands". MNAR3 expressed concerns that more research and information is required to discover and document past use of the area by the Métis. MNAR3 is concerned members will not be able to exercise Aboriginal rights once the Project is complete. 	 MNAR3 TLRU workshop (February 22, 2018) Letter from MNAR3 to Alberta Transportation (August 3, 2017) (cited in MNAR3 SR1 SCRT Oct 2016-Sept 2019; Specific Concern #1) MNAR3 TLRU Workshop (February 22, 2018) (cited in MNAR3 SR1 SCRT Oct 2016-Sept 2019; Specific Concern#13) 	Alberta Transportation has been engaged with MNAR3 since 2016 to understand potential Project effects on MNAR3, including offering and funding site visits and TUS studies. Métis communities may hold Aboriginal rights provided that they meet the criteria set out by the Supreme Court of Canada in R. v. Powley. To date, no Métis communities in southern Alberta have demonstrated that they meet the Powley test.	Alberta Transportation has provided multiple opportunities for MNAR3 to provide information about potential impacts to rights. Alberta Transportation provided drafts of the updated TLRU Effects Assessment sections of the EIA (Volumes 3A and 3B), which were provided February 5, 2018, for MNAR3 review and input. Alberta Transportation offered a TLRU workshop with MNAR3 to obtain input and feedback on the draft TLRU Effects Assessments, including MNAR3's perspectives on assessment methodology, proposed mitigation, Project-Specific Concerns and how the Project may adversely affect the exercise of Section 35 rights. This workshop was held on February 22, 2018. Alberta Transportation provided funding to MNAR3 to complete a TUS. The MNAR3 TUS was submitted to Alberta Transportation on August 29, 2019. Alberta Transportation is preparing a written response for MNAR3 and will offer to meet to discuss the response. Alberta Transportation sent a letter dated January 28, 2019 that requested the MNAR3 provide its views and perspectives on its Aboriginal rights, cultural and experiential values, and country foods. The letter listed four specific topics that Alberta Transportation was requesting input on to help answer CEAA IRs. MNAR3 has replied, providing their views on their exercise of Aboriginal rights in the PDA. The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses would include access for other activities in the LUA. Alberta Transportation is available to meet with MNAR3 to discuss the LUA.



Table 1-2 Indigenous Group Views on the Project's Potential Impacts to Rights

Views related to Potential Effects on Ri	ights Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
 MNAR3 is concerned the Project will alter landsc impact the landscape, and potentially disrupt the members who use the area to the lands and water and the potential homesteads, cart trails, historic use areas, and/of and are concerned about artifacts, trails and of which are identified and reburied without being Métis. MNAR3 has indicated the presence of a fort (Old area of SR-1). 	Alberta Transportation (August 3, 2017 and March 21, 2019) (cited in MNAR3 SR1 SCRT October buried Métis sites her cultural sites identified as Alberta Transportation (August 3, 2017 and March 21, 2019) (cited in MNAR3 SR1 SCRT October 2016-Sept 2019; Specific Concern #2, 3) Meetings between	cultural and archaeological sites identified by MNAR3 are important markers of identity, use, and occupancy in the region. No highly significant sites have been identified in the PDA to date, that would mandate avoidance. The Old Bow Fort is outside the PDA and will not be affected by the Project. Although trails were once present in the PDA, the high degree of cultivation makes mapping of these trails very difficult; no intact trails of precontact age have been identified within the PDA to date.	Alberta Transportation will maintain access to identified current use sites (located outside the designated construction and Project site limits) during construction and operations. Should any chance find of human remains be made during construction, all construction will immediately cease in the area, the site will be secured and all provincial regulations regarding the chance find of human remains will be followed. If the remains are determined to be of Aboriginal origin the Provincial Government will engage Indigenous groups according to GoA protocol and guidelines developed in consultation with Indigenous groups.
 MNAR3 harvest plants, catch fish and hunt/trap area. The impacts to country foods by construct potential to limit access or have adverse effects MNAR3 members to access country foods which important part of expressing, maintaining and povalues. MNAR3 indicated that wooded areas are prime areas for hunting moose, deer, rabbits and musk 	ion has the on the ability of of form an assing on cultural assing on cultural traditionally used Alberta Transportation (March 21, 2019) (cited in MNAR3 SR1 SCRT Occurs 2016-Sept 2019; Specific Concern #5)	licences available to the general public for activities such as hunting, fishing and trapping for food in the PDA. The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of	Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction. At the end of construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded to meet AEP reclamation requirements. Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important. The draft IPP was provided to MNAR3 on November 15, 2019 which includes opportunities for plant harvesting pre-construction and post-construction revegetation.



Table 1-2 Indigenous Group Views on the Project's Potential Impacts to Rights

Views related to Potential Effects on Rights	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
		Although individual plants will be removed from the PDA, none of the traditionally used species identified will be lost in the LAA, nor will vegetation communities supporting traditionally used plants be lost from the PDA (see the EIA, Volume 3A, Section 10.4).	



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Conformity IR2-02

<u>Topic:</u> Cultural Experience – Experiential Values and Importance of Water

Sources:

EIS Guidelines Part 1, Section 4.3.2

EIS Guidelines Part 2, Sections 5; 6.1.9; 6.3.4

EIS Volume 3A, Section 14; 14.1.3.3

EIS Volume 3B, Section 14; 14.5

Ermineskin Cree Nation – Springbank Off-Stream Reservoir TKU Report (CEAR #46)

Blood Tribe/Kainai – Traditional Knowledge, Land, and Resource Use (CEAR # 47)

CEAA Information Requests Related to the Environmental Impact Statement Round 1 Part 2, IR2-02

Alberta Transportation Responses to IR Round 1, SR1 CEAA IR Package 2, June 14, 2019

Context and Rationale

In CEAA Information Requests Related to the Environmental Impact Statement Round 1 Part 2, IR2-02, the Agency required the proponent to present an assessment of potential changes of the Project to cultural experience/experiential values. The cover letter to the information requests and the EIS Guidelines further direct the proponent to present points of disagreement between the views of Alberta Transportation and Indigenous groups, along with a description of efforts undertaken to reconcile these differences and a rationale for conclusions.

Alberta Transportation's response to IR2-02 includes information on each of the points requested (Indigenous groups' views presented in Tables IR2-1 through IR2-4) but not a synthesis and analysis of this information. Information presented regarding methodology is focused on current use of lands and resources, not cultural heritage, and offers limited insight into how Indigenous groups' views on experience influenced analysis and conclusions. Concerning mitigation, Alberta Transportation states that mitigation measures suggested by Indigenous groups were considered and lists mitigation measures specific to potential effects on cultural experience/experiential values and to potential effects on the cultural and spiritual importance of water. No discussion is presented on the degree to which these address the concerns raised by Indigenous groups or on the discrepancies between the mitigation measures proposed by Indigenous groups and those committed to by the proponent.



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The response also references draft principles of future land use for the Project. However, other than identifying the primary use as flood mitigation, the draft principles included in the response (Annex IR1-02) are vague and do not offer reassurance that effects to cultural experience/experiential values will be mitigated through access to the proposed Land Use Area.

Alberta Transportation's response to IR2-02 includes Appendix IR1-1. Specific Concerns and Response Tables included in this appendix list concerns raised by Indigenous groups with respect to cultural experience/experiential values that are unresolved. For example, item 16 in the Tsuut'ina Nation Specific Concerns and Response Table describe the concern that "effect of the project on experience of the land and spiritual practices has not been assessed". The proponent response on effort to avoid or mitigate the concern is listed as "none at this time".

<u>Information Request:</u>

- a) Using the information provided by Indigenous groups as presented in Alberta Transportation's response to IR2-02 and the Specific Concerns and Response Table:
 - Present a discussion on Indigenous groups' views and conclusions on the proposed mitigation specific or related to cultural experience/experiential values and the cultural importance of water, and the residual potential effects to cultural experience/experiential values and the cultural and spiritual importance of water.
 - Identify and discuss areas of disparity between the views and conclusions of Indigenous
 groups and Alberta Transportation regarding the Project's potential effects on cultural
 experience/experiential values and the cultural and spiritual importance of water, efforts
 made to reconcile the disparities, and rationale for conclusions on matters for which
 disparity in views remains.

Response

a) Alberta Transportation has reviewed feedback received to date regarding Indigenous groups' cultural experience/experiential values and the cultural importance of water. This has been gathered through various engagement and reporting processes including Statements of Concern, engagement meetings, correspondence, and TUS reports received. This information has been compiled into s SCRTs (provided in CEAA Conformity IR2-01, Appendix 1-2). The TUS conducted by Indigenous groups provides most of this information. More details regarding Alberta Transportation's Indigenous Engagement Program are available in Alberta Transportation's response to Round 1 CEAA Package 2, IR2-01.

The results of the TUS reports received from Kanai First Nation, Ermineskin Cree Nation, Louis Bull Tribe, Piikani Nation, and Tsuut'ina Nation, are described in Alberta Transportation's response to Round 1 CEAA Package 2, IR2-01, Appendix IR1-1. In addition, Alberta Transportation has met with Tsuut'ina Nation, Kainai First Nation, Louis Bull Tribe, and Ermineskin Cree Nation to discuss the response to their TUS and will offer to meet with Piikani Nation and Métis Nation of Alberta, Region 3. Each group has presented views on potential



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effects to cultural experience/experiential values and the cultural and spiritual importance of water in various submissions and information exchanges. A summary of these concerns is provided below in Table 2-1. Alberta Transportation acknowledges, values and respects these views.

Alberta Transportation is of the view that the Project is designed to facilitate natural river flow patterns, while mitigating against extreme flood events that can negatively impact river function and that overall flood protection measures help reduce the impacts of extreme flood events. In addition, Alberta Transportation has committed to implementing numerous mitigation measures to address concerns raised by Indigenous groups regarding traditional land and resource use, which, in many cases, interact and overlap with elements of cultural experience, experiential values and the cultural and spiritual importance of water. These mitigation measures and accommodation measures can also be found in Round 1, CEAA Conformity IR2-01, Appendix 1-1.

Alberta Transportation believes that the mitigation measures proposed may serve to reduce or avoid potential effects on cultural experience/experiential values and the cultural and spiritual importance of water. However, as stated in Volume 3A, Section 14.1.3.3 of the EIA, Alberta Transportation recognizes that potential effects on experiential values can only be meaningfully evaluated by individuals and communities experiencing these values in their cultural context. Through the Indigenous Engagement Program for the Project, Alberta Transportation has provided and continues to provide numerous opportunities for Indigenous groups to share their views on the proposed mitigation measures related to cultural experience/experiential values and the cultural importance of water. The information shared with Alberta Transportation to date is included in Table 2-1 below. Alberta Transportation continues to meet with Indigenous groups to better understand potential effects to cultural experience/experiential values and the cultural and spiritual importance of water and receive suggestions from Indigenous groups about how to mitigate these effects.

With respect to areas of disparity, Indigenous groups may still perceive that the Project might potentially affect cultural experience/experiential values and the cultural and spiritual importance of water. Specifically, the following issues have been raised for which mitigation of physical effects may not adequately address Indigenous groups' concerns:

- Alteration of the natural path of water flow can change the spirit of the water and the relationship between the water and the Indigenous group.
- Land, minerals, water, wildlife and plants are considered to have a spirit and to be capable of entering into relationships with Indigenous people. Changes to these life forms can affect the spirit or balance of other life forms.



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- Cultural transmission, transmission of traditional knowledge and the social, cultural and spiritual benefits of the practice of TLU may not rely solely on the physical experience of practicing TLU.
- Destruction of cultural sites can result in loss of spiritual connection to ancestors, regardless of the presence of a physical site. Mitigation measures that only address the physical component of a site do not mitigate effects on spiritual aspects of these locations and cultural practice.

Alberta Transportation recognizes that the cultural experience/experiential values and the cultural and spiritual importance of water entails more than the availability and ability to engage in traditional land uses and cultural practices. Alberta Transportation's assessment acknowledges that Indigenous groups may choose not to pursue traditional activities near the Project for a variety of personal, practical, aesthetic, and spiritual reasons, including lack of existing access.

Going forward, Alberta Transportation's efforts to reconcile areas of disparity will be, generally, through the provision of Project information, the incorporation of feedback that results in changes to Project planning or mitigation and through commitment to further exploring an issue, concern or recommendation. For example, Alberta Transportation has provided the TUS mitigation tables found in Alberta Transportation's response to Round 1 Conformity IR2-01, Appendix 1-1 to each of the participating Indigenous groups that has submitted a TUS, and will offer to meet with each Indigenous group to review and discuss its responses. Alberta Transportation reiterates that its engagement with Indigenous groups is ongoing. As such, Appendix 1-1 also describes both Alberta Transportation's efforts to date and planned commitments to reconcile areas of disparity between the views and conclusions of Indigenous groups and Alberta Transportation regarding the Project's potential effects on cultural experience/experiential values and the cultural and spiritual importance of water.

Alberta Transportation is committed to continuing to offer to meet with each Indigenous group engaged on the Project to try to resolve any disparity in views that may remain with respect to potential effects of the Project on cultural experience/experiential values and the cultural and spiritual importance of water and to discuss recommendations and measures for mitigation regarding cultural and spiritual factors. Alberta Transportation is also committed to working with Indigenous groups to try to seek mutually acceptable solutions to the issues, concerns or recommendations identified and those that remain unresolved will be tracked through Alberta Transportation's ongoing engagement.



Table 2-1 Indigenous Group Views on the Project's Potential Effects on the Cultural Experience/Experiential Values and the Cultural Importance of Water

Views related to Potential Effects on Cultural Experience/Experiential						
Values and the Cultural and Spiritual Importance of Water	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps			
Kainai First Nation/Blood Tribe (KFN)						
 KFN stated that the land, minerals, water and plant life are regarded as having spirit and capable of entering into relationships with the people. It is observed that a change in any one of these life forms affects the spirit or balance of others, áakoohtohkimiaaw, kiai áaka' pohpatsskimiaaw. KFN regard the relational network, comprised of all the life forms or inhabitants of the environment, perpetuates this constant change. KFN expressed concern regarding effects on recreational waters. Given the potential negative effects of the Project predicted by KFN on traditional use and traditional knowledge, and the traditional way of life and culture of its people, Alberta Transportation should discuss ways to support programming within the community to strengthen the transmission of KFN way of life and culture to future generations. KFN indicated that Elbow River is of importance to Blackfoot traditions and culture. KFN explained the importance of the river to the local landscape, to the wildlife and to the people who hunt the game while standing along Elbow River. For KFN, the river is like the blood in the veins of the earth and provides sustenance to the game. Effects of changes to sites of current use of cultural, spiritual and historical importance would be significant to KFN. KFN identified the mouth of the Val Vista Creek with Elbow River where materials related to traditional painting, arts and crafts were discovered as an area of importance for traditional use for ceremonial purposes. The disruption to and loss of use of the PDA as one of the few remaining sites within KFN traditional territory where natural prairie environment has been protected and maintained and is available for KFN to visit for ceremonial, cultural and spiritual purposes, and which stands as a place for traditional teaching and learning about Blackfoot culture and the local environment would be a highly significant residual effect. KFN highlighted that the	 Letter from KFN to CEAA, (June 25, 2018); (cited in KFN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #, 1) KFN 2018 (CEAR # 47) KFN TUS 2018 (CEAR # 47); p. 3, 10, 24, 28, 48, 65, 81 and 96 Blackfoot Gallery Committee 2013, p. 71 KFN Meeting with Alberta Transportation (September 15, 2016 & January 18, 2017) (cited in KFN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #7) 	Alberta Transportation acknowledges the stated importance of Elbow River to KFN, and to Blackfoot traditions and culture. Alberta Transportation respects the concerns expressed by KFN regarding the loss of spiritual and cultural aspects associated with culturally important locations. Alberta Transportation recognizes that culturally important locations continue to remain spiritually significant. Alberta Transportation also recognizes individuals and communities are best placed to articulate their views about potential effects on cultural experience/experiential values and the cultural and spiritual importance of water in their cultural context. The Project is designed to facilitate natural river flow patterns while mitigating against extreme flood events that can negatively impact river function through the introduction and dispersal of foreign and harmful substances (i.e., contaminants and debris). Alberta Transportation also respects KFN views regarding impacts to the cultural experience/experiential values and the cultural and spiritual importance of water and respects the views on the role and interactions between the land, minerals, water and plant life. Information on alternatives to the Project can be found within Alberta Transportation's response to Round 1 CEAA, Package 3, IR3-45. After investigation of alternatives, Alberta Transportation has determined that the Project remains the most effective project for flood mitigation of the Elbow River.	Alberta Transportation has provided multiple opportunities for KFN to provide information about cultural experience/experiential values and the cultural and spiritual importance of water. Prior to filing the EIA, Alberta Transportation provided drafts of Volume 3A, Section 14.2 and Volume 3B, Section 14.2.2 (TLRU Effects Assessment for Construction and Dry Operations and TLRU Effects Assessment for Flood and Post-flood Operations, respectively) to KFN for review and comment. KFN was offered an opportunity to participate in a TLRU workshop, facilitated by CEAA (see the EIA, Volume 3A, Section 14.2 and Volume 3B, Section 14.2.2). These workshops were designed to obtain feedback on the draft TLRU sections (Sections 14 of Volumes 3A and 3B), to obtain input on proposed mitigation measures, and to discuss how Project-Specific Concerns have been addressed in the EIA, including Indigenous groups' perspectives on assessment methodology, proposed mitigation, Project-Specific Concerns and Indigenous groups' perspectives on how the Project may affect TLRU including cultural practices and cultural experiences. In addition, Alberta Transportation has provided TUS funding to KFN, No requirements, restrictions or requests were placed on the conduct of TUS by Indigenous groups, but it has been Alberta Transportation's expectation that the TUS would include a description of traditional use activities including cultural practices and cultural experiences in relation to the Project. The KFN TUS did not propose specific mitigation to avoid or reduce effects on cultural experience (experiential values and the cultural and spiritual importance of water. Alberta Transportation has provided a written response to KFN and met on October 17, 2019 to discuss KFN's comments and feedback. Alberta Transportation has also facilitated 9 meetings and 14 days of site visits to Project site with KFN Elders and knowledge holders. These site visits provided an opportunity for KFN to see where the Project will be located, how the Project would b			



Table 2-1 Indigenous Group Views on the Project's Potential Effects on the Cultural Experience/Experiential Values and the Cultural Importance of Water

Views related to Potential Effects on Cultural Experience/Experiential Values and the Cultural and Spiritual Importance of Water	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
deliberately eliminates consideration of the long history of the Blackfoot people in general and the KFN in particular within the PDA and LAA, a history that has not been wiped out by several		·	Alberta Transport invites input on specific mitigation measures that could be considered to address spiritual impacts associated with the Project.
generations of private landownership, but is rather taught through oral history, traditions and experienced through access arrangements with the private landowners in the area. • With respect to the construction of a dam near the outlet works			Alberta Transportation has developed mitigation measures to avoid or reduce physical effects on traditional land use and important cultural sites. Alberta Transportation is of the view that these mitigations will help preserve the cultural sites and locations and reduce loss of connection
KFN asserted that further mitigation measures to reduce the significance of the effect would be required such as avoidance and/or redesign of the Project to preserve the integrity of the			to ancestors, cultural and spiritual sites. Alberta Transportation will work with Indigenous groups to minimize
 KFN requested additional rationale regarding the choice of location for flood mitigation measures and discuss and clarify 			disturbance to cultural and spiritual sites, and develop a protocol for recovery, collection, reporting on, and possible repatriation of artifacts. Actions could include flagging, fencing, or providing signage of sites to prevent disturbance during construction.
 alternatives such as McLean Creek. KFN reported that important to the Blackfoot way of life, or system, are specific places. Some of these places are very specific, such as Chief Mountain or Okotoks, or Writing on Stone, but there are other less famous places where sacred rock art 			Alberta Transportation will maintain access to identified current use site (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction access management plan.
can be found, or where there were buffalo jumps, wintering camps, and traditional trails, including the traditional trail along the foothills to the Bow River.			The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders
KFN explained that "the traditional territory of the Blackfoot Nation was given to our people by our Creator. We respected and protected this traditional territory with our minds and our hearts, and we depended on it for what it encompasses for our survival. Everything that we ever needed for our way of life and survival existed in our traditional territory, such as herbs for medicine, roots, rivers, game animals, berries, vegetables, the buffalo."			to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA Alberta Transportation invites KFN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.
			Alberta Transportation invites KFN to participate in the engagement process for the LUA. The establishment of the LUA may help preserve cultural experience/experiential values and the cultural and spiritual importance of water.
			Alberta Transportation by letter dated October 22, 2019 introduced the new approach to land use. Under cover dated November 15, 2019, Alberta Transportation provided the latest land use principles and more detail on the LUA engagement process and offered to meet with KFN to discuss next steps. Alberta Transportation has met with KFN on October 17, 2019 and November 21, 2019 and further discussed the LUA.
			Alberta Transportation continues to meet with KFN to better understand potential effects to cultural experience and experiential values and the cultural and spiritual importance of water and receive suggestions from Indigenous groups about how to mitigate these effects.



Table 2-1 Indigenous Group Views on the Project's Potential Effects on the Cultural Experience/Experiential Values and the Cultural Importance of Water

Views related to Potential Effects on Cultural Experience/Experiential Values and the Cultural and Spiritual Importance of Water	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
Piikani Nation (PN)			
 PN stated that "the Siksikaitsitapii maintain an unfettered and continuous relationship to the life surrounding the moraine and riparian landscape of the rivers, our source of spiritual sustenance, the core of our physical needs in this life we live; in this case, where, water is life. The Siksikaitsitapii chose the river valley's as a favored habitual homeland, among our traditional peers; all river corridors were addressed with the same reverence to be shared among all nilisitapii." PN remarked that the EIA did not make any specific commitments to protect/avoid TLRU and cultural sites, or any specific commitments to miligate or accommodate tangible and intangible cultural impacts to Blackfoot culture, traditions and practices that will occur as a result of the Project. PN has indicated that the onsite visits to location of the Offstream Storage Reservoir earth filled dam and diversion canal if constructed would, desecrate and destroy all traces of the original people's existence in this case the Siksikaitsitapii. The accepted practice is removal rather than preserving the last traces of the original history undisturbed and intact. PN emphasize the importance they place on the fact that the Project is on PN traditional territory. PN have been here for thousands of years. With respect to historical sites, PN noted that there is a deeper meaning than just what is on the surface. PN requests that Alberta Transportation in collaboration with PN, develops Project-specific triggers and limits for the Project's mitigation, management and monitoring plans that reflect traditional ecological knowledge (TEK) and ecological and culturally sensitive areas; ii. If it identifies or is informed through the TLRU study about traditional groundwater use in any culturally sensitive areas; ii. If it identifies or is informed through the TLRU study about traditionally used, culturally sensitive areas within the Project impact area, develops mitigative measures to protect these	 PN TUS 2017, p. 24 PN 2018 (CEAR # 48) PN Engagement Meeting with Alberta Transportation (September 18-19, 2018) (cited in PN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #62, 63) PN Engagement Meeting with Alberta Transportation (September 15, 2016) (cited in PN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #13) 	Alberta Transportation acknowledges the stated importance of Elbow River to PN traditions and culture. Alberta Transportation respects the concerns expressed by PN regarding the loss of spiritual and cultural aspects associated with culturally important locations. Alberta Transportation recognizes that these sites continue to remain spiritually significant. Alberta Transportation also recognizes individuals and communities are best placed to articulate their views about potential effects on cultural experience/experiential values and the cultural and spiritual importance of water in their cultural context. The Project is designed to facilitate natural river flow patterns while mitigating against extreme flood events that can negatively impact river function through the introduction and dispersal of foreign and harmful substances (i.e., contaminants and debris). Alberta Transportation respects PN views regarding impacts to the cultural experience/experiential values and the cultural and spiritual importance of water. Alberta Transportation has been engaged with PN since 2014 to understand how the Project potentially impacts rights, and traditional uses including offering and funding site visits and TUS studies. The TUS submitted by PN did not identify groundwater-dependent, traditionally used culturally sensitive areas, such as cabins, recreational sites, fishing, hunting, and plant gathering areas within the LAA that could be impacted by the Project.	Alberta Transportation has provided multiple opportunities for PN to provide information about cultural experience/experiential values and the cultural and spiritual importance of water. Prior to filing the EIA, Alberta Transportation provided drafts of Volume 3A, Section 14.2 and Volume 3B, Section 14.2.2 (TLRU Effects Assessment for Construction and Dry Operations and TLRU Effects Assessment for Flood and Post-flood Operations, respectively) to PN for review and comment. PN was offered an opportunity to participate in a TLRU workshop, facilitated by CEAA (see the EIA, Volume 3A, Section 14.2 and Volume 3B, Section 14.2.2). These workshops were designed to obtain feedback on the draft TLRU sections (Sections 14 of Volumes 3A and 3B), to obtain input on proposed mitigation measures, and to discuss how Project-Specific Concerns have been addressed in the EIA, including Indigenous groups' perspectives on assessment methodology, proposed mitigation, Project-Specific Concerns and Indigenous groups' perspectives on how the Project may affect TLRU including cultural practices and cultural experiences. Alberta Transportation continues to meet with Indigenous groups to better understand potential effects to cultural experience and experiential values and the cultural and spiritual importance of water and receive suggestions from Indigenous groups about how to mitigate these effects. Alberta Transportation, through the Indigenous Engagement Program for the Project, has sought feedback on the Project and has taken Indigenous traditional knowledge into consideration in developing mitigation planning. In addition, Alberta Transportation has responded TUS funding to PN. No requirements, restrictions or requests were placed on the conduct of TUS by Indigenous groups, but it has been Alberta Transportation's expectation that the TUS would include a description of traditional use activities and views on cultural practices in relation to the Project. Alberta Transportation has also facilitated 7 meetings and 14 days of sit



Table 2-1 Indigenous Group Views on the Project's Potential Effects on the Cultural Experience/Experiential Values and the Cultural Importance of Water

Views related to Potential Effects on Cultural Experience/Experiential Values and the Cultural and Spiritual Importance of Water	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
PN highlighted that the destruction of cultural sites or locations can lead to the loss of spiritual connection to ancestors and can occur regardless of the presence of a physical site. Participants also noted that many cultural and spiritual sites are no longer accessible and cannot be identified but are still significant. As a			Alberta Transportation has developed mitigation measures to avoid or reduce physical effects on traditional land use and important cultural sites. Alberta Transportation is of the view that these mitigations will help preserve the cultural sites and locations and reduce loss of connection to ancestors, cultural and spiritual sites.
result, mitigation measures that only address the physical component of a site do not mitigate effects on spiritual aspects of these locations and cultural practice.			Alberta Transportation will participate in discussions with ACMWS and Indigenous groups regarding further investigation of identified sites located within the designated construction site boundary.
			Alberta Transport invites input on specific mitigation measures that could be considered to address spiritual impacts associated with the Project.
			Alberta Transportation will work with Indigenous groups to minimize disturbance to cultural and spiritual sites, and develop a protocol for recovery, collection, reporting on, and possible repatriation of artifacts. Actions could include flagging, fencing, or providing signage of sites to prevent disturbance during construction.
			Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction access management plan.
			The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites PN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.
			Alberta Transportation by letter dated October 22, 2019 introduced the new approach to land use. Under cover dated November 15, 2019, Alberta Transportation provided the latest land use principles and more detail on the LUA engagement process and offered to meet with PN to discuss next steps.
			In December 2019, Alberta Transportation provided written responses to the PN Technical Review dated June 2018, which included these concerns as Question 13, 25, 66 and 67. Alberta Transportation will offer to meet with MFN regarding the written responses.



Table 2-1 Indigenous Group Views on the Project's Potential Effects on the Cultural Experience/Experiential Values and the Cultural Importance of Water

Views related to Potential Effects on Cultural Experience/Experiential Values and the Cultural and Spiritual Importance of Water	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
Siksika Nation (SN)			
 SN related the importance of the Blackfoot history at the SR1 site within their traditional territory and stated the need to protect artifacts that exist at the site, such as old camp sites, teepee rings and other rock markers. SN indicated that many of these sites have been lost in the past and it is important that Blackfoot history be preserved for future generations. SN highlighted that the destruction of cultural sites or locations can lead to the loss of spiritual connection to ancestors, and can occur regardless of the presence of a physical site. Participants also noted that many cultural and spiritual sites are no longer accessible and cannot be identified, but are still significant. As a result, mitigation measures that only address the physical component of a site do not mitigate effects on spiritual aspects of these locations and cultural practice. 	SN Meeting with Alberta Transportation (September 15, 2016) (cited in SN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #5)	Alberta Transportation acknowledges the stated importance of Elbow River to SN traditions and culture. Alberta Transportation respects the concerns expressed by SN regarding the loss of spiritual and cultural aspects associated with culturally important locations. Alberta Transportation recognizes that culturally important locations continue to remain spiritually significant. Alberta Transportation also recognizes that potential effects on cultural experience/experiential values and the cultural and spiritual importance of water can only be meaningfully evaluated by individuals and communities experiencing these values in their cultural context. The Project is designed to facilitate natural river flow patterns while mitigating against extreme flood events that can negatively impact river function through the introduction and dispersal of foreign and harmful substances (i.e., contaminants and debris). Potential effects to tipi rings, campsites, and other culturally important features identified by SN are addressed in Alberta Transportation response to Round 1 CEAA Package 2, IR2-10. Alberta Transportation respects SN views regarding impacts to the cultural experience/experiential values and the cultural and spiritual importance of water.	Alberta Transportation has provided multiple opportunities for SN to provide information about cultural experience/experiential values and the cultural and spiritual importance of water. Prior to filing the EIA, Alberta Transportation provided drafts of Volume 3A, Section 14.2 and Volume 3B, Section 14.2.2 (TLRU Effects Assessment for Construction and Dry Operations and TLRU Effects Assessment for Flood and Post-flood Operations, respectively) to SN for review and comment. SN was offered an opportunity to participate in a TLRU workshop, facilitated by the CEAA (see the EIA. Volume 3A, Section 14.2 and Volume 3B, Section 14.2.2). This workshop was held on February 26, 2018. These workshops were designed to obtain feedback on the draft TLRU sections (Sections 14 of Volumes 3A and 3B), to obtain input on proposed mitigation measures, and to discuss how Project-Specific Concerns have been addressed in the EIA, including Indigenous groups' perspectives on assessment methodology, proposed mitigation, Project-Specific Concerns and Indigenous groups' perspectives on how the Project may affect TLRU including cultural practices and cultural experiences. In addition, Alberta Transportation has provided funding to SN to complete a TUS. A joint interim TUS was submitted with KFN on March 13, 2017 and considered in the EIA. A final SN TUS has not been received. Alberta Transportation has also facilitated 7 meetings and 8 days of site visits to Project site with SN Elders and knowledge holders. These site visits provided an opportunity for SN to see where the Project will be located, how the Project would be operated, identify traditional use sites, areas, activities and practices that might be intersected by the Project, consider potential mitigation measures, and identify potential impacts to cultural experience and practice. Alberta Transportation, through the Indigenous Engagement Program for the Project, has sought feedback on the Project and has taken Indigenous traditional knowledge into consideration in developi



Table 2-1 Indigenous Group Views on the Project's Potential Effects on the Cultural Experience/Experiential Values and the Cultural Importance of Water

Views related to Potential Effects on Cultural Experience/Experiential Values and the Cultural and Spiritual Importance of Water	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
			Alberta Transport invites input on specific mitigation measures that could be considered to address spiritual impacts associated with the Project.
			Alberta Transportation will work with Indigenous groups to minimize disturbance to cultural and spiritual sites, and develop a protocol for recovery, collection, reporting on, and possible repatriation of artifacts Actions could include flagging, fencing, or providing signage of sites to prevent disturbance during construction.
			Alberta Transportation will maintain access to identified current use site (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction access management plan.
			The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholder to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA Alberta Transportation invites SN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.
			Alberta Transportation by letter dated October 22, 2019 introduced the new approach to land use. Under cover dated November 15, 2019, Alberta Transportation provided the latest land use principles and mor detail on the LUA engagement process and offered to meet with SN to discuss next steps. A meeting is currently scheduled for January 6, 2020
			Alberta Transportation continues to meet with Indigenous groups to better understand potential effects to cultural experience and experiential values and the cultural and spiritual importance of water and receive suggestions from Indigenous groups about how to mitigat these effects.



Table 2-1 Indigenous Group Views on the Project's Potential Effects on the Cultural Experience/Experiential Values and the Cultural Importance of Water

Views related to Potential Effects on Cultural Experience/Experiential Values and the Cultural and Spiritual Importance of Water	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
Stoney Nakoda Nations (SNN)			
 SNN expressed concerns about cultural practices, current use of lands and resources for traditional purposes, the effect on water and wetlands for wildlife, fish, birds and vegetation. SNN noted the cultural importance of wildlife crossings: "The memories from Elders go back generations and this is the import[ant] part of cultural studies. The Elders tell stories of animals in the area. Wildlife cameras don't pick up everything and science is lacking where cultural studies can prove to be effective." 	 SNN Letter to CEAA, June 8, 2016 (cited in SNN SR1 SCRT Aug 2014 – Aug 2019; Specific Concern #4) SNN Meeting with Alberta Transportation (June 4, 2018) (cited in SNN SR1 SCRT Aug 2014 – Aug 2019; Specific Concern #9) 	Alberta Transportation recognizes the stated importance of water and wetlands to SNN traditions and culture and respects SNN views regarding impacts to the cultural experience, experiential values and the cultural and spiritual importance of water. Alberta Transportation acknowledges SNN views with respect to Project impacts their current use of lands and resources for traditional purposes, the effect on water and wetlands for wildlife, fish, birds and vegetation. Alberta Transportation also recognizes that potential effects on cultural experience, experiential values and the cultural importance of water can only be meaningfully evaluated by individuals and communities experiencing these values in their cultural context. The Project is designed to facilitate natural river flow patterns while mitigating against extreme flood events that can negatively impact river function through the introduction and dispersal of foreign and harmful substances (i.e., contaminants and debris).	Prior to filing the EIA, Alberta Transportation provided drafts of Volume 3A, Section 14.2 and Volume 3B, Section 14.2.2 (TLRU Effects Assessment for Construction and Dry Operations and TLRU Effects Assessment for Flood and Post-flood Operations, respectively) to SNN for review and comment. Alberta Transportation has provided multiple opportunities for SNN to provide information about cultural experience/experiential values and the cultural and spiritual importance of water. Alberta Transportation notes SNN was offered an opportunity to participate in a TLRU workshop, facilitated by the CEAA (see Volume 3A, Section 14.2 and Volume 3B, Section 14.2.2). These workshops were held February 12 & March 20, 2018. These workshops were designed to obtain feedback on the draft TLRU sections (Sections 14 of Volumes 3A and 3B), to obtain input on proposed mitigation measures, and to discuss how Project-Specific Concerns have been addressed in the EIA, including Indigenous groups' perspectives on assessment methodology, proposed mitigation, Project-Specific Concerns and Indigenous groups' perspectives on how the Project may affect TLRU including cultural practices and cultural experiences. In addition, Alberta Transportation has provided funding to SNN to complete a TUS. Alberta Transportation has invited SNN to provide a TUS. however, SNN verbally advised that they do not intend to provide a TUS. If SNN submits one at a later date, Alberta Transportation will review and provide SNN with a written response. No requirements, restrictions or requests were placed on the conduct of TUS by Indigenous groups, but it has been Alberta Transportation will review and provide SNN with a written response. No requirements, restrictions or requests were placed on the Conduct of TUS by Indigenous groups, but it has been Alberta Transportation will review and provide SNN with a written response. No requirements, restrictions or requests were placed on the Conduct of TuS by Indigenous groups, but it has been Alberta Transportation in



Table 2-1 Indigenous Group Views on the Project's Potential Effects on the Cultural Experience/Experiential Values and the Cultural Importance of Water

Views related to Potential Effects on Cultural Experience/Experiential Values and the Cultural and Spiritual Importance of Water	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
•			Alberta Transportation has developed mitigation measures to avoid or reduce physical effects on traditional land use and important cultural sites. Alberta Transportation is of the view that these mitigations will help preserve the cultural sites and locations and reduce loss of connection to cultural and spiritual sites.
			Alberta Transportation will meet with SNN to discuss opportunities to support cultural programming through participation in the Project.
			The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites SNN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.
			Alberta Transportation by letter dated October 22, 2019 introduced the new approach to land use. Under cover dated November 15, 2019, Alberta Transportation provided more detail on the LUA engagement process and offered to meet with SNN to discuss next steps. Alberta Transportation has met with SNN on November 19, 2019 and further discussed the LUA.
			Alberta Transportation continues to meet with Indigenous groups to better understand potential effects to cultural experience and experiential values and the cultural and spiritual importance of water and receive suggestions from Indigenous groups about how to mitigate these effects.
Tsuut'ina Nation (TN)			
 TN expressed concern that the "effect of the project on experience of the land and spiritual practices has not been assessed". TN expressed concerns about the ability to pursue traditional land use practices and foreseeable impacts on TN reserve lands and water. 	Meeting between TN and Alberta Transportation (November 13, 2014) (cited in TN SR1 SCRT Aug 2014-Aug 2019; Specific Concerns #3) TN TUS 2018, p. 84, 85	Alberta Transportation acknowledges the stated importance of water to TN traditions and culture. Alberta Transportation respects the concerns expressed by TN regarding the loss of spiritual and cultural aspects associated with culturally important locations. Alberta Transportation recognizes that these sites continue to remain spiritually significant.	Prior to filing the EIA, Alberta Transportation provided drafts of Volume 3A, Section 14.2 and Volume 3B, Section 14.2.2 (TLRU Effects Assessment for Construction and Dry Operations and TLRU Effects Assessment for Flood and Post-flood Operations, respectively) to TN for review and comment. Alberta Transportation has provided multiple opportunities for TN to
 TN reported that traditional activities, such as ceremonial practices, occur in the Project area; historically and culturally important sites were reported by TN. TN expressed concern that since water is culturally and spiritually important, the Project will change the relationship between TN 	• TN 2018 (CEAR #50)	Alberta Transportation also recognizes that potential effects on cultural experience/experiential values and the cultural and spiritual importance of water can only be meaningfully evaluated by individuals and communities experiencing these values in their cultural context.	provide information about cultural experience/experiential values and the cultural and spiritual importance of water. Alberta Transportation notes that TN was offered an opportunity to participate in a TLRU workshop, facilitated by the CEAA (see the EIA. Volume 3A, Section 14.2 and Volume 3B, Section 14.2.2). These
and the water in the traditional territory.		The Project is designed to facilitate natural river flow patterns while mitigating against extreme flood events that can negatively impact river function through the introduction and	workshops were held in March 2018. These workshops were designed to obtain feedback on the draft TLRU sections (Sections 14 of Volumes 3A and 3B), to obtain input on proposed mitigation measures, and to discuss how Project-Specific Concerns have been addressed in the EIA,



Table 2-1 Indigenous Group Views on the Project's Potential Effects on the Cultural Experience/Experiential Values and the Cultural Importance of Water

Views related to Potential Effects on Cultural Experience/Experiential Values and the Cultural and Spiritual Importance of Water	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
 TN reported that changing how water moves can result in effects on its "power, flow and spirit" and expressed concerns that the Project will have an effect on the relationship between TN and the water within the traditional territory. If the Project proceeds, TN identified a need for a ceremony for 		dispersal of foreign and harmful substances (i.e., contaminants and debris). Alberta Transportation respects TN views regarding impacts to the cultural experience/experiential values and the cultural and spiritual importance of water.	including Indigenous groups' perspectives on assessment methodology, proposed mitigation, Project-Specific Concerns and Indigenous groups' perspectives on how the Project may affect TLRU including cultural practices and cultural experiences The workshop was held in March 2018.
 the spirit of the water. TN members stated that their land use is culturally connected to the rivers, including Elbow River, noting that buffalo were dependent on the water. TN explained that there are cultural sites in the undisturbed lands and therefore undisturbed lands should remain that way. TN reported that rock cairns were used to mark a burial sites or 			In addition, Alberta Transportation has provided TUS funding to TN. No requirements, restrictions or requests were placed on the conduct of TUS by Indigenous groups, but it has been Alberta Transportation's expectation that the TUS would include a description of traditional use activities including cultural practices and cultural experiences in relation to the Project. Alberta Transportation has provided a written response to TN and met on December 6, 2018 to receive TN's comments and feedback.
significant events. Deceased were put in trees and use rocks to mark the site. TN people are intuitively connected to the land and to events that occurred within a specific site. The rock cairns found on site are burial cairns, bones will not be found, nor will there be evidence of clothing or other materials. • TN stated that their culture relies on everything that grows. Without it, TN people become weak and have to go further away from home to collect their medicines, smudges, and			Alberta Transportation has also facilitated 18 meetings and 23 days of site visits to Project site with TN Elders and knowledge holders. These site visits provided an opportunity for TN to see where the Project will be located, how the Project would be operated, identify traditional use sites, areas, activities and practices that might be intersected by the Project, consider potential mitigation measures, and identify potential impacts to cultural experience and practice. These site visits have been ongoing with more planned for the near future.
everything that takes care of their culture. The medicinal plants are important and may not be found in other parts of the land.			Alberta Transportation, through the Indigenous Engagement Program for the Project, has sought feedback on the Project and has taken Indigenous traditional knowledge into consideration in developing mitigation planning and to develop creative solutions to TN concerns.
			Alberta Transportation has developed mitigation measures to avoid or reduce physical effects on traditional land use and important cultural sites. Alberta Transportation is of the view that these mitigations will help preserve the cultural sites and locations and reduce loss of connection to cultural and spiritual sites.
			Alberta Transportation will participate in discussions with ACMWS and Indigenous groups regarding further investigation of identified sites located within the designated construction site boundary.
			Alberta Transport invites input on specific mitigation measures that could be considered to address spiritual impacts associated with the Project.
			Alberta Transportation will work with Indigenous groups to minimize disturbance to cultural and spiritual sites, and develop a protocol for recovery, collection, reporting on, and possible repatriation of artifacts. Actions could include flagging, fencing, or providing signage of sites to prevent disturbance during construction.
			Alberta Transportation continues to meet with Indigenous groups to better understand potential effects to cultural experience and experiential values and the cultural and spiritual importance of water and receive suggestions from Indigenous groups about how to mitigate these effects.



Table 2-1 Indigenous Group Views on the Project's Potential Effects on the Cultural Experience/Experiential Values and the Cultural Importance of Water

Views related to Potential Effects on Cultural Experience/Experiential			
Values and the Cultural and Spiritual Importance of Water	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
			Alberta Transportation will meet with TN to discuss opportunities to support cultural programming through participation in the Project.
			Alberta Transportation is committed to ongoing consultation with TN to try to resolve any disparity in views that may remain with respect to potential effects on the cultural experience/experiential values and the cultural and spiritual importance of water.
			In May 2018, Alberta Transportation funded a ceremony involving TN and will facilitate additional ceremonies prior to the start of construction if requested.
			The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites TN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.
			Alberta Transportation by letter dated October 22, 2019 introduced the new approach to land use. Under cover dated November 15, 2019, Alberta Transportation provided the latest land use principles and more detail on the LUA engagement process and offered to meet with TN to discuss next steps.
Ermineskin Cree Nation (ECN)			
 Given the potential negative effects of the Project predicted by ECN on traditional use and traditional knowledge, and the traditional way of life and culture of its people, Alberta Transportation should discuss ways to support programming within the community to strengthen the transmission of ECN ways of life and culture to future generations. ECN indicated that the loss of areas for TU implies a loss much greater than access to resources for subsistence purposes: it 	12, 13, 14, 15); (cited in ECN SR1 SCRT Oct 2016-Sept 2019; Specific Concern #35)	Alberta Transportation acknowledges the stated importance of Elbow River to the ECN traditions and culture. Alberta Transportation respects the concerns expressed by ECN regarding the loss of spiritual and cultural aspects associated with the environment. Alberta Transportation respects the concerns expressed by ECN regarding traditional use and traditional knowledge and the traditional way of life and culture of the ECN people.	Prior to filing the EIA, Alberta Transportation provided drafts of Volume 3A, Section 14.2 and Volume 3B, Section 14.2.2 (TLRU Effects Assessment for Construction and Dry Operations and TLRU Effects Assessment for Flood and Post-flood Operations, respectively) to ECN for review and comment. Alberta Transportation has provided multiple opportunities for ECN to provide information about cultural experience/experiential values and the cultural and spiritual importance of water.
represents a threat to the web of cultural norms, spiritual values, sense of self, place, and purpose, and knowledge that are invariably embedded within the physical act of land use and the connections between Indigenous peoples and their traditional territories.		Alberta Transportation also recognizes that potential effects on cultural experience/experiential values and the cultural and spiritual importance of water can only be meaningfully evaluated by individuals and communities experiencing these values in their cultural context. The Project is designed to facilitate natural river flow patterns while mitigating against extreme flood events that can negatively impact river function through the introduction and dispersal of foreign and harmful substances (i.e., contaminants and debris).	Alberta Transportation notes that opportunities were offered to each Indigenous group engaged on the Project, including ECN, to participate in a TLRU workshop, facilitated by the CEAA (see Volume 3A, Section 14.2 and Volume 3B, Section 14.2.2). These workshops were designed to obtain feedback on the draft TLRU sections (Sections 14 of Volumes 3A and 3B), to obtain input on proposed mitigation measures, and to discuss how Project-Specific Concerns have been addressed in the EIA, including Indigenous groups' perspectives on assessment methodology, proposed mitigation, Project-Specific Concerns and



Table 2-1 Indigenous Group Views on the Project's Potential Effects on the Cultural Experience/Experiential Values and the Cultural Importance of Water

Views related to Potential Effects on Cultural Experience/Experiential Values and the Cultural and Spiritual Importance of Water	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
ECN regard themselves as part of nature and regard all the animals: moose, deer, all the animals as literally our brothers and			Indigenous groups' perspectives on how the Project may affect TLRU including cultural practices and cultural experiences.
sisters. In ECN beliefs and teachings, a clearcut disrupts community because the tree has a spirit. ECN do not believe people are above animals in this world. They are here for us humans: to feed us, to clothe us, to utilize the parts of the animal, like the buffalo a long time ago, to utilize their bones for spoons, their hides for the outfits and blankets. The animals have			In addition, Alberta Transportation has provided TUS funding to ECN. No requirements, restrictions or requests were placed on the conduct of TUS by Indigenous groups, but it has been Alberta Transportation's expectation that the TUS would include a description of traditional use activities and views on cultural practices in relation to the Project.
 spirits too. They also go to the spirit world. ECN explained that TK refers to the body of knowledge developed by an Indigenous community over generations about their traditional way of life and culture, its transmission to future generations is essential to the cultural survival of Indigenous communities. The transmission of TK, however, relies upon sociocultural spaces and physical places in which TK can be transmitted, such as sites for traditional use, the 			As TUS reports have been received by Alberta Transportation, these have been reviewed and a written response provided to Indigenous groups addressing their comments and concerns. Since filing the EIA, Alberta Transportation has received a final TUS from ECN. A written response has been provided to ECN addressing the concerns and issues raised in the TUS and met with ECN on September 16, 2019 to receive comment and feedback on the response (see CEAA Conformity IR2-01, Appendix 1-1).
intergenerational bonds of families, and community spaces for socialization and gathering. This dependence upon sociocultural spaces and physical places similarly means that TK can be undermined by a variety of factors both dramatic and subtle, from the changes in value systems provoked by socioeconomic shifts to delayed transmission mechanisms and reduced time spent on the land.			Alberta Transportation has also facilitated 4 meetings and 1 day of site visits to Project site with ECN Elders and knowledge holders. These site visits provided an opportunity for ECN to see where the Project will be located, how the Project would be operated, identify traditional use sites, areas, activities and practices that might be intersected by the Project, consider potential mitigation measures, and identify potential impacts to cultural practice and experience.
ECN reported that their members have a strong connection to the land. The land is important for livelihood and being on the land provides a sense of peace. Being in nature helps the healing process for ECN residential school survivors. ECN stated			Alberta Transportation, through the Indigenous Engagement Program for the Project, has sought feedback on the Project and has taken Indigenous traditional knowledge into consideration in developing mitigation planning and to develop creative solutions to ECN concerns.
 that members lives are supported by the land. ECN related that animals are considered sacred and it's important to tell stories about the animals that are hunted to children. Children are taught the names of the animals and herbs in Cree. The transmission of knowledge to the next 			Alberta Transportation has developed mitigation measures to avoid or reduce physical effects on traditional land use and important cultural sites. Alberta Transportation is of the view that these mitigations will help preserve the cultural sites and locations and reduce loss of connection to cultural and spiritual sites.
generation is important because it is a way to make sure ECN culture stays alive. ECN regards language, the harvesting of resources from the land, and connection to the land as being			Alberta Transportation will participate in discussions with ACMWS and Indigenous groups regarding further investigation of identified sites located within the designated construction site boundary.
very important to keeping ECN culture alive.			Alberta Transport invites input on specific mitigation measures that could be considered to address spiritual impacts associated with the Project.
			Alberta Transportation will work with Indigenous groups to minimize disturbance to cultural and spiritual sites, and develop a protocol for recovery, collection, reporting on, and possible repatriation of artifacts. Actions could include flagging, fencing, or providing signage of sites to prevent disturbance during construction.



Table 2-1 Indigenous Group Views on the Project's Potential Effects on the Cultural Experience/Experiential Values and the Cultural Importance of Water

Views related to Potential Effects on Cultural Experience/Experiential Values and the Cultural and Spiritual Importance of Water	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
			Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction access management plan. Alberta Transportation continues to meet with Indigenous groups to better understand potential effects to cultural experience and experiential values and the cultural and spiritual importance of water and receive suggestions from Indigenous groups about how to mitigate these effects. Alberta Transportation will meet with ECN to discuss opportunities to
			support cultural programming through participation in the Project. The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites ECN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights. Alberta Transportation by letter dated October 22, 2019 introduced the new approach to land use. Under cover dated November 15, 2019, Alberta Transportation provided the latest land use principles and more detail on the LUA engagement process and offered to meet with ECN to discuss next steps. Alberta Transportation has met with ECN on
			September 16 and November 18, 2019, 2019 and further discussed the LUA.
Foothills Ojibway Society (FOS)			
 FOS explained: "There will be power here. Each time you move, reroute water, takes away natural power that is supposed to be going through those areas. Flood was a natural disaster, for us to learn that we don't disrupt the culture. We all come from the source of the natural power. What if we start destroying water? It's going to retaliate back". FOS stated: "Water is very important, has that power. The power created us. In Treaties we say water flows. The spirit of the water is very important, we're part of it." 	 FOS Meeting with Alberta Transportation (May 7, 2018) FOS Meeting with Alberta Transportation (October 28, 2019) 	Alberta Transportation acknowledges the stated importance of water to FOS traditions and culture. Alberta Transportation respects the concerns expressed by FOS regarding the spiritual and cultural aspects of water. Alberta Transportation respects the concerns expressed by FOS regarding traditional use and traditional knowledge and the traditional way of life and culture of members of FOS. Alberta Transportation also recognizes that potential effects on cultural experience/experiential values and the cultural and spiritual importance of water can only be meaningfully evaluated by individuals and communities experiencing these values in their cultural context.	Prior to filing the EIA, Alberta Transportation provided drafts of Volume 3A, Section 14.2 and Volume 3B, Section 14.2.2 (TLRU Effects Assessment for Construction and Dry Operations and TLRU Effects Assessment for Flood and Post-flood Operations, respectively) to FOS for review and comment. Alberta Transportation has provided multiple opportunities for FOS to provide information about cultural experience/experiential values and the cultural and spiritual importance of water.



Table 2-1 Indigenous Group Views on the Project's Potential Effects on the Cultural Experience/Experiential Values and the Cultural Importance of Water

Views related to Potential Effects on Cultural Experience/Experiential Values and the Cultural and Spiritual Importance of Water	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
		The FOS have not proposed mitigation to avoid or reduce effects on cultural experience/experiential values and the cultural and spiritual importance of water. The Project is designed to facilitate natural river flow patterns while mitigating against extreme flood events that can negatively impact river function through the introduction and dispersal of foreign and harmful substances (i.e., contaminants and debris).	Alberta Transportation notes that opportunities were offered to each Indigenous group engaged on the Project, including FOS to participate in a TLRU workshop, facilitated by the CEAA (see Volume 3A, Section 14.2 and Volume 3B, Section 14.2.2). These workshops were designed to obtain feedback on the draft TLRU sections (Sections 14 of Volumes 3A and 3B), to obtain input on proposed mitigation measures, and to discuss how Project-Specific Concerns have been addressed in the EIA, including Indigenous groups' perspectives on assessment methodology, proposed mitigation, Project-Specific Concerns and Indigenous groups' perspectives on how the Project may affect TLRU including cultural practices and cultural experiences.
			Alberta Transportation has also facilitated 2 meetings with FOS representatives, and maintain ongoing email and phone communication to share Project information and updates.
			Alberta Transportation, through the Indigenous Engagement Program for the Project, has sought feedback on the Project and has taken Indigenous traditional knowledge into consideration in developing mitigation planning and to develop creative solutions to FOS concerns.
			Alberta Transportation has developed mitigation measures to avoid or reduce physical effects on traditional land use and important cultural sites. Alberta Transportation is of the view that these mitigations will help preserve the cultural sites and locations and reduce loss of connection to cultural and spiritual sites.
			Alberta Transportation continues to meet with Indigenous groups to better understand potential effects to cultural experience and experiential values and the cultural and spiritual importance of water and receive suggestions from Indigenous groups about how to mitigate these effects.
			Alberta Transportation will meet with FOS to discuss opportunities to support cultural programming through participation in the Project.
			The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses would include access for other activities in the LUA. Alberta Transportation is available to meet with FOS to discuss the LUA.
			Alberta Transportation is committed to ongoing engagement with FOS and is committed to ongoing engagement to try to resolve any disparity in views that may remain with respect to potential effects on the cultural experience/experiential values and the cultural and spiritual importance of water.



Table 2-1 Indigenous Group Views on the Project's Potential Effects on the Cultural Experience/Experiential Values and the Cultural Importance of Water

Views related to Potential Effects on Cultural Experience/Experiential Values and the Cultural and Spiritual Importance of Water	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
Louis Bull Tribe (LBT)			
 LBT stated "the Project, when considered in isolation of other projects, has limited impacts that are readily mitigated however, the cumulative effects of the development within the region are of great concern to LBT" (LBT 2018 TLRU Report). LBT stated that opportunities for pursuit of cultural practices that are important to the cultural identity of LBT, or to transfer knowledge of the land, have input into the management of those lands, or even quietly enjoy the land itself must be viewed in the context of past, cumulative effect on land access. LBT remarked: "While we can appreciate the desire to establish a link directly between the Project site, and the social, cultural and spiritual benefits of active practice of traditional land use, this does not consider the cumulative impact of incremental loss of access and ability to practice traditional land use since land settlement or more recent development of these lands. LBT members could derive such benefits from the Project area, if access were permitted, given the presence of traditionally and culturally used resources at this site." 	• LBTTUS 2018, p. 9 (CEAR #1228)	Alberta Transportation respects the stated concerns expressed by LBT regarding impacts to the traditional land use, cultural experience, experiential values and the cultural and spiritual importance of water. Alberta Transportation also recognizes that potential effects on cultural experience, experiential values and the cultural importance of water can only be meaningfully evaluated by individuals and communities experiencing these values in their cultural context. The Project is designed to facilitate natural river flow patterns while mitigating against extreme flood events that can negatively impact river function through the introduction and dispersal of foreign and harmful substances (i.e., contaminants and debris). Alberta Transportation has conducted a cumulative effects assessment. The cumulative effects assessment considered the Project effects that have the potential to act cumulatively with effects of other past, present and reasonably foreseeable future projects and activities in the RAA for two scenarios: construction and dry operations and flood and post-flood operations. The assessment of potential cumulative effects of the Project was accomplished by recognizing where such interactions may occur, and in consideration of the regional context. Proposed mitigation for residual effects from the Project for all assessed VCs described in Appendix C of Volume 4 of the EIA is adequate to mitigate potential Project contribution to cumulative effects.	Prior to filing the EIA, Alberta Transportation provided drafts of Volume 3A, Section 14.2 and Volume 3B, Section 14.2.2 (TLRU Effects Assessment for Construction and Dry Operations and TLRU Effects Assessment for Flood and Post-flood Operations, respectively) to LBT for review and comment. Alberta Transportation has provided multiple opportunities for LBT to provide information about cultural experience/experiential values and the cultural and spiritual importance of water. Alberta Transportation notes that opportunities were offered to each Indigenous group engaged on the Project, including LBT, to participate in a TLRU workshop, facilitated by CEAA (see Volume 3A, Section 14.2 and Volume 3B, Section 14.2.2). These workshops were designed to obtain feedback on the draft TLRU sections (Sections 14 of Volumes 3A and 3B), to obtain input on proposed mitigation measures, and to discuss how Project-Specific Concerns have been addressed in the EIA, including Indigenous groups' perspectives on assessment methodology, proposed mitigation, Project-Specific Concerns and Indigenous groups' perspectives on how the Project may affect TLRU including cultural practices and cultural experiences. In addition, Alberta Transportation has approved TUS funding for LBT. No requirements, restrictions or requests were placed on the conduct of TUS by Indigenous groups, but it has been Alberta Transportation's expectation that the TUS would include a description of traditional use activities including cultural practices and cultural experiences in relation to the Project. As TUS reports have been received by Alberta Transportation, these have been reviewed and a written response provided to Indigenous groups addressing their comments and concerns. Since filing the EIA, Alberta Transportation has received a final TUS from LBT and met November 14, 2019 to discuss the response. Alberta Transportation has also facilitated 4 meetings and 1 day of site visits to Project site with LBT Elders and knowledge holders. These site visits have



Table 2-1 Indigenous Group Views on the Project's Potential Effects on the Cultural Experience/Experiential Values and the Cultural Importance of Water

Views related to Potential Effects on Cultural Experience/Experiential Values and the Cultural and Spiritual Importance of Water	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
	223,00	7.130.14 Hansportation of Response	Alberta Transportation has developed mitigation measures to avoid or reduce physical effects on traditional land use important cultural sites. Alberta Transportation is of the view that these mitigations will help preserve the cultural sites and locations and reduce loss of connection to cultural and spiritual sites.
			Alberta Transportation will participate in discussions with ACMWS and Indigenous groups regarding further investigation of identified sites located within the designated construction site boundary.
			Alberta Transport invites input on specific mitigation measures that could be considered to address spiritual impacts associated with the Project.
			Alberta Transportation will work with Indigenous groups to minimize disturbance to cultural and spiritual sites, and develop a protocol for recovery, collection, reporting on, and possible repatriation of artifacts. Actions could include flagging, fencing, or providing signage of sites to prevent disturbance during construction.
			Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction access management plan.
			Alberta Transportation continues to meet with Indigenous groups to better understand potential effects to cultural experience and experiential values and the cultural and spiritual importance of water and receive suggestions from Indigenous groups about how to mitigate these effects.
			Alberta Transportation commits to offering to meet with LBT to discuss recommendations and measures for mitigation regarding cultural and spiritual factors.
			The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites LBT to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.
			Alberta Transportation by letter dated October 22, 2019 introduced the new approach to land use. Under cover dated November 13, 2019, Alberta Transportation provided the latest land use principles and more detail on the LUA engagement process. Alberta Transportation has met with LBT on November 14, 2019 and further discussed the LUA.



Table 2-1 Indigenous Group Views on the Project's Potential Effects on the Cultural Experience/Experiential Values and the Cultural Importance of Water

Views related to Potential Effects on Cultural Experience/Experiential Values and the Cultural and Spiritual Importance of Water	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
Samson Cree Nation (SCN)			
 SCN's evaluation of any industrial development within its traditional territory also considers the potential impacts on important intangible factors such as changes to cultural transmission of knowledge and to the spirituality of the land. The evaluation of how the Project effects to aquatic ecology, wildlife and biodiversity can affect cultural and spiritual factors was not provided in the Els. SCN requests further dialogue with Alberta to determine how Alberta can mitigate and offset these effects. SCN requested information regarding the potential effects of erosion and sedimentation on watercourses on SCN sites of importance, including fishing sites and spiritual sites. 	• SCN 2018 (CEAR #52) (cited in SCN SR1 SCRT Oct 2016-Sept 2019; Specific Concern #3, & 4)	Alberta Transportation acknowledges the stated viewpoints of SCN regarding potential impacts on traditional land use, cultural experience, experiential values and the cultural and spiritual importance of water. Alberta Transportation also recognizes that potential effects on cultural experience, experiential values and the cultural importance of water can only be meaningfully evaluated by individuals and communities experiencing these values in their cultural context. The Project is designed to facilitate natural river flow patterns while mitigating against extreme flood events that can negatively impact river function through the introduction and dispersal of foreign and harmful substances (i.e., contaminants and debris). Specific fishing and spiritual sites have not been identified by SCN to Alberta Transportation. Generally, construction of the diversion channel will result in the loss of fish habitat on the bed and banks of Elbow River and the unnamed tributary, but with the implementation of mitigation, the Project is unlikely to reduce the productivity or sustainability of SCN fishing. During dry operations, there will be no changes to flow in Elbow River, and therefore no alterations to the quality of fish habitat. Overall, the Project is not expected to limit the availability of traditional resources for current use in the RAA. Overall, the residual effects of the Project on current use sites or areas outside the area of permanent structures will be moderate during construction and low for dry operations. It is anticipated that following construction, current use sites or areas would remain largely unchanged outside the PDA. Project effects to current use sites or areas that may occur within the area of permanent structures and cultural, spiritual, ceremonial, and ancestral sites as well as archaeological sites located within the areas of temporary physical disturbance will be of high magnitude because these sites will be permanently removed.	Prior to filling the EIA, Alberta Transportation provided drafts of Volume 3A, Section 14.2.2 and Volume 3B, Section 14.2.2 (TLRU Effects Assessment for Construction and Dry Operations and TLRU Effects Assessment for Flood and Post-flood Operations, respectively) to SCN for review and comment. Alberta Transportation notes that opportunities were offered to each Indigenous group engaged on the Project, including SCN to participate in a TLRU workshop, facilitated by the CEAA (see the EIA, Volume 3A, Section 14.2 and Volume 3B, Section 14.2.2). This workshop was held on February 23, 2018. These workshops were designed to obtain feedback on the draft TLRU sections (Sections 14 of Volumes 3A and 3B), to obtain input on proposed mitigation measures, and to discuss how Project-Specific Concerns have been addressed in the EIA, including Indigenous groups' perspectives on assessment methodology, proposed mitigation, Project-Specific Concerns and Indigenous groups' perspectives on how the Project may affect TLRU including cultural practices and cultural experiences. Alberta Transportation has also facilitated 3 meetings with SCN representatives and maintain ongoing email and phone communication to share Project information and updates. Alberta Transportation continues to meet with Indigenous groups to better understand potential effects to cultural experience and experiential values and the cultural and spiritual importance of water and receive suggestions from Indigenous groups about how to mitigate these effects. Alberta Transportation has developed mitigation measures to avoid or reduce physical effects on traditional land use and important cultural sites. Alberta Transportation is of the view that these mitigations will help preserve the cultural sites and locations and reduce loss of connection to cultural and spiritual sites. Alberta Transportation invites input from SCN on specific mitigation measures that could be considered to address traditional land use, cultural and spiritual imports and stakeholders to



Table 2-1 Indigenous Group Views on the Project's Potential Effects on the Cultural Experience/Experiential Values and the Cultural Importance of Water

Views related to Potential Effects on Cultural Experience/Experiential Values and the Cultural and Spiritual Importance of Water	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
			traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites SCN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.
			Alberta Transportation by letter dated October 22, 2019 introduced the new approach to land use. Under cover dated November 15, 2019, Alberta Transportation provided the latest land use principles more detail on the LUA engagement process and offered to meet with SCN to discuss next steps. Alberta Transportation has met with SCN on November 26, 2019 and further discussed the LUA.
Métis Nation of Alberta, Region 3 (MNAR3)			
 MNAR3 expressed concern that the Project will alter the landscape, potentially disrupting the connections of members who use the area to the lands and waters of the area. Water areas are very important to MNAR3 and uses range from fishing, gathering medicines, swimming, camping, water dowsing, healings, ceremonies, blessings, clearings, prayer, sweat lodges, guiding, baptisms, gathering, kayaking, canoeing, and more. MNAR3 indicated that areas around waterbodies, including rivers, streams, and lakes were used in many of the diverse Métis ways of life and should be considered high potential for archaeological material. MNAR3 have harvested plants, caught fish, and hunted/trapped in the Project area. The impacts to country foods by the construction of the reservoir has the potential to limit the access or have adverse effects on the availability of members of MNAR3 to access country foods that form and important part of expressing, maintaining, and passing on cultural values. MNAR3 members have and continue to use this area for recreational and cultural purposes. The nature of the Project means the landscape will be altered, potentially disrupting the connections of MNAR3 to the lands and waters of the area. 	MNAR3 TUS 2019, p. 1, 7 & 10 MNAR3 Letter to Alberta Transportation, March 21, 2019 (cited in MNAR3 SR1 SCRT Oct 2016-Sept 2019; Specific Concern #5)	Alberta Transportation acknowledges the stated importance of the Project area to MNAR3 traditions and culture. Alberta Transportation recognizes that potential effects on cultural experience, experiential values and the cultural and spiritual importance of water can only be meaningfully evaluated by individuals and communities experiencing these values in their cultural context. The MNAR3 TUS did not propose mitigation to avoid or reduce effects on cultural experience/experiential values and the cultural and spiritual importance of water. The Project is designed to facilitate natural river flow patterns while mitigating against extreme flood events that can negatively impact river function through the introduction and dispersal of foreign and harmful substances (i.e., contaminants and debris).	Prior to filing the EIA, Alberta Transportation provided drafts of Volume 3A, Section 14.2 and Volume 3B, Section 14.2.2 (TLRU Effects Assessment for Construction and Dry Operations and TLRU Effects Assessment for Flood and Post-flood Operations, respectively) to MNAR3 for review and comment. Alberta Transportation notes that opportunities were offered to each Indigenous group engaged on the Project, including MNAR3 to participate in a TLRU workshop, facilitated by CEAA (see the EIA, Volume 3A, Section 14.2 and Volume 3B, Section 14.2.2). This workshop was held on February 22, 2018. These workshops were designed to obtain feedback on the draft TLRU sections (Sections 14 of Volumes 3A and 3B), to obtain input on proposed mitigation measures, and to discuss how Project-Specific Concerns have been addressed in the EIA, including Indigenous groups' perspectives on assessment methodology, proposed mitigation, Project-Specific Concerns and Indigenous groups' perspectives on how the Project may affect TLRU including cultural practices and cultural experiences. In addition, Alberta Transportation has provided TUS funding to MNAR3. No requirements, restrictions or requests were placed on the conduct of TUS by Indigenous groups, but it has been Alberta Transportation's expectation that the TUS would include a description of traditional use activities including cultural practices and cultural experiences in relation to the Project. Alberta Transportation received a TUS from MNAR3 after filing the EIA, Alberta Transportation will provide a written response in December 2019 and meet to discuss. Alberta Transportation has also facilitated 5 meetings with MNAR3 representatives and maintain ongoing email and phone communication to share Project information and updates.



Table 2-1 Indigenous Group Views on the Project's Potential Effects on the Cultural Experience/Experiential Values and the Cultural Importance of Water

Views related to Potential Effects on Cultural Experience/Experiential Values and the Cultural and Spiritual Importance of Water	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
			Alberta Transportation has developed mitigation measures to avoid or reduce physical effects on important cultural sites. Alberta Transportation is of the view that these mitigations will help preserve the cultural sites and locations and reduce loss of connection to cultural and spiritual sites.
			Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction access management plan.
			Alberta Transportation continues to meet with Indigenous groups to better understand potential effects to cultural experience and experiential values and the cultural and spiritual importance of water and receive suggestions from Indigenous groups about how to mitigate these effects.
			Alberta Transportation will meet with MNAR3 to discuss opportunities to support cultural programming through participation in the Project.
			The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses would include access for other activities in the LUA. Alberta Transportation is available to meet with MNAR3 to discuss the LUA.



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Conformity IR2-04

Topic: Economic Opportunities

Sources:

EIS Guidelines Part 1, Section 2.1

EIS Guidelines Part 2, Section 5

EIS Volume 3A, Section 17.1.2

EIS Volume 3B, Section 17

CEAA Information Requests Related to the Environmental Impact Statement Round 1 Part 2, IR2-04

Alberta Transportation Responses to IR Round 1, SR1 CEAA IR Package 2, June 14, 2019

Context and Rationale

In CEAA Information Requests Related to the Environmental Impact Statement Round 1 Part 2, IR2-04, the Agency required the proponent to describe economic opportunities associated with the Project that may be of interest to Indigenous groups and discuss if and how the distribution of economic benefits to Indigenous groups could contribute to accommodation. As noted in the information request, the EIS Guidelines require the proponent to describe predicted environmental, economic, and social costs and benefits of the Project. They further indicate that the EIS will document, from the proponent's perspective, any potential economic impacts or benefits to each Indigenous group that may arise as a result of the Project, and include the perspectives of the Indigenous groups.

The context and rationale of the information request identifies the concerns of Indigenous groups with historic and current systemic exclusion of Indigenous peoples from economic benefits, the need for pro-active and creative solutions in the context of the Project, and that Indigenous groups have identified that they perceive benefits to be absent or indirect. The cover letter to the information requests and the EIS Guidelines further direct the proponent to present points of disagreement between the views of Alberta Transportation and Indigenous groups, along with a description of efforts undertaken to reconcile these differences and a rationale for conclusions.

Alberta Transportation's response to IR2-04 references an Indigenous Participation Plan, which is intended to create training, employment, and contracting opportunities with interested Indigenous groups potentially affected by the project. Alberta Transportation indicates it aims to obtain Indigenous groups' input to this plan.



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Alberta Transportation's response states that positive effects associated with employment and expenditures related to this project are listed in the EIS. The table referenced does not include any information specific to the distribution of anticipated benefits to Indigenous peoples. Alberta Transportation's response includes Appendix IR1-1. Specific Concerns and Response Tables included in this appendix list concerns raised by Indigenous groups with respect to economic benefits that are unresolved.

Information Request:

- a) Discuss the anticipated distribution of economic costs and benefits as it relates to Indigenous peoples.
 - Describe systemic barriers to benefits as identified by Indigenous groups. Discuss how the Indigenous Participation Plan will address these.
 - Identify and discuss areas of disparity between the views and conclusions of Indigenous
 groups and Alberta Transportation regarding the Project's economic costs and benefits
 relating to Indigenous peoples, efforts made to reconcile the disparities, and rationale for
 conclusions on matters for which disparity in views remains.

Response

a) Alberta Transportation understands, based on the Context and Rationale to Round 1 CEAA Package 2, IR2-04, that Technical Advisory Group (TAG) participants described to CEAA their perception of historic and current systemic exclusion of Indigenous peoples from socioeconomic benefits of development. The TAG participants also expressed the need for proactive and creative solutions including the purposeful inclusion of Indigenous groups in the economic benefits from projects such as this Project.

According to a GoA report on Indigenous workforce and economic development, Indigenous peoples in Alberta continue to face additional barriers to economic participation in development Projects (Alberta 2010). Such barriers include lack of education or training; racism, discrimination and negative stereotypes; not having a driver's license for employment purposes; and insufficient social and financial supports for transitioning into educational institutions, training, apprenticeships, employment, or the workplace. Further, Indigenous business have reported that obtaining access to financing; meeting procurement qualifications or requirements; and limited online access all remain impediments to Indigenous economic development (CCAB 2016). Through the Indigenous Engagement Program for the Project, Alberta Transportation heard from Indigenous groups that they are both more vulnerable to the effects of development and less likely to receive benefits from project development. In response to the concerns and recommendations expressed by the TAG participants to CEAA as well as to the Specific Concerns identified by Indigenous groups through engagement on the Project, Alberta Transportation developed a draft IPP that is intended to enhance Indigenous economic participation in this Project. Alberta Transportation is committed to Indigenous participation in the Project, including



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training, employment, and contracting opportunities. To this end, Alberta Transportation is preparing a draft IPP with the goal to create training, employment, monitoring, and contracting opportunities with interested Indigenous groups potentially affected by the Project (CEAA Conformity IR2-04, Appendix 4-1). Alberta Transportation aims to obtain Indigenous comment and feedback on the draft IPP and has provided opportunities for Indigenous groups to comment and provide feedback on the draft IPP. A draft of the IPP was provided to Kainai First Nation, Stoney Nakoda Nations, Ermineskin Cree Nation, Louis Bull Tribe, and Samson Cree Nation by letter dated November 12, 2019. The draft IPP was also provided to Piikani Nation, Siksika Nation, Tsuut'ina Nation Montana First Nation, Foothills Ojibway Society, and Métis Nation of Alberta, Region 3 by letter dated November 15, 2019. Alberta Transportation has met to discuss the IPP with Kainai First Nation, Stoney Nakoda Nations, Ermineskin Cree Nation, Louis Bull Tribe, and Samson Cree Nation.

Table 4-2 consolidates feedback received to date related to Project economic benefits, barriers to accessing these benefits and recommendations to address these barriers as identified by Indigenous groups. Alberta Transportation notes that no comments or concerns regarding economic costs, benefits or systemic barriers to accessing Project-related economic opportunities were provided by Foothills Ojibway Society, Ktunaxa Nation or Métis Nation of British Columbia.

With respect to areas of disparity, Alberta Transportation believes there is not a disparity regarding Indigenous viewpoints and Alberta Transportation's viewpoint on the Project's economic costs and benefits relating to Indigenous peoples. Alberta Transportation accepts that inequities exist between Indigenous and non-Indigenous communities with regard to accessibility of economic benefits. The draft IPP is designed to help address these inequities and provide tangible opportunities for Indigenous groups to benefit from the Project.

As demonstrated in Table 4-2, Alberta Transportation is committed to working with Indigenous groups to implement proactive and creative solutions during Project construction and operations. Should any disparities arise during the procurement process for construction or during implementation of training and contracting opportunities, efforts to reconcile such disparities will be made through ongoing engagement initiatives. It is Alberta Transportation's intention to tailor the accessibility and suitability of training and contracting opportunities within the IPP to meet the needs of Indigenous groups identified for engagement by the regulators, as identified through ongoing engagement. Alberta Transportation reiterates that its engagement with Indigenous groups is ongoing. As such, Table 4-2 also describes both Alberta Transportation's efforts to date and planned commitments to reconcile areas of disparity between the views and conclusions of Indigenous groups and Alberta Transportation regarding the Project's economic costs and benefits relating to Indigenous peoples.

Alberta Transportation is committed to working with interested Indigenous groups to try to seek mutually acceptable solutions to the issues, concerns or recommendations identified.



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A summary of key concerns raised by Indigenous groups is provided below (Table 4-1) along with some key resolutions or areas of opportunity for Indigenous groups during construction and operations. Table 4-2 provides detailed information regarding input from individual Indigenous groups engaged.

Table 4-1 Summary of Key Concerns Raised by Indigenous Groups and Key Resolutions

Indigenous Group Concern/Issue	Opportunities or Resolution
Indigenous peoples are subject to insensitive attitudes and discriminatory treatment on worksites.	Cultural sensitivity training will be required for all Project employees and contractors.
Indigenous groups are seeking training, employment, education, apprenticeship and contracting opportunities.	 Specific interest by Indigenous groups has been indicated for the following: participation in reclamation design, implementation and monitoring environmental monitoring during construction and operations provision of cultural sensitivity training participation in archaeology field work training for fish stranding mitigative work pre-construction wildlife surveys The IPP will incorporate this input and additional input gathered through the ongoing engagement process.
Indigenous groups have capacity constraints including: • skills and education deficits • existing community resources overwhelmed by multiple projects	The IPP will include training programs. Alberta Transportation has approved \$1.21 million in funding to Indigenous groups in pre-planning work for the Project, that has included funding through TUS agreements with provisions for training and capacity development, where requested, and capacity funding agreements.
Indigenous groups have expressed a desire for direct negotiated contracts for Indigenous communities and businesses.	Alberta Transportation will maximize Indigenous participation opportunities for training and contracting opportunities by including requirements for its prime contractors to hire qualified and competitive Indigenous contractors and employees. Potential prime contractors will be evaluated on, among other things, their plans for Indigenous participation throughout Project construction that meet or exceed the goal of Alberta Transportation's IPP for the Project.
Indigenous groups desire clear targets for Indigenous employment and contracting	The goal of Alberta Transportation's IPP for the Project is to create contracting, employment and training opportunities with Indigenous groups identified by the regulators for consultation. Targets and associated reporting mechanisms will be informed by IPP engagement and Project requirements.



Table 4-2 Indigenous Group Views on Economic Costs, Benefits and Barriers for the Project and Alberta Transportation's Responses

Views related to E	conomic Costs, Benefits and Barriers	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps		
Kainai First Nation /I	Kainai First Nation /Blood Tribe (KFN)					
consult with KFN educational, tro that could facili	ployment plan, the Proponent should I regarding potential support for sining, and apprenticeship programs tate the employment of KFN	KFN Letter to CEAA 2018 (CEAR #47)	Alberta Transportation is committed to Indigenous participation in the Project, including training, employment, and contracting opportunities. To this end, Alberta Transportation is preparing a draft IPP with the goal to create training, employment, monitoring, and contracting opportunities with interested	On March 23, 2018, Alberta Transportation sent detailed responses to Specific Concerns raised to date by providing a copy of Table 7-7 SR1 Project Specific Concerns and Responses - Kainai First Nation from the March 2018 EIA. At the open house held on October 29, 2018, Alberta Transportation		
community men especially youn	mbers during construction, and g people.		Indigenous groups potentially affected by the Project, including KFN. Alberta Transportation aims to obtain Indigenous comment and feedback on the draft	indicated they are willing to discuss possible economic opportunities with the KFN.		
businesses in the	should consult with KFN regarding e community and potential business g opportunities in relation to the possible the Proponent and KFN	Letter from KFN to CEAA 2018 (CEAR #47)	IPP, the final draft of which will identify how that feedback was incorporated. The priorities of KFN for contracting, education, and training to support Project employment will be explored through this ongoing engagement.	In a letter dated June 18, 2019, Alberta Transportation stated they are committed to Indigenous participation in the Project including training, employment, and contracting opportunities.		
should attempt	to identify opportunities for Direct ntracts with KFN businesses.			Alberta Transportation met with KFN to discuss the IPP on October 17, 2019 and provided KFN the draft IPP on November 12, 2019. A meeting to discuss the IPP document was held November 21, 2019, with further meetings		
should consult v	onmental monitoring, the Proponent with KFN to discuss the possibility of wment, and contracting opportunities	Letter from KFN to CEAA 2018 (CEAR #47)		involving KFN Employment and Training department to be planned for the new year. KFN indicated they would be providing written comments on the draft IPP document.		
design and imp	should consult with KFN regarding the lementation of cultural-sensitivity in that is mandatory for all Project contractors.	Letter from KFN to CEAA 2018 (CEAR #47)	Alberta Transportation will design and implement a mandatory cultural sensitivity training program for all Project employees and contractors. The program itself will incorporate input and content shared by KFN through ongoing engagement. Delivery of a cultural sensitivity program by an Indigenous business or service provider may also be a recommendation KFN wishes to bring forward for consideration within the IPP.	The IPP was provided to KFN on November 12, 2019 and contains a commitment that all contractors and GoA staff on the Project site will be required to participate in Indigenous cultural awareness training. This was discussed with KFN at the meeting held on November 21, 2019.		
possible: who w the proposed P	ant to the KFN to establish as soon as ill be employed in the development of roject; what community benefits will our communities that accommodate	• KFN TUS 2018 (CEAR # 47)	To date, Alberta Transportation has approved \$1.21 million in funding to Indigenous groups in pre-planning work for the Project, that has included funding for TUS agreements with provisions for training and capacity development, where requested, and capacity funding agreements.	On March 23, 2018, Alberta Transportation sent detailed responses to Specific Concerns raised to date by providing a copy of Table 7-7, SR1 Project Specific Concerns and Responses - Kainai First Nation from the March 2018 EIA.		
KFN suggests th	at loss of traditional use could be	• KFN TUS 2018	However, in response to the concerns and recommendations expressed by the TAG participants to CEAA and to the Specific Concerns identified by Indigenous	At the open house held on October 29, 2018, Alberta Transportation indicated they are willing to discuss possible economic opportunities with KFN.		
concurrently wi	accommodated through a process that works concurrently with the study of the physical reservoir, toward a community benefits agreement for KFN. It is believed that such a community benefits agreement could be negotiated and agreed by both communities and Alberta permitting the construction of the Project to the benefit of all three parties.	(CEAR # 47)	groups through engagement on the Project, including KFN, Alberta Transportation developed a draft IPP that is intended to enhance Indigenous economic participation in this Project.	In a letter dated June 18, 2019, Alberta Transportation stated they are committed to Indigenous participation in the Project including training, employment, and contracting opportunities.		
could be negot			Alberta Transportation aims to obtain Indigenous comment and feedback on the draft IPP, the final draft of which will identify how that feedback was incorporated as appropriate.	Alberta Transportation met with KFN to discuss the IPP on October 17, 2019 and provided KFN the draft IPP on November 12, 2019. A meeting to discuss the IPP document was held November 21, 2019, with further meetings involving the Blood Tribe Employment and Training department to be planned for the new year. KFN indicated they would be providing written comments on the draft IPP document.		



Table 4-2 Indigenous Group Views on Economic Costs, Benefits and Barriers for the Project and Alberta Transportation's Responses

Views related to Economic Costs, Benefits and Barriers	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
In the event that the Project is to be decommissioned, the Proponent should consult with KFN regarding the design, implementation, and monitoring of its Reclamation Plan to maximize the use of KFN TEK and	Letter from KFN to CEAA 2018 (CEAR #47)	decommissioned. However, following construction, areas disturbed by construction that are not required for operation and maintenance will reclaimed and Alberta Transportation will consult with KFN on the design, implementation	On March 23, 2018, Alberta Transportation sent detailed responses to Specific Concerns raised to date by providing a copy of Table 7-7 SR1 Project Specific Concerns and Responses - Kainai First Nation from the March 2018 EIA. At the open house held on October 29, 2018, Alberta Transportation
support KFN employment in the reclamation process.			indicated they are willing to discuss possible economic opportunities with KFN.
			In a letter dated June 18, 2019, Alberta Transportation stated they are committed to Indigenous participation in the Project including training, employment, and contracting opportunities.
			Alberta Transportation met with KFN to discuss the IPP on October 17, 2019 and provided KFN the draft IPP on November 12, 2019. A meeting to discuss the IPP document was held November 21, 2019, with further meetings involving the Blood Tribe Employment and Training department to be planned for the new year. KFN indicated they would be providing written comments on the draft IPP document.
Ermineskin Cree Nation (ECN)			
 The Proponent should consult with ECN to discuss the possibility of training, employment, and contracting opportunities for ECN, including through environmental monitoring opportunities. The Proponent should consult with ECN regarding businesses in the community and potential business and contracting opportunities in relation to the Project. Where possible the Proponent and ECN should attempt to identify opportunities for Direct Negotiated Contracts with ECN businesses. The significant obstacles to employment for ECN members, particularly with respect to education, 	• ECN TUS 2018 (CEAR #46)	Alberta Transportation is committed to Indigenous economic participation in the Project including through potential training and contracting opportunities. As such, Alberta Transportation is preparing an IPP for the Project. The goal of this IPP is to create training and contracting opportunities with interested Indigenous groups potentially affected by the Project, including ECN. Alberta Transportation aims to obtain Indigenous comment and feedback on the draft IPP, the final draft of which will identify how that feedback was incorporated as appropriate. The priorities of ECN for contracting and education, training and apprenticeship programs to support Project employment will be explored through this ongoing engagement. To that end, Alberta Transportation met with ECN on September 16, 2019 and November 18, 2019 to discuss several topics including the IPP. On November 18,	In a letter dated June 18, 2019, Alberta Transportation stated they are committed to Indigenous participation in the Project including training, employment, and contracting opportunities. Alberta Transportation responded to ECN's TUS report on August 8, 2019 with mitigation measures and responses. Alberta Transportation will work with ECN to develop a process to share monitoring results. At the meeting held on September 16, 2019, Indigenous participation was discussed. Alberta Transportation has committed to Indigenous participation in employment and monitoring and other aspects of the Project. Alberta Transportation expressed their willingness to have monthly meetings with ECN to continue discussions on Indigenous participation. ECN was provided the draft IPP on November 12, 2019. A meeting to discuss the IPP document was
experience, and culture, will impede the ability of ECN members to benefit from the Project.		2019, ECN advised it intended to provide written comments on the IPP.	held November 18, 2019. ECN indicated they would be providing written comments on the draft IPP document and were interested in future meetings.
As part its employment plan, the Proponent should consult with ECN regarding potential support for educational, training, and apprenticeship programs that could facilitate the employment of ECN community members, and especially young people.			de la
Indigenous peoples are among the most vulnerable groups to industrial development: more likely to suffer the negative effects and less likely to benefit from the potential positive effects.	• ECN TUS 2018 (CEAR # 46)	Alberta Transportation recognizes that Indigenous groups perceive they may face additional barriers to economic participation in development projects. In response to the concerns and recommendations expressed by the TAG participants to CEAA as well as to the Specific Concerns identified by Indigenous	In a letter dated June 18, 2019, Alberta Transportation stated they are committed to Indigenous participation in the Project including training, employment, and contracting opportunities. Alberta Transportation responded to ECN's TUS report on August 8, 2019 with
Without clear targets for ECN employment and		groups through engagement on the Project, including ECN, Alberta Transportation developed a draft IPP that is intended to enhance Indigenous	mitigation measures and responses.
contracting and a clear work plan to meet potential targets, ECN and its members will be largely excluded from the potential socio-economic benefits of the Project.		economic participation in this Project. The goal of Alberta Transportation's IPP for the Project is to create contracting, employment and training opportunities with Indigenous groups potentially affected by the Project.	At the meeting held on September 16, 2019, Indigenous participation was discussed. Alberta Transportation has committed to Indigenous participation in employment and monitoring and other aspects of the Project. Alberta Transportation expressed their willingness to have monthly meetings with ECN to continue discussions on Indigenous participation. ECN was provided the draft IPP on November 12, 2019. A meeting to discuss the IPP document was



Table 4-2 Indigenous Group Views on Economic Costs, Benefits and Barriers for the Project and Alberta Transportation's Responses

Views related to Economic Costs, Benefits and Barriers	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
The Proponent should consult with ECN regarding the establishment of employment targets for ECN community members and the development of a plan to meet those targets.		While many of these opportunities will be made available through the Project's general contractors, Alberta Transportation will maximize Indigenous participation opportunities for training and contracting opportunities by including requirements for its prime contractors to hire qualified and competitive Indigenous contractors and employees. Potential prime contractors will be evaluated on, among other things, their plans for Indigenous participation throughout Project construction that meet or exceed the goal of Alberta Transportation's IPP for the Project. As noted above, Alberta Transportation aims to obtain Indigenous comment and feedback on the draft IPP, the final draft of which will identify how that feedback was incorporated as appropriate. The priorities of ECN for contracting	held November 18, 2019. ECN indicated they would be providing written comments on the draft IPP document and were interested in future meetings.
		and employment will be explored through this ongoing engagement.	
 That ECN members employed on the Project could be subjected to discriminatory treatment and insensitive attitudes from supervisors and/or contractors, which could result in psychological harm and lower retention rates, among other potential effects. The Proponent should consult with ECN regarding the 	• ECN TUS 2018 (CEAR # 46)	Alberta Transportation will design and implement a mandatory cultural sensitivity training program for all Project employees and contractors. The program itself will incorporate feedback and content shared by ECN through ongoing engagement. Delivery of a cultural sensitivity program by an Indigenous business or service provider may also be a recommendation ECN wishes to bring forward for consideration within the IPP.	The IPP was provided to ECN on November 12, 2019 and contains a commitment that all contractors and GoA staff on the Project site will be required to participate in Indigenous cultural awareness training. This was discussed with ECN at the meeting held on November 18, 2019.
design and implementation of a Cree cultural- sensitivity training program that is mandatory for all Project employees and contractors.			
In the event that the Project is to be decommissioned, the Proponent should consult with ECN regarding the design, implementation, and monitoring of its Reclamation Plan to maximize the use of ECN TEK and support ECN employment in the reclamation process.	• ECN TUS 2018 (CEAR # 46)	The Project is expected to operate in perpetuity and is not expected to be decommissioned. However, following construction, areas disturbed by construction that are not required for operation and maintenance will reclaimed and Alberta Transportation will engage with ECN on the design, implementation and monitoring of the Reclamation Plan.	Alberta Transportation responded to ECN's TUS report on August 8, 2019 with mitigation measures and responses. The Project is expected to operate in perpetuity and is not expected to be decommissioned.
Louis Bull Tribe (LBT)			
LBT is interested in economic participation through training, employment and contracting.	• LBT TUS 2018 (CEAR #1228)	Alberta Transportation is committed to Indigenous economic participation in the Project including through potential training and contracting opportunities. As such, Alberta Transportation is preparing an IPP for the Project. The goal of this IPP is to create training and contracting opportunities with interested Indigenous groups potentially affected by the Project, including LBT. Alberta Transportation aims to obtain Indigenous comment and feedback on the draft IPP, the final draft of which will identify how that feedback was incorporated as appropriate. The priorities of LBT for contracting, education and training will be explored through this ongoing engagement.	At the meeting held on November 6, 2018 and the open house on November 19, 2018, Alberta Transportation committed to continuing discussions on this topic. In a letter dated June 18, 2019, Alberta Transportation stated they are committed to Indigenous participation in the Project including training, employment, and contracting opportunities. Alberta Transportation responded to LBT's TUS report on August 8, 2019 with mitigation measures and responses. Alberta Transportation provided the draft IPP to LBT on November 12, 2019 and discussed during the November 14, 2019 meeting.



Table 4-2 Indigenous Group Views on Economic Costs, Benefits and Barriers for the Project and Alberta Transportation's Responses

Views related to Economic Costs, Benefits and Barriers	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
Montana First Nation (MFN)			
 Capacity constraints are limiting MFN's participation in Project engagement. 	• MFN 2018 (CEAR # 51)	Alberta Transportation recognizes that Indigenous groups perceive they may face capacity constraints limiting their ability to participate in Project engagement, which includes economic participation.	Alberta Transportation approved MFN's TUS budget on September 11, 2018.
		To date, Alberta Transportation has approved \$1.21 million in funding to Indigenous groups in pre-planning work for the Project, that has included funding through TUS agreements with provisions for training and capacity development, where requested, and capacity funding agreements.	
		Alberta Transportation remains available to discuss MFN's current interests and priorities regarding the Project, which may include exploring alternative solutions to enhancing capacity through the IPP.	
Métis Nation of Alberta, Region 3 (MNAR3)			
Métis businesses and companies are being left out from economic benefit opportunities on the Project.	Letter from MNAR3 to Alberta Transportation, March 13, 2019	To date, Alberta Transportation has approved \$1.21 million in funding to Indigenous groups in pre-planning work for the Project, that has included funding through TUS agreements with provisions for training and capacity development, where requested, and capacity funding agreements.	In a letter dated June 18, 2019, Alberta Transportation stated they are committed to Indigenous participation in the Project including training, employment, and contracting opportunities. MNAR3 was provided the draft IPP on November 15, 2019. Alberta Transportation has requested written comments and a meeting to discuss the document.
		However, in response to the concerns and recommendations expressed by the TAG participants to CEAA as well as to the Specific Concerns identified by Indigenous groups through engagement on the Project, including MNAR3, Alberta Transportation developed a draft IPP that is intended to enhance Indigenous economic participation in this Project.	
		Alberta Transportation aims to obtain Indigenous comment and feedback on the draft IPP, the final draft of which will identify how that feedback was incorporated as appropriate. The priorities of MNAR3 for economic benefit opportunities will be explored through this ongoing engagement.	
Piikani Nation (PN)			
For PN to have effective involvement with Alberta Transportation on these plans and programs there will be a need for PN and Alberta Transportation to agree	• PN 2018 (CEAR #48)	Alberta Transportation recognizes that Indigenous groups perceive they may face capacity constraints limiting their ability to participate in Project engagement, which includes economic participation. To date, Alberta	In a letter dated June 18, 2019, Alberta Transportation stated they are committed to Indigenous participation in the Project including training, employment, and contracting opportunities.
 on capacity support for PN. PN is concerned that monitoring will not involve Indigenous communities and requests that Alberta Transportation provides opportunities and financial 	• PN 2018 (CEAR #48)	Transportation has approved \$1.21 million in funding to Indigenous groups in pre- planning work for the Project, that has included funding through TUS agreements with provisions for training and capacity development, where requested, and capacity funding agreements.	PN was provided the draft IPP on November 15, 2019. Alberta Transportati has requested written comments and a meeting to discuss the document
capacity for the community to meaningfully participate in the planning and implementation of monitoring to help define meaningful monitoring targets, criteria and indicators for traditional land use objectives.		Alberta Transportation is committed to Indigenous economic participation in the Project including through potential training and contracting opportunities. As such, Alberta Transportation is preparing an IPP for the Project. The goal of this Plan is to create training and contracting opportunities with interested Indigenous groups potentially affected by the Project, including PN. Alberta Transportation aims to obtain Indigenous comment and feedback on the draft IPP, the final draft of which will identify how that feedback was incorporated as appropriate.	



Table 4-2 Indigenous Group Views on Economic Costs, Benefits and Barriers for the Project and Alberta Transportation's Responses

Views related to Economic Costs, Benefits and Barriers	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
		Alberta Transportation remains available to discuss PN's current interests and priorities regarding the Project, which may include exploring alternative solutions to enhancing capacity, training and contracting opportunities relative to monitoring activities.	
PN requests that Alberta Transportation commits to holding a workshop with the PN consultation office and knowledge holders where commitments related to appropriate avoidance measures, mitigation, management and accommodation strategies will be made prior to the issuing of any Project permits or approvals.	• PN 2018 (CEAR #48)	Alberta Transportation will make itself available to meet (including a workshop forum) and discuss these commitments at a time convenient to the PN.	In December 2019, Alberta Transportation provided written responses to the PN Technical Review dated June 2018, which included this concern as Question 48. Alberta Transportation will offer to meet with PN regarding the written responses.
Tsuut'ina Nation (TN)			
Without proper accounting for future trends in flooding, the Project benefits cannot be, accurately weighed against the Project's environmental, social, and economic costs.	• TN 2018 (CEAR #50)	The maximum water management capacity of the Project is designed to divert, retain, and slowly release a portion of the flood water from a design flood of the 2013 event, or equivalent. If a flood larger than the design flood should occur, the water in excess of the design volume would bypass the reservoir and flow down the Elbow River. The effects on the environment would be similar to what a flood of that excess volume would do without the Project. An increased frequency of flooding would result in increased Project activation when flows in the Elbow River exceed 160 m³/s, meaning the reservoir would be used in more years than it would under current flood frequencies. The potential effects of such an increase would be more noticeable with smaller floods because increased frequency may decrease the recovery time for VCs. A flood frequency analysis that considers the effects of current projections on climate change was completed for the Project and further detail has been presented in CEAA Conformity IR3-01.	At the meeting held on February 21, 2019, Alberta Transportation's independent expert discussed effects of potential climate change on the Elbow River. In December 2019, Alberta Transportation provided written responses to the TN Technical Review dated 2018, which included these concerns as Question 2-11. Alberta Transportation will offer to meet with TN regarding the written responses.
Members of TN should be field crew for all archaeological and other field work.	• TN TUS 2018	Alberta Transportation is committed to Indigenous economic participation in the Project including through potential training and contracting opportunities. As such, Alberta Transportation has prepared a draft an IPP for the Project. The goal	On November 23, 2018, Alberta Transportation provided its report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table. In the mitigation table, Alberta Transportation provided the
TN requested training and communication plans in the event of fish stranding.	• TN (CEAR #50)	of this IPP is to create training and contracting opportunities with interested Indigenous groups potentially affected by the Project, including TN. Alberta Transportation aims to obtain Indigenous comment and feedback on	mitigation measures proposed in the EIA for monitoring and employment opportunities. Alberta Transportation also met with TN December 6, 2018 to discuss the
		the draft IPP, the final draft of which will identify how that feedback was	response and mitigation table.
		incorporated as appropriate. The priorities of TN for contracting and training will be explored through this ongoing engagement.	In a letter dated June 18, 2019, Alberta Transportation stated they are committed to Indigenous participation in the Project including training, employment, and contracting opportunities.
			TN was provided the draft IPP on November 15, 2019. Alberta Transportation has requested written comments and a meeting to discuss the document.



Table 4-2 Indigenous Group Views on Economic Costs, Benefits and Barriers for the Project and Alberta Transportation's Responses

Views related to Economic Costs, Benefits and Barriers Source		Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
Siksika Nation (SN)			
It is very important to the SN to establish as soon as possible: who will be employed in the development of the proposed Project; what community benefits will be available to our communities that accommodate the loss of our traditional use. One means for doing so would be to begin a process that would work concurrently with the study of the physical reservoir, toward a community benefits agreement for SN. It is believed that such a community benefits agreement could be negotiated and agreed by both communities and Alberta permitting the construction of the Project to the benefit of all three parties.	Meeting between SN and Alberta Transportation, April 26, 2018	To date, Alberta Transportation has approved \$1.21 million in funding to Indigenous groups in pre-planning work for the Project, that has included funding through TUS agreements with provisions for training and capacity development, where requested, and capacity funding agreements. However, in response to the concerns and recommendations expressed by the TAG participants to CEAA as well as to the Specific Concerns identified by Indigenous groups through engagement on the Project, including SN, Alberta Transportation developed a draft IPP that is intended to enhance Indigenous economic participation in this Project. Alberta Transportation aims to obtain Indigenous comment and feedback on the draft IPP, the final draft of which will identify how that feedback was incorporated as appropriate.	On March 23, 2018, Alberta Transportation sent detailed responses to Specific Concerns raised to date by providing a copy of Table 7-5 SR1 Project Specific Concerns and Responses - Siksika Nation from the March 2018 EIA. On April 26, 2018, Alberta Transportation met with SN to review their Specific Concerns and the responses and proposed mitigation measures in Table 7-5 SR1 Project Specific Concerns and Responses - Siksika Nation. In a letter dated June 18, 2019, Alberta Transportation stated they are committed to Indigenous participation in the Project including training, employment, and contracting opportunities. SN was provided the draft IPP on November 15, 2019. Alberta Transportation has requested written comments and a meeting to discuss the document. A meeting is currently scheduled for January 6, 2020.
SN has inquired on what steps will be taken to address and accommodate future impacts to SN interests. SN would like preferred contracting for the contract procurement process.	Meeting between SN and Alberta Transportation, April 26, 2018		
Samson Cree Nation (SCN)			
Interest in Project-related jobs for Indigenous peoples.	• SCN 2018 (CEAR #52)	Alberta Transportation is committed to Indigenous economic participation in the Project including through potential training and contracting opportunities. As such, Alberta Transportation is preparing an IPP for the Project. The goal of this IPP is to create training and contracting opportunities with interested Indigenous groups potentially affected by the Project, including SCN. Alberta Transportation aims to obtain Indigenous comment and feedback on the draft IPP, the final draft of which will identify how that feedback was incorporated as appropriate. The priorities of SCN for contracting and training will be explored through this ongoing engagement.	At the meeting held on November 29, 2016, Alberta, Alberta Transportation indicated there is potential for the Project to create First Nation jobs but nothing would be decided until the Project is approved. In a letter dated June 18, 2019, Alberta Transportation stated they are committed to Indigenous participation in the Project including training, employment, and contracting opportunities. SCN was provided the draft IPP on November 12, 2019 and met November 26, 2019 to discuss the document. Alberta Transportation has also requested written comments.
SCN also requests that Alberta engage with SCN so that community members can support or participate in pre-construction wildlife surveys.	• SCN 2018 (CEAR #52)	Alberta Transportation is committed to Indigenous participation in the Project, including training, employment, and contracting opportunities. To this end, Alberta Transportation is preparing a draft IPP with the goal to create training, employment, monitoring, and contracting opportunities with interested Indigenous groups potentially affected by the Project, including SCN. Alberta Transportation aims to obtain Indigenous comment and feedback on the draft IPP, the final draft of which will identify how that feedback was incorporated. Alberta Transportation is committed to offering to meet with the SCN to discuss opportunities for participation in pre-construction wildlife surveys.	In November 2019, Alberta Transportation provided written responses to the SCN Technical Review dated June 2018, which included this concern as Question 8. Alberta Transportation will offer to meet with SCN regarding the written responses. At the meeting held on November 26, 2019, Alberta Transportation discussed the IPP and offered to discuss the draft WMMP with SCN at their next meeting.



Table 4-2 Indigenous Group Views on Economic Costs, Benefits and Barriers for the Project and Alberta Transportation's Responses

Views related to Economic Costs, Benefits and Barriers	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
Stoney Nakoda Nations (SNN)			
SNN are currently being engaged on over 500 active projects and, therefore, capacity continues to be a constraint for SNN.	Meeting between SNN and Alberta Transportation, June 4, 2018	Alberta Transportation recognizes that Indigenous groups perceive they may face capacity constraints limiting their ability to participate in Project engagement, which includes economic participation. To date, Alberta Transportation has approved \$1.21 million in funding to Indigenous groups in pre-planning work for the Project, that has included funding through TUS agreements with provisions for training and capacity development, where requested, and capacity funding agreements. Alberta Transportation remains available to discuss SNN's current interests and priorities regarding the Project, which may include exploring alternative solutions to enhancing capacity through the IPP.	Alberta Transportation requests budgets prior to every meeting with SNN to help facilitate participation, and has funded site visits and a TUS report, which has not been received.





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REFERENCES

Alberta. 2010. Connecting the Dots: Aboriginal Workforce and Economic Development in Alberta. Report of the MLA Committee on the First Nations, Métis and Inuit Workforce Planning Initiative.

CCAB (Canadian Council for Aboriginal Business). 2016. Promise and Prosperity: The 2016
Aboriginal Business Survey. In partnership with Environics Research. Indigenous and
Northern Affairs Canada.

Conformity IR2-05

Topic: Federal Lands

Sources:

EIS Guidelines Part 1, Section 3.3.2

EIS Guidelines Part 2. Section 6.3.5

EIS Volume 3A, Section 18

EIS Volume 3B, Section 18

EIS Volume 3C, Section 1

Tsuut'ina First Nation, Ermineskin Cree Nation, and Kainai First Nation – Technical Review of the EIS - Annexes – Combined (CEAR # 46, 47, 50)

CEAA Information Requests Related to the Environmental Impact Statement Round 1 Part 2, IR2-05

Alberta Transportation Responses to IR Round 1, SR1 CEAA IR Package 2, June 14, 2019

Context and Rationale

In CEAA Information Requests Related to the Environmental Impact Statement Round 1 Part 2, IR2-05, the Agency required the proponent to provide an assessment of effects to federal lands.

Alberta Transportation's response to IR2-05 provides a rationale for why the LAA and RAA are VC-specific and describes the challenges of considering "Federal Lands" as a stand-alone VC. Respecting the rationale provided, the Agency understands additional information related to pertinent VCs may be forthcoming in the proponent's responses to information requests. Upon receipt of this information, the Agency will undertake further review to determine whether the information provided supports a full understanding of potential effects to federal lands.



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To support this analysis, additional contextual information regarding the current state of the environment on reserve is required. The Agency recognizes the need to minimize the degree of duplication and redundancy in an assessment and to focus the analysis on the project-environment interactions of greatest importance and consequence. While the EIS evaluates the potential effects of the Project to each VC that extended onto reserve lands, it is pertinent to understand how potential residual effects of the Project could affect land and resource management objectives and activities on these reserve lands.

Information Request:

a) Provide a description of the current state of the environment on federal lands, prepared with the First Nation whose reserve(s) may be affected, that focuses on the land management plans or priorities set by the respective First Nations. Discuss potential interactions of residual project effects with the plans and objectives identified.

Response

a) Alberta Transportation has endeavoured to obtain land management plans or priorities from the Tsuut'ina Nation (for Reserve No. 145) and Stoney Nakoda Nations (for Reserves No. 142, 143, and144). On September 23, 2019, Alberta Transportation sent letters to Tsuut'ina Nation and Stoney Nakoda Nation asking for any information regarding land management plans and priorities that could be used as part of this response. To date, Tsuut'ina Nation has not provided information on land management plans or priorities in response to Alberta Transportation's September 23, 2019 request.

At a meeting on November 19, 2019, Stoney Nakoda Nations provided information in relation to Alberta Transportation's request, indicating that they had participated in community plans that were funded by AEP related to a water needs assessment for the Stoney Nakoda Nations. Following the meeting, Alberta Transportation identified the following historical projects funded by AEP:

- 2013-14 Flood Mitigation Program, July 2014: Add resiliency to the system by adding
 erosion control measures and/or upsizing culverts to prevent repeat occurrences in the
 future for Stoney Indian Reserve, Eden Valley as well as riverbank protection for Big Horn
 Indian Reserve.
- Water Needs Pre-assessment, April 2015: Assist the three Stoney Nakoda First Nations in reaching consensus to participate in a Water Needs Assessment with the Province of Alberta that can be used to govern the Water Needs Assessment Project.
- Water Needs Assessments, January 2016: All three Stoney Nations will collaborate on one
 water needs assessment to better understand their existing and future water
 management planning. Includes an inventory of existing water use and consumption on
 the reserve(s) of the Stoney Nations and predictions for future water need on the Stoney
 reserve(s) up to 50 years.



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- Treaty 7 Water Sub Table, May 2017: Forum for Treaty 7 First Nations, AEP, Aboriginal Relations and Indigenous and Northern Affairs Canada to discuss overarching water issues, shared priorities, best practices, policy matters and possible areas of alignment.
- Treaty 7 Water Sub Table, November 2017: Forum for Treaty 7 First Nations, AEP, Aboriginal Relations and Indigenous and Northern Affairs Canada to discuss overarching water issues, shared priorities, best practices, policy matters and possible areas of alignment.
- Treaty 7 Water Sub Table, March 2019: Forum for Treaty 7 First Nations, AEP, Aboriginal Relations and Indigenous and Northern Affairs Canada to discuss overarching water issues, shared priorities, best practices, policy matters and possible areas of alignment.

The plans identified above have two primary objectives: water needs, and flood protection and erosion resiliency. The residual effects of the Project are not expected to interact with the objectives of the identified plans Stoney Nakoda Nations (for Reserves No. 142, 143, and 144) located on the Bow River, given the Project's location on the Elbow River 28 km distance from the reserves.

In addition to the information provided by the Stoney Nakoda Nations, Alberta Transportation has reviewed previous feedback from these two First Nations, and their issues or concerns that may be interpreted in the context of this request. Table 5-1 provides a summary of such issues and associated information as follows:

- under "Indigenous Issue", issues from Indigenous groups as identified from the engagement record (i.e., SCRTs)
- under "Potential Effects", effect(s) as identified and assessed by Alberta Transportation in the EIA that are most relevant to the issue
- under "Alberta Transportation Management Response", Alberta Transportation's response to manage those issues (i.e., proposed measures to address the effects)

Effects are differentiated between those outside and inside federal lands. This reflects the nature of issues raised, many of which are not restricted specifically to the geographic area of federal land but to concerns within the larger region. For the purpose of this response, it has been assumed that for an effect to exist within a federal land, there must be an assessed residual effect of the Project on environmental and human use features in those lands. Further information on direct effects is provided in Volume 3A, Section 18 of the EIA (Assessment of Effects to Federal Lands) and Volume 3B, Section 18 of the EIA (Assessment of Effects to Federal Lands).



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Table 5-1 Potential Effects by the Project Inside and Outside of Federal Lands Relevant to a Land Use Management Context

Issues Raised by	Potential Effects as A Alberta Transpo		Alberta Transportation Response to Manage Potential Effects	
Indigenous Groups	Outside Federal Lands	Inside Federal Lands	Outside Federal Lands	Inside Federal Lands
Retention of cultural sites/artifacts	Disturbance or loss of cultural sites/artifacts	None	Implementation of established historical resources mitigation	N/A
Effect on Treaty rights	Conversion of private land to Crown land	None	Discussion of principles for future land use	N/A
Loss or diminished access to land	Conversion of private land to Crown land	None	Discussion of principles for future land use	N/A
Impingement of wildlife movements	Changes to movement corridors though physical and sensory barriers to movement	None	Incorporation of wildlife mitigation measures	N/A
Loss or disturbance of fish habitat	In- and near-stream Project physical works and activities	None	Incorporation of fish mitigation measures	N/A
Change to potable water quality and quantity	Sediment discharge in Elbow River and change to groundwater	None	Incorporation of sediment control mitigation measures for surface water; no effects anticipated to groundwater sourced potable water	N/A
Flooding in Redwood Meadows	Backwater from Project during flood and cumulative effects of flood mitigation measures	N/A	N/A	Discussion of flood management measures in Redwood Meadows as a separate project



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Conformity IR2-06

Topic: Indigenous and Community Knowledge

Sources:

EIS Guidelines Part 1, Section 4.3.2

EIS Guidelines Part 2, Section 3.3.3

EIS Volume 3A, Section 14

EIS Volume 3B, Section 14

Piikani Nation – Technical Review of EIS, June 15, 2018 (CEAR #48)

Tsuut'ina First Nation, Ermineskin Cree Nation, and Kainai First Nation – Technical Review of the EIS - Annexes – Combined (CEAR # 46, 47, 50)

Samson Cree Nation – Springbank Off-Stream Reservoir Project Written Submission – June 25, 2018 (CEAR # 52)

Montana First Nation – Review of Springbank Off-Stream Reservoir EIA, June 2018 (CEAR # 51)

Ermineskin Cree Nation and Blood Tribe – Springbank EIS Technical Comments (CEAR # 46, 47)

Ermineskin Cree Nation – Springbank Off-Stream Reservoir TKU Report (CEAR #46)

Blood Tribe/Kainai – Traditional Knowledge, Land, and Resource Use (CEAR # 47)

CEAA Information Requests Related to the Environmental Impact Statement Round 1 Part 2, IR2-06

Alberta Transportation Responses to IR Round 1, SR1 CEAA IR Package 2, June 14, 2019

Context and Rationale

In CEAA Information Requests Related to the Environmental Impact Statement Round 1 Part 2, IR2-06, the Agency required the proponent to describe the methodology used for considering Indigenous and community knowledge and concerns raised by Indigenous groups. The information request indicates that Indigenous knowledge extends beyond information pertaining to use of lands and resources. The cover letter to the information requests and the EIS Guidelines further direct the proponent to present points of disagreement between the views of Alberta Transportation and Indigenous groups, along with a description of efforts undertaken to reconcile these differences and a rationale for conclusions.



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Alberta Transportation's response to IR2-06 provides an overview of how information was gathered but does not present the methodology applied when analyzing or considering the information received. With regards to demonstrating how Indigenous knowledge was considered throughout the preparation of the EIS, Alberta Transportation provides discrete examples of times when information related to traditional land and resource use was used to inform assessment parameters and mitigation. Alberta Transportation did not extend consideration of Indigenous knowledge beyond data on traditional land and resource use.

Alberta Transportation's response includes Appendix IR1-1. Specific Concerns and Response Tables included in this appendix list concerns raised by Indigenous groups with respect to Indigenous knowledge that are unresolved. For example, the table includes concerns from Kainai First Nation regarding the degree to which knowledge holders were or were not included in the environmental impact studies and regarding the proponent's conflation of traditional use information and traditional knowledge. The table indicates these concerns have not yet been addressed.

Alberta Transportation's response states that Alberta Transportation is not aware of any differences between Indigenous, community, and western knowledge collected for the purposes of the EIA or project planning. The Specific Concerns and Response Tables identify numerous concerns and views expressed by Indigenous groups related to Indigenous and traditional knowledge that conflict with or contradict statements made by Alberta Transportation in the EIS and information request responses. For example, item 3 in the Stoney Nakoda Specific Concerns and Response Table requests using cultural studies to look at animals and plants instead of relying only on scientific techniques. Alberta Transportation provides no response in the table and no discussion of this or other points of discrepancy in the information request response.

Information Requests:

- a) Discuss the methodology used for considering Indigenous and community knowledge and concerns raised by Indigenous groups.
- b) Present a discussion on the views expressed by Indigenous groups regarding Alberta Transportation's methodology for considering Indigenous knowledge. Identify and discuss areas of disparity between the views of Indigenous groups and Alberta Transportation on the consideration of Indigenous knowledge (both the methodology used and the outcomes of the analysis), efforts made to reconcile the disparities, and rationale for conclusions on matters for which disparity in views remains.



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Response

a) Alberta Transportation employed a thorough and consistent method for considering Indigenous and community knowledge and concerns raised by Indigenous groups. As stated in Alberta Transportation's response to Round 1 CEAA Package 2, IR2-06, Alberta Transportation considered information obtained through the Indigenous Engagement Program for the Project, including meetings, workshops, correspondence and TUS funded by Alberta Transportation. More detail on the Indigenous Engagement Program for the Project is provided on response to Round 1 CEAA Package 2, IR2-01. As well, information was gathered through a review of publicly available literature containing TLRU information for Indigenous groups engaged on the Project and was reviewed to deepen the understanding of the nature and extent of current use by these Indigenous groups.

Indigenous and community knowledge and concerns gathered by Alberta Transportation were reviewed and summarized into tabular format organized into the following categories:

1. Traditional Land and Resource Use Information

This includes information shared by Indigenous groups regarding existing conditions and potential Project effects. The information has been organized under the following EIA categories:

- TEK
 - hydrogeology (groundwater)
 - hydrology
 - surface water quality
 - fish and fish habitat
 - vegetation and wetlands
 - wildlife and biodiversity
- TLRU
 - hunting
 - fishing
 - trapping
 - plant harvesting
 - travel
 - cultural, spiritual, and ceremonial practices or areas
- Project design
- cumulative effects



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2. Location of Sites or Areas

This considers where the specific sites or areas identified by Indigenous groups are in relation to the Project, including PDA, LAA, or RAA, and in geographical reference to specific Project components such as the diversion channel, off-stream dam, and floodplain berm.

3. Relevant EIA Section

This identifies which sections of the EIA the Indigenous and community knowledge and concerns may be applicable to.

4. Proposed Mitigation Measures

This identifies the relevant mitigation measures proposed in the EIA to mitigate potential effects from the Project relative to Indigenous and community knowledge and concerns identified in the TLRU Information category.

The purpose of this tabular summary is to categorize applicable TLRU information within relevant EIA categories to identify the most relevant TLRU information so that it may be more effectively considered. The tabular summary was developed to facilitate the inclusion of TLRU throughout the development of the EIA, including the methodology, characterization of existing conditions, assessment of potential effects, identification of thresholds and limits, proposed mitigation measures and monitoring, and consideration of cumulative effects. The tabular summary was provided to biophysical and socio-economic discipline leads to review for relevant information to include in various VC chapters. For instance, the wildlife and biodiversity discipline lead reviewed the tabular summary to identify species of cultural importance identified by Indigenous groups. The response to Round 1 CEAA Package 2, IR 2-11, provides more detail on the assessment of species of cultural importance. Further, review of the tabular statement by the wildlife and biodiversity discipline lead also served to confirm the selection of VCs and confirmed that no new effects pathways were identified by Indigenous groups.

The use of Indigenous and community knowledge and concerns in the EIA submitted in March 2018 reflects the information available to that point. However, as additional TUS' have been submitted to Alberta Transportation, this information has been reviewed in the context of the March 2018 EIA and a written response to the concerns and issues identified in the TUS was provided to the Indigenous groups. To date, Alberta Transportation has met with Tsuut'ina Nation, Ermineskin Cree Nation, Louis Bull Tribe, and Kainai First Nation to receive feedback and comments on these written responses. Alberta Transportation commits to offering to meet with other Indigenous groups to discuss concerns and issues identified in their respective TUS.



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b) As noted in Alberta Transportation's response to CEAA Conformity IR2-01, Alberta Transportation provided drafts of the TLRU Effects Assessment to Indigenous groups for review and comment prior to filing the EIA and offered to hold TLRU workshops with each Indigenous group to obtain input and feedback on the draft TLRU effects assessments. Alberta Transportation did not receive feedback from Indigenous groups regarding the methodology for the TLRU effects assessment.

However, since the EIA was filed, Indigenous groups have brought forward concerns about how Indigenous and community knowledge and concerns have been considered in the EIA. Alberta Transportation has consolidated and analysed feedback received to date regarding the consideration of Indigenous and community knowledge, and the concerns raised regarding the EIA, as provided by Indigenous groups through SoC, SCRTs (provided in CEAA Conformity IR2-01, Appendix 1-2), and the TUS reports received. The TUS conducted by Indigenous groups provide most of this information.

Information regarding the consideration of Indigenous and community knowledge or concerns raised regarding the EIA were not received from, Foothills Ojibway Society, Louis Bull Tribe and Métis Nation of Alberta, Region 3.

With respect to areas of discrepancy between Indigenous viewpoints and Alberta Transportation's methodology, Indigenous groups have raised concerns regarding:

- the consideration of Indigenous knowledge in the EIA, including scoping and selection of VCs
- the definition of temporal and spatial boundaries for the effects assessment

As noted in Volume 3A, Section 14.3.1, the consideration of Indigenous and community knowledge in the EIA relied upon information from Project-specific TUS reports, the results of the Indigenous Engagement Program for the Project, review of publicly available literature containing TLRU information for Indigenous groups engaged on the Project, and feedback on the assessment from participating Indigenous groups. However, Alberta Transportation acknowledges that only one final and one interim TUS report were received prior to filing the EIA in March 2018, which limited the ability to use Indigenous and community knowledge to scope the EIA and select VCs.

TUS' have been received since the filing of the EIA, and Alberta Transportation has reviewed and analyzed these in the context of the EIA, including the selection of VCs and study area boundaries, identification of potential Project effects, measurable parameters, and residual effects. This analysis was undertaken employing the methodology described above and served to confirm that the TUS submitted by Indigenous groups did not identify new effects to traditional resources, sites, areas, activities and practices that had not been considered in the EIA. The information obtained through the review of the TUS was considered thoroughly in the TLRU mitigation tables (response to CEAA Conformity IR 2-01, Appendix 1-1). Available TEK was considered including Indigenous groups' concerns and comments on



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hydrogeology, hydrology, surface water quality, fish and fish habitat, vegetation and wetlands, wildlife and biodiversity, and historical resources. The review of the results of TUS submitted by Indigenous groups did not result in changes to the conclusions of the EIA.

The response provided by Alberta Transportation considers the potential effects identified by Indigenous groups, identifies where these were addressed in the EIA, proposes mitigation to avoid or reduce effects, and makes commitments to address the concerns of Indigenous groups. Alberta Transportation has provided copies of the TLRU mitigation tables to Indigenous groups for their review and comment and has already met with Kainai First Nation, Tsuut'ina Nation, Ermineskin Cree Nation, and Louis Bull Tribe to discuss the TLRU mitigation tables. Alberta Transportation has committed to offering to meet with Piikani Nation and Métis Nation of Alberta, Region 3 to discuss their TLRU mitigation tables when available.

With respect to discrepancies regarding the identification of temporal and spatial boundaries for the assessment, the methodology for the selection of temporal and spatial boundaries is provided in Volume 2, Section 5.3 of the EIA. The LAA is the maximum area within which Project environmental effects can be predicted or measured with a reasonable degree of accuracy and confidence. The RAA is the area within which the Project's environmental effects may interact or accumulate with the environmental effects of other projects or activities that have been or will be carried out such that cumulative environmental effects may potentially occur. For consistency, spatial boundaries for TLRU align with the largest relevant VC LAAs and RAAs (wildlife and biodiversity, and aquatic ecology) because there are links between TLRU activities identified by Indigenous groups and these assessments (e.g., hunting, trapping and fishing). While the TLRU assessment spatial boundaries align with the wildlife and biodiversity and aquatic ecology spatial boundaries, the assessment of effects on TLRU is not limited to the effects on the resources; the TLRU assessment also considers information about cultural importance and experiential values, and intangible values, where that information has been provided by Indigenous groups.

The temporal boundaries for the assessment are based on the timing and duration of Project activities and the nature of the interactions with each VC. The purpose of a temporal boundary is to identify when an environmental effect may occur in relation to specific Project phases and activities. In addition, temporal boundaries for TLRU recognize that current use must be understood in the context of past and future use that situates long-standing cultural practices in a contemporary context. For the TLRU assessment current use is defined as the present time to within the last 25 years, or one generation, which also considers cultural values, cultural transmission, and intergenerational knowledge transfer.

The temporal and spatial boundaries established for the Project reflect those defined on other recent projects accepted by CEAA.



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In considering potential effects of the Project on TLRU, Alberta Transportation conducted a review of publicly-available TLRU information to provide context regarding existing conditions, issues and concerns, and environmental observations that may affect conditions for TLRU. No specific information regarding TLRU relative to the Project footprint was obtained through this review of available TLRU information. Reported TLRU activities in the sources consulted appear to mainly occur a considerable distance from the Project. In keeping with conservative assumptions, this material has been referenced to assist in understanding the nature of TLRU activities and practices undertaken by Indigenous groups, as well as identifying potential issues and concerns that have been brought forward on other projects. Moreover, the use of relevant secondary sources to consider potential effects to TLRU is standard practice in environmental assessments, reflects guidance from CEAA (December 2015) and has been accepted by CEAA on many other regulatory applications. This remains an area of disagreement with certain Indigenous groups.

Efforts to reconcile areas of disparity may occur, generally, through the provision of Project information, the incorporation of feedback that results in changes to Project planning or through commitment to further exploring an issue, concern or recommendation. For example, as of September 2019 Alberta Transportation has provided a written response for each TUS received, apart from Piikani Nation and Métis Nation of Alberta, Region 3, which will receive written responses to their TUS in December 2019. Alberta Transportation has met with or will offer to meet with each Indigenous group that has submitted a TUS to receive their comment and feedback. The written responses that Alberta Transportation has provided to Tsuut'ina Nation, Kainai First Nation, Louis Bull Tribe, and Ermineskin Cree Nation have been included in CEAA Conformity IR2-01 Appendix 1-1 of this package. Alberta Transportation's Indigenous Engagement Program with Indigenous groups is ongoing. As such, Table 6-1 also describes both Alberta Transportation's efforts to date and planned commitments to reconcile areas of disparity between the views and conclusions of Indigenous groups and Alberta Transportation regarding consideration of Indigenous and community knowledge or concerns raised regarding the EIA.

Alberta Transportation is committed to working with Indigenous groups to try to seek mutually acceptable solutions to the issues, concerns or recommendations identified. Alberta Transportation is committed to offering to meet with Indigenous groups to discuss their concerns regarding the consideration of Indigenous knowledge in the EIA, which includes scoping and selection of VCs, and the definition of temporal and spatial boundaries, how these have been considered in the EIA and where appropriate identify possible mitigation for any concerns that have not been adequately addressed. The issues that remain unresolved will be tracked through Alberta Transportation's ongoing Indigenous Engagement Program.





Table 6-1 Indigenous Group Views on the Consideration of Indigenous and Community Knowledge or Concerns Raised Regarding the EIA

Views related to Consideration of Indigenous and Community Knowledge or Concerns Raised regarding the EIA	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
Kainai First Nation/Blood Tribe (KFN)			
 KFN stated "it is problematic that the Proponent is claiming that Indigenous people lose their knowledge of an area if it is not used within 25 years. This is an attempt by the Proponent to negate the existence of traditional use and knowledge of this Project area, especially when coupled with the Proponent's reiterations within the EIA that the area has been occupied primarily by private landowners since the 1800s (Alberta Transportation, 2018, 14.1)." KFN also stated "An additional flaw in the Assessment Framework for TLRU is the spatial parameters chosen for the assessment. The Proponent draws a TLRU local assessment area that is the PDA plus 1 km plus the Aquatics Study Area, and a Regional Assessment Area RAA that is a 15 km buffer of the PDA. In its description of TLRU, however, the Proponent emphasizes the potential lack of TLRU in the PDA due to the status of the PDA as private lands." KFN added "In addition to the gaps in the information base, the flaws in the selection of spatial and temporal boundaries, the Proponent's assessment of Project effects to [KFN] was flawed due to the invalidity of its residual effects significance determinations." 	• KFN TUS 2018, pg. 21, 22-23, 27 (CEAR #47)	Alberta Transportation has provided opportunities for KFN to provide input on the methodology for assessing effects on TLRU, including spatial and temporal boundaries. Alberta Transportation provided drafts of the updated TLRU Effects Assessment sections of the EIA (Volumes 3A and 3B), on February 5, 2018, for KFN review and input. Alberta Transportation offered a TLRU workshop in January 2018 with KFN to obtain input and feedback on the draft TLRU Effects Assessments, including KFN's perspectives on assessment methodology, proposed mitigation, Project-Specific Concerns and how the Project may affect the exercise of Section 35 rights. Alberta Transportation is awaiting KFN to identify a suitable date to meet. The definition of temporal boundaries recognizes that current use must be understood in the context of past and future use that situates long-standing cultural practices in a contemporary context. For the TLRU assessment current use is defined as the present time to within the last 25 years, which considers cultural values, cultural transmission, and intergenerational knowledge transfer. The primary consideration for the selection of spatial boundaries is the probable geographical area of the environmental effects on each VC. Spatial boundaries for TLRU encompass the largest VC LAAs and RAAs (wildlife and biodiversity, and aquatic ecology) because there are links between TLRU activities identified by Indigenous groups and these assessments (e.g., hunting, trapping and fishing). KFN has not identified alternate or preferred spatial or temporal boundaries to Alberta Transportation in discussions to date through the Indigenous engagement for the Project including TUS studies.	Alberta Transportation has provided opportunities for KFN to provide input on the methodology for assessing effects on TLRU, including spatial and temporal boundaries. Alberta Transportation provided drafts of the updated TLRU Effects Assessment sections of the EIA (Volumes 3A and 3B), on February 5, 2018, for KFN review and input. Alberta Transportation offered a TLRU workshop in January 2018 with KFN to obtain input and feedback on the draft TLRU Effects Assessments, including KFN's perspectives on assessment methodology, proposed mitigation, Project-Specific Concerns and how the Project may affect the exercise of Section 35 rights. KFN Elders and knowledge holders participated in 14 days of site visits facilitated by Alberta Transportation in 2016. Results of the site visits were reported in the interim KFN TUS study submitted to Alberta Transportation on March 13, 2017. The results of the interim TUS were considered in the EIA. A final TUS was submitted to Alberta Transportation on June 25, 2018. KFN provided the locations of some TLRU areas and Alberta Transportation considered the locations and potential effects to these areas as a result of the Project. Alberta Transportation provided a written response to KFN on August 9, 2019 addressing the concerns and issues raised in the TUS and met with KFN on October 17, 2019 to discuss the response. KFN indicated they will be providing written comments on Alberta Transportation's response.
KFN stated "At least two segments of historic trails and travelways were identified and marked with GPS during the field verification exercise in May 2018. This exercise confirmed the location and characteristics of sites that had been previously identified in May 2016 and that have been known to [KFN] oral history and traditional knowledge for generations. These were trails that were mentioned in the EIA but were not clearly located or identified."	KFN TUS 2018, pg. 83, (CEAR #47)	KFN submitted its final TUS to Alberta Transportation in June 2018, after the filing of the EIA in March 2018; the sites identified in the KFN TUS were unavailable for consideration in the EIA. Alberta Transportation facilitated 14 days of site visits with KFN in 2016. Specific locational information collected during the site visits was recorded by KFN and has not been shared with Alberta Transportation. Alberta Transportation committed to cross reference the sites in KFN's TLRU Report and those identified in the HRIA; to confirm the risks to these sites; and propose possible mitigation measures for these sites. Alberta Transportation has committed to overlay the GPS coordinates with the PDA to determine sites at risk. Alberta Transportation is awaiting the GPS coordinates from KFN. The HRIA concluded that no remnants of the Old North Trail have been identified within the PDA. Although trails were once present in the PDA, the high degree of cultivation makes mapping of these trails very difficult; no intact trails of precontact age have been identified within the PDA to date.	Alberta Transportation provided a written response to KFN on August 9, 2019 addressing the concerns and issues raised in the TUS and met with KFN on October 17, 2019 to discuss the response. Historic trails were not discussed at this time, but KFN promised a written response will be forthcoming. ACMWS will evaluate the reported presence of the North-South Trail and the disagreement between conventional archaeological assessment and KFN to determine whether a supplemental HRIA or additional field visits by ACMWS is required. If ACMWS determines historical trails are present, standard mitigation will be applied, including photography, mapping, documentation and mitigative excavation, to preserve the knowledge of the site. Depending upon its significance, other mitigation may include additional engagement, Indigenous participation in the assessment and mitigation program and Indigenous monitoring during construction.



Table 6-1 Indigenous Group Views on the Consideration of Indigenous and Community Knowledge or Concerns Raised Regarding the EIA

,	Views related to Consideration of Indigenous and Community Knowledge or Concerns Raised regarding the EIA	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
•	KFN stated that in the event that the Project is to be decommissioned, Alberta Transportation should consult with KFN regarding the design, implementation, and monitoring of its Reclamation Plan to maximize the use of KFN TEK and support KFN employment in the reclamation process.	KFN Letter to CEAA 2018 (CEAR #47) (cited in KFN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #55)	The Project is expected to operate in perpetuity and is not expected to be decommissioned.	Following construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded with a native custom seed mix to meet AEP reclamation requirements. Native trees and shrubs should re-establish over time. Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups about species that are culturally important. KFN involvement in reclamation and revegetation were discussed at the meetings held on October 17, 2019 and November 21, 2019.
•	Concerns expressed over how the traditional knowledge the KFN Elders or technicians provide will be used, and that the knowledge needs to be protected.	Letter from KFN to Alberta Transportation (May 16, 2016) (cited in KFN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #6)	Traditional knowledge shared by KFN has been reviewed and analyzed in the method described above. Alberta Transportation recognizes the confidentiality and proprietary nature of the Indigenous knowledge shared by KFN. Alberta Transportation will not disclose confidential information received from KFN without express permission of KFN.	In an email to the KFN on January 30, 2017, Alberta Transportation stated they will accept an abbreviated TUS rather than the full report, if KFN would prefer to keep some knowledge internal. On March 23, 2018, Alberta Transportation sent detailed responses to Specific Concerns raised to date by providing a copy of Table 7-7 SR1 Project Specific Concerns and Responses - Kainai First Nation from the March 2018 EIA. Alberta Transportation has prepared a written response to the TUS submitted by KFN and met with KFN on October 17, 2019 to receive KFN's feedback and comments. KFN indicated they will be providing written comments on Alberta Transportation's response.
•	TUS reports from all First Nations should be incorporated into the baseline report and effects assessment chapters in a meaningful way to provide more context from an Indigenous perspective.	KFN 2018 (CEAR #47) (cited in KFN SR1 SCRT Aug 2014-Aug 2019; Specific Concern 3)	The EIA submitted in March 2018 considered best available TLRU information, including existing conditions. Alberta Transportation considered information obtained through the Indigenous Engagement Program for the Project, including TUS, and information gathered through a review of publicly available literature containing TLRU information for Indigenous groups engaged on the Project. As additional TUS have been submitted to Alberta Transportation, this information has been reviewed in the context of the March 2018 EIA and a written response provided to Indigenous groups. Alberta Transportation reviewed and analyzed the results of the TUS received according to the method described above.	In December 2019, Alberta Transportation provided written responses to the KFN Technical Review dated June 2018, which included this concern as Annex D, Question 19. Alberta Transportation will offer to meet with KFN regarding the written responses.



Table 6-1 Indigenous Group Views on the Consideration of Indigenous and Community Knowledge or Concerns Raised Regarding the EIA

Views related to Consideration of Indigenous and Community Knowledge or Concerns Raised regarding the EIA	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
Piikani Nation (PN)			
PN requests that Alberta Transportation discusses how issues of concern to PN, treaty and aboriginal rights, traditional knowledge, and its traditional and contemporary land uses has been used in Project planning and site selection.	PN 2018 (CEAR #48) (cited in PN SR1 SCRT Aug 2014-Aug 2019; Specific concern #3)	Alberta Transportation has reviewed and analyzed Indigenous and community knowledge and concerns shared by PN and information has been considered in the method described above. PN submitted a TUS to Alberta Transportation on February 22, 2017 and the information was considered in the EIA. Alberta Transportation has provided a written response to PN.	Alberta Transportation will meet with PN to discuss the written response to its TUS and discuss how issues of concern to PN, treaty and aboriginal Rights, traditional knowledge, and its traditional and contemporary land uses has been used in Project planning and site selection. In December 2019, Alberta Transportation provided written responses to the PN Technical Review dated June 2018, which included this concern as Question 46. Alberta Transportation will offer to meet with PN regarding the written responses.
PN requests development with PN of Project- specific triggers and limits for the Project's mitigation, management, and monitoring plans that reflect community traditional ecological knowledge and cultural values.	PN 2018 (CEAR #48) (cited in PN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #62)	Alberta Transportation is committed to Indigenous participation in the Project, including training, employment, and contracting opportunities. To this end, Alberta Transportation is preparing a draft IPP with the goal to create training, employment, monitoring, and contracting opportunities with interested Indigenous groups potentially affected by the Project, including PN. Alberta Transportation aims to obtain Indigenous comment and feedback on the draft IPP, the final draft of which will identify how that feedback was incorporated.	At the meeting held on December 17, 2018, Alberta Transportation stated their willingness to discuss monitoring programs, and that this was a discussion they were also having with AEP (the eventual owner and operator of SR1). In December 2019, Alberta Transportation provided written responses to the PN Technical Review dated June 2018, which included this concern as Question 67. Alberta Transportation will offer to meet with PN regarding the written responses.
Siksika Nation (SN)			
SN expressed concern that the Blackfoot Nations were not involved in the EIA work.	Meeting between SN and Alberta Transportation (January 18, 2017)	Alberta Transportation has been engaged with SN since 2014 to understand how the Project potentially impacts rights, and traditional uses including offering and funding site visits and TUS studies, in addition to workshops and other meetings. More detail regarding Indigenous engagement activities with SN is provided on Alberta Transportation's response to Round 1 CEAA Package 2, IR2-01. Alberta Transportation has held 7 meetings and a workshop with SN to discuss potential effects of the Project. Wildlife, vegetation, and historical resources discipline leads attended several of these meetings to discuss results of those assessments. Alberta Transportation provided funding to SN to complete a TUS. This study	On March 23, 2018, Alberta Transportation sent detailed responses to Specific Concerns raised to date by providing a copy of Table 7-5, SR1 Project Specific Concerns and Responses - Siksika Nation from the March 2018 EIA. When SN submits its TUS, Alberta Transportation will review and analyze the information shared by SN in the method described above. Alberta Transportation will provide a written response and will offer to meet with SN to receive their feedback and comments.
		remains in progress.	
Stoney Nakoda Nations (SNN)			
SNN would like to undertake a cultural assessment to mark the importance of it and place animal and plant studies into one cultural assessment as the topics related to certain stories and wildlife behaviour, instead of relying solely on scientific techniques.	Meeting between SN and Alberta Transportation (June 4, 2018) (cited in SNN SR1 SCRT Aug 2014- Aug 2019; Specific Concern #3)	Alberta Transportation has been engaged with SNN since 2014 to understand how the Project potentially impacts rights, and traditional uses including offering and funding site visits and TUS studies. More detail regarding Indigenous engagement activities with SNN is provided on Alberta Transportation's response to Round 1 CEAA Package 2, IR2-01. SNN Elders and knowledge holders participated in 11 days of site visits facilitated by Alberta Transportation.	Alberta Transportation has provided funding to SNN to complete a TUS. Alberta Transportation has invited SNN to provide a TUS, however, SNN verbally advised that they do not intend to provide a TUS. If SNN submits one at a later date, Alberta Transportation will review and provide SNN a written response.



Table 6-1 Indigenous Group Views on the Consideration of Indigenous and Community Knowledge or Concerns Raised Regarding the EIA

Views related to Consideration of Indigenous and Community Knowledge or Concerns Raised regarding the EIA	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
Tsuut'ina Nation (TN)			
TN noted that the scoping and VC selection was made without reference to traditional use information.	• TN 2018 (CEAR #50)	Alberta Transportation has been engaged with TN since 2014 to understand how the Project potentially impacts rights, and traditional uses including offering and funding site visits and TUS studies.	Alberta Transportation has prepared a written response to the TUS submitted by TN and met with TN on December 6, 2018 to receive TN's feedback and comments.
		More detail regarding Indigenous engagement activities with TN is provided on Alberta Transportation's response to Round 1 CEAA Package 2, IR2-01.	The information contained in the TN TUS was reviewed by Alberta Transportation in the context of the EIA and confirmed the selection of VC's and that no new effects pathways were identified by Indigenous groups.
		TN submitted their TUS to Alberta Transportation on April 3, 2018. The information provided in the TN TUS were unavailable for consideration in the EIA.	
		In scoping the EIA and selecting VCs, Alberta Transportation considered information obtained through the Indigenous Engagement Program for the Project, including TUS, and information gathered through a review of publicly available literature containing TLRU information for Indigenous groups engaged on the Project according to the method described above.	
The boundaries set for the RAA still exclude the majority of IR145. The rationale for establishing these boundaries has not been provided. In the absence of a solid rationale for these boundaries, it is not possible to determine whether sufficient information has been collected to assess potential impacts on TN rights and interests.	• TN 2018 (CEAR #50)	The primary consideration for the selection of the RAA is the probable geographical area of the environmental effects on each VC. The RAA is the area within which the Project's environmental effects may interact or accumulate with the environmental effects of other projects or activities that have been or will be carried out such that cumulative environmental effects may potentially occur. The RAA is defined for each VC depending on physical and biological conditions and the type and location of other past, present, or reasonably foreseeable projects or activities that have been or will be carried out.	Alberta Transportation has prepared a written response to the TUS submitted by TN and met with TN on December 6, 2018 to receive TN's feedback and comments. The information contained in the TN TUS was reviewed by Alberta Transportation in the context of the EIA and conclusion of the TLRU assessment in Volume 3A, Section 14 remain unchanged. In December 2019, Alberta Transportation provided written responses to the TN Technical Review dated April 2018, which included this concern as Question 3-2.
		Spatial boundaries for TLRU encompass the largest VC LAAs and RAAs (wildlife and biodiversity, and aquatic ecology) because there are links between TLRU activities identified by Indigenous groups and these assessments (e.g., hunting, trapping and fishing).	Alberta Transportation will offer to meet with TN regarding the written responses
		While the TLRU assessment RAA aligns with the wildlife and biodiversity and aquatic ecology RAAs, the assessment of effects on TLRU is not limited to the effects on the resources; the assessment also considers information about cultural importance and experiential values, and intangible values, where that information has been provided by Indigenous groups.	
		Alberta Transportation considered information obtained through the Indigenous Engagement Program for the Project, including TUS, and information gathered through a review of publicly available literature containing TLRU information for Indigenous groups engaged on the Project according to the method described above.	
		TN submitted their TUS to Alberta Transportation on April 3, 2018. The information provided in the TN TUS were unavailable for consideration in the EIA. TN recorded a total of 338 traditional LUAs, 90% of which are within the PDA.	



Table 6-1 Indigenous Group Views on the Consideration of Indigenous and Community Knowledge or Concerns Raised Regarding the EIA

Views related to Consideration of Indigenous and Community Knowledge or Concerns Raised regarding the EIA	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
		The information in the TN TUS serves to confirm the assumptions made in the March 2018 EIA regarding the nature and extent of TN traditional use in the PDA.	
Montana First Nation (MFN)			
 MFN expressed concern that the assessment of impacts on MFN traditional use has not been adequately considered because information in the EIA used information from publicly available reports rather than discussing potential impacts directly with MFN for this Project. MFN does not support the proponent's use of MFN traditional land and resource use information available in the public domain to inform their assessment, particularly when the information used is of no relevance to the study area and has not been verified by MFN. 	• MFN 2018 (CEAR #51)	Alberta Transportation has been engaged with MFN since 2016 to understand how the Project potentially impacts rights, and traditional uses including offering and funding site visits and TUS studies.	On March 23, 2018, Alberta Transportation sent detailed responses to Specific Concerns raised to date by providing a copy of Table 7-10 SR1 Project Specific Concerns and Responses – Montana First Nation from the March 2018 EIA.
		More detail regarding Indigenous engagement activities with SN is provided on Alberta Transportation's response to Round 1 CEAA Package 2, IR2-01.	When MFN submits its TUS, Alberta Transportation will review and analyze the information shared by MFN in the method described above.
		In assessing effects on TLRU, Alberta Transportation considered information obtained through the Indigenous Engagement Program for the Project, including TUS, and information gathered through a review of publicly available literature containing TLRU information for Indigenous groups engaged on the Project according to the method described above.	Alberta Transportation will provide a written response and meet with MFN to receive their feedback and comments.
		Alberta Transportation's rationale and justification for using publicly available sources is provided above.	
		Alberta Transportation has provided funding to MFN to complete a TUS; Alberta Transportation understands this TUS remains in progress.	
Samson Cree Nation (SCN)			
 SCN identified a potential concern related to how the Project could impact regional movement of wildlife species, which would require evaluation beyond the spatial scale that would be typical for the EIA. SCN requests that Alberta Transportation demonstrate how it plans to engage with SCN to identify an appropriate regional-scale approach to further evaluate its concerns regarding regional wildlife movement and effects within the SCN traditional territory. 	• SCN 2018 (CEAR #52)	Alberta Transportation has been engaged with SCN since 2016 to understand how the Project potentially impacts rights, and traditional uses. As stated in Volume 3A, Section 11.7.2, the Project effects on wildlife movement are unlikely to pose a long-term threat to the persistence or viability of a wildlife species in the RAA.	In November 2019, Alberta Transportation provided written responses to the SCN Technical Review dated June 2018, which included this concern in Question 6. Alberta Transportation will offer to meet with SCN regarding the written responses.





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Conformity IR2-07

<u>Topic:</u> Effects on Traditional Land and Resource Use

Sources:

EIS Guidelines Part 2 Section 5; 6.1.9; 6.3.4

EIS Volume 3A, Section 14

EIS Volume 3B, Section 14

Piikani Nation – Technical Review of EIS, June 15, 2018 (CEAR #48)

Tsuut'ina First Nation, Ermineskin Cree Nation, and Kainai First Nation – Technical Review of the EIS - Annexes – Combined (CEAR # 46, 47, 50)

Samson Cree Nation – Springbank Off-Stream Reservoir Project Written Submission, June 25, 2018 (CEAR # 52)

Montana First Nation – Review of Springbank Off-Stream Reservoir EIA, June 2018 (CEAR # 51)

Ermineskin Cree Nation and Blood Tribe – Springbank EIS Technical Comments (CEAR # 46, 47)

Ermineskin Cree Nation – Springbank Off-Stream Reservoir TKU Report (CEAR #46)

Blood Tribe/Kainai – Traditional Knowledge, Land, and Resource Use (CEAR # 47)

CEAA Information Requests Related to the Environmental Impact Statement Round 1 Part 2, IR2-07

Alberta Transportation Responses to IR Round 1, SR1 CEAA IR Package 2, June 14, 2019

Context and Rationale

In CEAA Information Requests Related to the Environmental Impact Statement Round 1 Part 2, IR2-07, the Agency required the proponent to provide a rationale for the selection of the RAA for traditional land and resource use and an updated assessment of effects to traditional land and resources, taking into account the distribution of and pathways of effects to resources. The context and rationale notes that Indigenous groups identified the need for additional site-specific information, as the information used in the EIS to predict effects on Indigenous peoples and impacts to rights is incorrect, inappropriate, and/or taken from secondary sources that do not accurately characterize traditional land and resource use that may be affected by the Project. The cover letter to the information requests and the EIS Guidelines further direct the proponent to present points of disagreement between the views of Alberta Transportation and



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Indigenous groups, along with a description of efforts undertaken to reconcile these differences and a rationale for conclusions.

Alberta Transportation's response to IR2-07 focuses on the rationale for RAA selection and does not address the identified need for site-specific information or the distribution and relative importance of resources. Alberta Transportation's response includes Appendix IR1-1. Specific Concerns and Response Tables included in this appendix list concerns raised by Indigenous groups with respect to traditional land and resource use that are unresolved.

Information Requests:

- a) Using site-specific information, describe the presence and distribution of traditional resources and traditional land and resource use areas within the PDA, LAA and RAA.
- b) Identify the relative importance of the resources, preferred use areas, and access to the areas and resources described in a).
- c) Identify and discuss areas of disparity between the views of Indigenous groups and Alberta Transportation on potential effects to traditional land and resource use, efforts made to reconcile the disparities, and rationale for conclusions on matters for which disparity in views remains.

Response

The Context and Rationale above states that "...Indigenous groups identified the need for additional site-specific information, as the information used in the EIS to predict effects on Indigenous peoples and impacts to rights is incorrect, inappropriate, and/or taken from secondary sources that do not accurately characterize traditional land and resource use that may be affected by the Project."

Alberta Transportation have taken steps to address the concerns outlined in this question, including a detailed discussion of potential impacts to Section 35 Rights and Title (see CEAA Conformity IR2-01). Since 2014, Alberta Transportation has implemented (and continues to implement) Project specific Indigenous engagement to collect Indigenous views and concerns related to potential Project effects. Engagement for the Project has included the funding of TUS, provision of Project related information, facilitation of TLRU workshops, general correspondence, community meetings and Indigenous site-visits. These engagement activities are described in CEAA Conformity IR2-01, Table 1-1. Through this engagement, Alberta Transportation has responded to statements of concern from Indigenous groups regarding site-specific information related to the Project (see Table 7-1).



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Alberta Transportation has assessed this site-specific information related to TLRU including: the presence and distribution of traditional resources and traditional land and resource use areas within the PDA, LAA and RAA, the relative importance of the resources, preferred use areas, and access to the areas and resources. Table 7-1 also includes relevant mitigations that have been developed to reconcile and address Specific Concerns raised by Indigenous groups related to potential Project effects on TLRU.

Areas of disparity relate to general statements that Alberta Transportation used only secondary sources of information on the presence and distribution of traditional resources and traditional land and resource use areas, and that as a consequence the EIA was inadequate. To the extent that such comments are on the record, Alberta Transportation has compiled, responded to and attempted to reconcile these issues and concerns (see Table 7-2).

a) Alberta Transportation has reviewed feedback received to date regarding site-specific information describing the presence and distribution of traditional resources, and traditional land and resource use areas within the PDA, LAA and RAA.

This information has been gathered through various engagement and reporting processes, including SoCs, engagement meetings, correspondence, and TUS reports received (see CEAA Conformity IR2-01, Table 1-1). TUS' conducted by Indigenous groups is the richest source of primary information with respect to Indigenous knowledge and concerns including site specific information.

Statements and information provided by Indigenous groups concerning important species, location of sites relative to the PDA, LAA, RAA, access to the areas and resources, relative importance and preferred use associated with these sites and resources are contained in Table 7-1. As stated above, Alberta Transportation is of the view that there are no disparities with Indigenous statements as they relate site specific issues and concerns.

Alberta Transportation reviewed and analyzed the results of the TUS that have been received including reports received from Kanai First Nation, Ermineskin Cree Nation, Louis Bull Tribe, Métis Nation of Alberta, Region 3, Piikani Nation and Tsuut'ina Nation. As of September, Alberta Transportation has provided a written response for each TUS received, apart from Piikani Nation and Métis Nation of Alberta, Region 3, which will receive written responses to their TUS in December 2019. Alberta Transportation has met with or will offer to meet with each Indigenous group that has submitted a TUS to receive their comment and feedback. The written responses that Alberta Transportation has provided to Kainai First Nation, Louis Bull Tribe, and Ermineskin Cree Nation have been provided in CEAA Conformity IR2-01, Appendix 1-1.



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The Tsuut'ina Nation TUS was provided to Alberta Transportation in confidence and Tsuut'ina Nation has placed restrictions on how the information from the TUS may be referenced by Alberta Transportation in public documents. Tsuut'ina Nation has directed that:

- Alberta Transportation is permitted to identify whether the specific locations of traditional use sites are either inside or outside the PDA, LAA, or RAA.
- Alberta Transportation is not permitted to identify the specific site locations.
- Alberta Transportation is permitted to identify use sites generally as "traditional use areas".

Information regarding location of sites or specific sites, the relative importance of the resources, preferred use areas, and access to the areas and resources associated with these sites was not received from Foothills Ojibway Society, Ktunaxa Nation, or Métis Nation British Columbia.

b) Alberta Transportation has reviewed feedback received to date regarding site-specific information describing the presence and distribution of traditional resources, and traditional land and resource use areas within the PDA, LAA and RAA, as discussed above. Alberta Transportation recognizes and respects the importance that Indigenous peoples place on traditional resources and overall TLRU.

Indigenous groups have provided information related to the presence and distribution of traditional resources and traditional land and resource use areas within the PDA, LAA and RAA (Table 7-1). Some Indigenous groups have also provided information regarding "relative importance", assumed to mean the importance of these resources compared to other resources, preferred use areas, and access important to the Indigenous groups. This information has been excerpted from Table 7-1, as follows:

- Kanai First Nation explained the importance of the Elbow River to wildlife, noting that the river is the "blood in the veins of the earth and provides sustenance to the game".
- The Elbow River was identified by Kanai First Nation as a critical wildlife habitat and migration corridor.
- Kanai First Nation stated that hunting big game species such as moose, elk and whitetailed deer generally occurs in the fall and early winter and is "a pillar of the Blood Tribe/Kainai traditional food provisioning system".
- Kanai First Nation indicated that they do not currently trap for food in the PDA or exercise commercial trapping rights.
- Kanai First Nation noted that the RAA is an important area for travel.
- Kanai First Nation stated that the location of this traditional camp and its unique features
 give it special significance and that members intend to return to the site to pray, make
 an offering, and give the area a traditional Kainai name.



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- Piikani Nation noted that hunting and trapping is a culturally significant practice, however, they did not indicate that hunting and trapping occurred within the PDA.
- Elbow River was identified by Siksika Nation as an important transportation route for the Blackfoot people.
- Tsuut'ina Nation stated that the floodplain topography and the Elbow River valley, as well as the presence of many important plants, explains why Tsuut'ina Nation chose the area as part of traditional territory. Tsuut'ina Nation oral history supports that the Elbow River area began to be used by its people hundreds of years ago.
- Ermineskin Cree Nation stated the Project area represents one of the least disturbed and accessible areas for Ermineskin Cree Nation hunters.
- Ermineskin Cree Nation noted that areas within the PDA, LAA and RAA contain important cultural, spiritual, ceremonial sites.

Alberta Transportation's view is that if Indigenous groups have not provided information on the relative importance of the resources, preferred use areas and access in the PDA, LAA and RAA, that this lack of information does not diminish the importance of the resources, preferred use areas and access they have identified, as summarized in Table 7-1. Alberta Transportation is not able to assign relative importance or preferred use of the identified resources on behalf of the Indigenous groups.

Alberta Transportation has assessed this site specific information and sees no disparity with Indigenous statements and views related to TLRU including: the presence and distribution of traditional resources and traditional land and resource use areas within the PDA, LAA and RAA, the relative importance of the resources, preferred use areas, and access to the areas and resources. Furthermore, Alberta Transportation have developed mitigations to reconcile and address Specific Concerns raised by Indigenous groups related to potential Project effects on TLRU.

- c) The remaining area of disparity between the views of Indigenous groups and Alberta Transportation is the general statement outlined in the context and rationale:
 - "...the information used in the EIS to predict effects on Indigenous peoples and impacts to rights is incorrect, inappropriate, and/or taken from secondary sources that do not accurately characterize traditional land and resource use that may be affected by the Project."

To the extent that such comments are made by Indigenous groups and are on the record, Alberta Transportation has compiled, responded to, and attempted to reconcile these issues and concerns (see Table 7-2).



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Alberta Transportation has undertaken considerable Indigenous engagement activities to reconcile areas of disparity regarding potential effects to traditional land and resource use and will continue to do so. Additional efforts to reconcile areas of disparity may occur, generally, through the provision of Project information, the incorporation of feedback that results in changes to Project planning or mitigation and through commitment to further exploring an issue, concern or recommendation. As of September 2019, Alberta Transportation has provided a written response for each TUS received, apart from Pilkani Nation and Métis Nation of Alberta, Region 3, which will receive written responses to their TUS in December 2019. Alberta Transportation has met with or will offer to meet with each Indigenous group that has submitted a TUS to receive their comment and feedback. The written responses that Alberta Transportation has provided to Tsuut'ina Nation, Kainai First Nation, Louis Bull Tribe, and Ermineskin Cree Nation are provided in CEAA Conformity IR2-01, Appendix 1-1. Alberta Transportation reiterates that its engagement with Indigenous groups is ongoing. As such, Alberta Transportation's response to Round 1 CEAA Package 2, IR2-01 also describes both Alberta Transportation's efforts to date and planned commitments to reconcile areas of disparity between the views and conclusions of Indigenous groups and Alberta Transportation regarding the Project's potential effects on traditional land and resource use. As noted in the response to CEAA Conformity IR2-01, through the engagement process that included feedback from First Nations, a draft guiding principles and direction for future land use for the Project has been developed (see the response to CEAA Conformity IR2-09, Appendix 9-1).

Specific engagement activities conducted with each Indigenous group engaged on the Project are summarized in CEAA Conformity IR2-01, Table 1-1. Further information about engagement with each Indigenous group is in the EIA, Volume 1, Section 7 and Volume 4, Appendix B. Engagement activities that occurred up until March 2019 are provided in Alberta Transportation's response to Round 1 CEAA Package 2, IR2-01, Appendix 1-1. Engagement activities that occurred from April 2019 to September 2019 are provided in the response to CEAA Conformity IR2-01, Appendix 1-2.

The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by the Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites First Nations and stakeholders to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights. Alberta Transportation is committed to ongoing engagement with Indigenous groups to try to resolve any disparity in views that may remain with respect to potential effects of the Project on traditional land and resource use.



Table 7-1 Location of Important Traditional Resources and Traditional Use Areas Relative to PDA, LAA and RAA as Identified by Indigenous Groups

Indigenous Statements on the Location of Traditional Resources, Traditional Practices, Identification of Preferred Use Areas and the Relative Importance of These Sites

Distribution of Traditional Resources and TLRU within the PDA, LAA, and RAA, Site Accessibility and Efforts to Reconcile (Mitigations)

Kainai First Nation/Blood Tribe (KFN)

Fish and Fishing

Fish:

KFN stated that Elbow River provides habitat for rainbow trout, cutthroat trout, brook trout, bull trout and rocky mountain whitefish.

KFN identified a spawning area in a tributary of Elbow River and mapped an area of Elbow River as bull trout and cutthroat trout habitat.

Fishing:

Species fished by KFN include rainbow trout, rocky mountain whitefish, and cutthroat trout.

KFN noted that portions of the PDA that intersect Elbow River are currently used to fish for trout and rocky mountain whitefish.

KFN explained that Elbow River is accessible near the bridge on Highway 22 by anglers on foot. Fishing in that area occurs regularly in the summer and fall. Another access point for KFN fishers is near the mouth of Val Vista Creek where it flows into the Elbow River.

KFN mapped several locations that would be suitable for angling along the Elbow River. These locations include areas that are accessible by the public and with negotiated access through private lands.

KFN explained that Elbow River has changed dramatically since the 2013 floods, making it less predictable for anglers, but it is still a good potential source of fish.

Source:

KFN TUS 2018 (CEAR #47) KFN 2018 (CEAR #47)

Fish

<u>Species</u>: Rainbow trout, cutthroat trout, brook trout, bull trout and rocky mountain whitefish.

Locations: The Elbow River is within the PDA. The fish spawning area identified by KFN is within the LAA.

The bull trout and cutthroat trout habitat identified by KFN is within the PDA, and is intersected by the diversion channel, diversion structure, floodplain berm, and gravel road.

Site Access: Current use sites and areas located outside the PDA are not anticipated to be directly affected by the Project. The construction of the diversion channel will result in the loss of 1,854 m² of fish habitat on the bed and banks of Elbow River and 300 m² of fish habitat at the interception of the tributary ID1350. Potential habitat offset gains will be addressed as part of the Fisheries Act authorization process for the Project: a habitat offset plan will be developed and submitted for review and will take into consideration input from Indigenous groups, Fisheries and Oceans Canada (DFO) and stakeholders. It will also align with local fish management objectives.

Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.

Structures will be designed so that storm water runoff and wash water from the access roads, decks, side slopes, and approaches are directed into a retention pond or vegetated area to remove suspended solids, dissipate velocity, and prevent sediment and other deleterious substances from entering watercourses.

- Works in water will be timed with respect to the RAPs wherever possible. For Elbow River, the RAP is May 01 July 15 and September 16 April 15. Condition and use of RAPs will be provided within further Project permitting and authorization under the Fisheries Act. For planning purposes, the Elbow River RAP will be applied as an avoidance and mitigation measure.
- To allow for fish passage and construction of the structures within Elbow River, the river will be diverted, and flows will be maintained downstream by the construction of a temporary bypass channel.
- Drainage areas within the reservoir will be graded to reduce stranding of fish during release of retained flood water from the reservoir.
- Boulders will be added to increase the bed roughness of the channel immediately downstream of the diversion structure, which will increase water depths and reduce velocities.
- Boulder v-weir structures will be constructed in the channel downstream of the gates to provide slower velocity and deeper resting zones.
- A monitoring program will be undertaken to identify if fish passage is impeded for migratory salmonids or other fish species, including bull or cutthroat trout.
- Maintenance, debris removal on the structure, and on the fish passage structures will occur to accommodate fish passage.
- Debris will be cleaned from the structure gates after a flood recedes to allow unimpeded fish passage upstream over the structure.
- Isolated pools will be identified, marked, and a determination by a qualified aquatic environmental specialist will be made as to whether there are stranded fish in the pool that require rescue and relocation to secure habitats in Elbow River. When the water has been fully drained, the unnamed creek will also be surveyed to identify isolated pools where fish might be stranded.
- Where debris removal from the structures is required, debris removal will be timed to avoid disruption to sensitive fish life stages (i.e., outside the RAP), unless the debris and its accumulation is immediately threatening to the integrity of the structure or relates to an emergency (i.e., risk of structure failure).
- During post-flood reservoir maintenance, areas that had isolated pools may be graded to prevent the isolation of fish in successive flood events.
- Annual offset monitoring to assess condition of habitat offsetting measures and identify potential remediation measures:
 - Success of offsetting measures determined by criteria that determine if offsetting is functioning as intended and to identify contingencies if monitoring shows deficiencies.
- Confirmation that offsetting components meet the design requirements.
- Confirmation that the terms of the DFO Authorization are met.

A post-construction report will be provided to DFO at the completion of construction that will outline the as-built condition of the offsetting measures. In addition to a photographic log, as-built engineer drawings, and construction monitoring, post-construction measurements will include:

- Location and measurements of the structures on the bed and banks.
- Location and quantity of the vegetation reclamation.



Indigenous Statements on the Location of Traditional Resources, Traditional Practices, Identification of Preferred Use Areas and the Relative Importance of These Sites	Distribution of Traditional Resources and TLRU within the PDA, LAA, and RAA, Site Accessibility and Efforts to Reconcile (Mitigations)
	Location and measurements of the Fish Passage Mitigation Structure.
	Fish habitat, abundance, distribution, and benthic invertebrate monitoring in previously sampled reaches (1-12).
	Location and measurements of required fisheries offsetting measures.
	Fishing
	Species: Rainbow trout, rocky mountain whitefish, and cutthroat trout.
	Site Access: With the implementation of mitigation, the Project is unlikely to reduce the productivity or sustainability of a commercial, recreational or Aboriginal fishery as defined by the Fisheries Act. During dry operations, there will be no changes to flow in Elbow River, and therefore no alterations to the quality of fish habitat. Overall, the Project is not expected to limit the availability of traditional resources for current use in the RAA (see Volume 3A, Section 8.4.4 and Section 14.8.1).
	In addition, the Project will create access through the development of a permanent portage for Elbow River.
	The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites KFN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.
	Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.
	Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods. Alberta Transportation will avoid substantial interference with public navigation of Elbow River through the following design practices:
	As part of construction, a permanent portage will be developed around the in-stream water intake components.
	Signs directing traffic to detours will be installed during construction of road realignments and modifications.
	• Signs will be installed along the existing Elbow River channel. Multiple signs will be placed upstream and downstream of the water intake components on both banks of Elbow River. These signs will warn users on Elbow River that they are approaching in-stream water intake components and of the associated danger with this infrastructure and to direct them to a portage location.
	Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction access management.
	Alberta Transportation will create a portage to facilitate access to the river.
	• To allow for fish passage and construction of the structures within Elbow River, Elbow River will be temporarily diverted, and flows will be maintained downstream by the construction of a temporary bypass channel.
Plants and Plant Harvesting	
Plants:	Plants:
KFN stated that the PDA encompasses several landscape types, including natural fescue grassland, aspen forests, mixedwood forests and groves of coniferous trees. KFN indicated that the ecological setting of the Project area is conducive to the growth of a wide variety of trees, shrubs and grasses that are used for subsistence, medicinal, ceremonial, construction, artisanal, and fuel use.	Species: Bull berry, chokecherry, saskatoon berry, gooseberry, wild strawberry, blueberry, aapinaakinaman, otsipiis (willow), sage, sweetgrass, lodgepole pine, pine, spruce, aspen, cottonwood, black birch, diamond willow, sooyootispiskoo, aaakitooyisi, sooyaistaa, bachelor root, rose bush (rose hips), yarrow, porcupine plant, shooting star plant, and several undisclosed medicinal plants.
	Locations: The wetland and old growth stand identified by KFN are within the PDA. The old growth stand is intersected by permanent Project infrastructure, including the off-stream reservoir dam. 20 culturally important plant areas were identified by KFN: 15 are within the PDA, 5 are within the LAA. Val Vista Ranch is in the PDA.
	Site Access: Of the culturally important plant areas within the PDA, 2 are intersected by permanent Project infrastructure, including the gravel road, off-stream dam, outlet structure and floodplain berm. Traditionally used plant species within the PDA will be directly affected due to vegetation removal and grading associated with construction, affecting 168 ha associated with permanent Project infrastructure and approximately 566 ha of temporary workspace. Although individual plants will be removed from the PDA, none of the traditionally used species identified will be lost in the LAA, nor will vegetation communities supporting traditionally used plants be lost from the PDA (see the EIA, Volume 3A, Section 10.4). Native trees and shrubs should re-establish over time.



Table 7-1 Location of Important Traditional Resources and Traditional Use Areas Relative to PDA, LAA and RAA as Identified by Indigenous Groups

Indigenous Statements on the Location of Traditional Resources, Traditional Practices, Identification of Preferred Use Areas and the Relative Importance of These Sites

Culturally important plants observed by KFN include: bull berry, chokecherry, saskatoon berry, gooseberry, wild strawberry, blueberry, aapinaakinaman, otsipiis (willow), sage, sweetgrass, lodgepole pine, pine, spruce, aspen, cottonwood, black birch, diamond willow, sooyootispiskoo, aaakitooyisi, sooyaistaa, bachelor root, rose bush (rose hips), yarrow, porcupine plant, shooting star plant, and several undisclosed medicinal plants.

Plant Harvesting:

Plants are typically harvested in the summer and fall, but some plants are used year-round, such as wood for fuel in winter and spring. KFN value deciduous trees for traditional construction and for fuel, particularly if they produce fewer sparks such as willow, cottonwood, and aspen. These species were observed by KFN during site visits.

KFN identified wetlands in the native grassland on the Val Vista Ranch. This type of natural wetland is referred to as Omhkskimooki in Blackfoot, which translates to English as "Tall Grass Lake." KFN identified an old growth stand of cottonwood poplar trees within the Val Vista Creek bed and surrounding area.

KFN identified otsipiis (willow) and explained that it is used for medicinal purposes and to construct sweat lodges because the wood is flexible and strong. KFN stated that willow is becoming less common in the region due to agricultural development but is still prevalent in the PDA.

KFN and SN noted that there are medicinal and ceremonial plants located on both sides of the Elbow River where the diversion inlet and service sluiceway are proposed to be constructed. These plants will need to be protected or relocated to another spot nearby to ensure they are available in the future for Blackfoot traditional people.

Source:

KFN TUS 2018 (CEAR #47)

KFN 2018 (CEAR #47)

KCO and SCO TUS 2017 Research Study Joint Interim Report (pg. 4) (cited in KFN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #30)

Distribution of Traditional Resources and TLRU within the PDA, LAA, and RAA, Site Accessibility and Efforts to Reconcile (Mitigations)

Many of the potentially affected grassland and wetland plant communities have intrinsic adaptations to periodic flooding, while other species such as poplar and spruce would be less tolerant to flooding due to having a low anaerobic tolerance. Mortality of traditional use species found in upland plant communities is expected. However, these species are widespread and are expected to re-establish by natural recruitment; permanent loss of traditional use species is not predicted. Overall, residual effects on vegetation and wetlands post-flood would not result in the loss of native upland or wetland plant communities, nor would it result in the loss of wetland function from the LAA (see the EIA, Volume 3B, Section 10.2).

<u>Mitigations</u>: At the end of construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded to meet AEP reclamation requirements. Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important.

In addition, Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods.

- Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction.
- Restrict construction activities to the approved construction footprint.
- Reduce the removal of vegetation in wetlands to the extent possible.
- Where possible, conduct ground level cutting/mowing/mulching of wetland vegetation instead of grubbing.
- Where applicable, in areas not impacted by the permanent Project footprint, if ground conditions are encountered that create potential for rutting, admixing or compaction, minimize ground disturbance by using a protective layer such as matting or biodegradable geotextile and clay ramps or other approved materials between wetland root/seed bed and construction equipment.
- Native areas disturbed by the Project would be reseeded using an Alberta Transportation native custom seed mix.
- Alberta Transportation will not apply herbicide within 30 m of plant species or ecological communities of management concern, wetland or waterbody. Spot spraying, wicking, mowing, or hand picking are acceptable measures for control of regulated weeds in this area.
- A licensed industrial pesticide applicator would be contracted to select and apply all herbicide in compliance with the procedures as outlined in the Code of Practice for Pesticides (GoA 2010).

Plant Harvesting

Site Access: Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction.

The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites KFN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.

Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.

In addition to the measures proposed to mitigate potential effects on wildlife and biodiversity, and on vegetation and wetlands, as described above, Alberta Transportation will implement the following measures to mitigate potential effects on plant harvesting:

- Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction access management.
- Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important.
- Alberta Transportation commits to offering to hold workshops with KFN to discuss mitigation measures.



ALBERTA TRANSPORTATION SPRINGBANK OFF-STREAM RESERVOIR PROJECT RESPONSE TO AGENCY CONFORMITY REVIEW OF ROUND 1, PART 2, DATED AUGUST 6, 2019

December 2019

Table 7-1 Location of Important Traditional Resources and Traditional Use Areas Relative to PDA, LAA and RAA as Identified by Indigenous Groups

Indigenous Statements on the Location of Traditional
Resources, Traditional Practices, Identification of
Preferred Use Areas and the Relative Importance of
These Sites

Distribution of Traditional Resources and TLRU within the PDA, LAA, and RAA, Site Accessibility and Efforts to Reconcile (Mitigations)

Wildlife and Hunting and Trapping

Wildlife:

KFN identified elk, moose, white-tailed deer, mule deer, grizzly bear, black bear, wolf, beaver, rabbit, skunk, ruffed grouse, sharp-tailed grouse, eagle, hawk, osprey, raven, Canada goose, trumpeter swan, heron, sandhill crane, mallard duck, merganser duck, pintail snipes, and magpie as present in the Project area and of interest to KFN.

KFN explained the importance of the Elbow River to wildlife, noting that the river is the "blood in the veins of the earth and provides sustenance to the game."

The Elbow River was identified as a critical wildlife habitat and migration corridor.

KFN identified areas of high-quality habitat for elk, moose, white-tailed deer, and mule deer, as well as signs of ungulates, including scat, tracks and marks on trees.

KFN identified areas of furbearer habitat, including a beaver dam in a tributary of the Elbow River and beaver habitat on Val Vista Ranch.

KFN identified grizzly bear habitat and signs of grizzly bear and black bear, including scat, claw marks, digs, and torn trees. KFN noted that the local landowners shared photographic evidence from a wildlife trail camera of grizzly bears in the area.

Signs of black bear, wolf, cougar and fox were identified by KFN. Coyote tracks were also observed.

KFN stated that there are many species of birds that nest and live in the Project area, including eagle, owl, crow, magpies, Sitisaisi, and Omahkaasittipimakinnaman.

KFN identified a wetland within natural grassland on the Val Vista Ranch that provides ideal habitat for nesting birds and a stopping place for migratory birds.

Another wetland was identified that is a stopping place for trumpeter swans, herons, sandhill cranes, Canada goose, mallard ducks, and pintail snipes.

KFN also observed ruffed grouse, merganser ducks, Canada geese, and several other bird habitat features. KFN emphasized the interconnectedness of the environment, explaining that the Project area provides habitat for bird, animal and plant species that all support one another.

Wildlife:

Species: elk, moose, white-tailed deer, mule deer, grizzly bear, black bear, wolf, beaver, rabbit, skunk, ruffed grouse, sharp-tailed grouse, eagle, hawk, osprey, raven, Canada goose, trumpeter swan, heron, sandhill crane, mallard duck, merganser duck, pintail snipes, and magpie owl, crow, Sitisaisi, and Omahkaasittipimakinnaman.

<u>Locations</u>: Ungulates: KFN identified 24 ungulate habitat areas: 21 are within the PDA, 3 are within the LAA. Of the ungulate habitat areas within the PDA, 11 are intersected by permanent Project infrastructure, including the highway right-of-way, gravel road, new bridge, off-stream dam, unnamed creek, unnamed creek, diversion channel, floodplain berm, and emergency spillway. Val Vista Ranch is in the PDA.

<u>Furbearers</u>: Signs of black bear, wolf, cougar, fox and coyote (including tracks) were identified by KFN within the PDA. Four furbearer habitat areas were identified by KFN within the PDA. One of the furbearer habitat areas within the PDA is intersected by permanent Project infrastructure, including the gravel road, off-stream dam, unnamed creek and outlet structure. KFN identified 6 bear habitat areas: 3 are within the PDA, 3 are within the LAA.

Birds: 11 bird habitat areas were identified by KFN: 10 bird habitat areas (including the wetland on the Val Vista Ranch) are within the PDA, 1 is within the LAA. Of the bird habitat areas within the PDA, 1 is intersected by permanent Project infrastructure, including the gravel road, off-stream dam, unnamed creek.

Site Access: The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see EIA, Volume 3A, Section 11.4.2).

<u>Mitigations</u>: In addition to the measures proposed to mitigate potential effects on vegetation and wetlands described above, Alberta Transportation will implement the following measures to mitigate potential effects on wildlife and biodiversity:

- Pre-construction surveys will be conducted to identify wildlife features (e.g., nests, dens) and appropriate site-specific mitigation developed.
- Where possible, construction activities during the RAP for the KWBZ identified along Elbow River (December 15 to April 30) will be avoided or reduced. This will limit potential sensory disturbance to wintering ungulates (ESRD 2015, GoA 2017). If construction activities must occur during this time period, a wildlife mitigation and monitoring plan will be developed in consultation with regulators, which will include monitoring ungulate habitat use and response to human disturbance.
- Restrict all construction activities to the approved construction footprint.
- Where possible, temporary workspaces and access roads will be in areas that avoid wildlife features and native vegetation (e.g., shrubland, treed areas, wetlands). Existing access roads and previously disturbed areas will be used, where feasible.
- Where fencing is proposed to restrict livestock access to Project structures (e.g., diversion channel), wildlife-friendly fencing will be installed to allow ungulate passage.

Hunting:

Species: Elk, moose, white-tailed deer, mule deer, rabbit, ruffed grouse, sharp-tailed grouse, Canada goose, mallard duck, and merganser duck.

Locations: Elbow River and the Elbow River valley are within the PDA. KFN identified 6 current hunting areas that are within the PDA. Of these, 4 are intersected by permanent Project infrastructure, including the gravel, off-stream dam, diversion channel, emergency spillway, unnamed creek.

<u>Site Access</u>: The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see EIA, Volume 3A, Section 11.4.2). Impacts to hunting and trapping are expected to be minimal and temporary.

The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites KFN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.

Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.



Indigenous Statements on the Location of Traditional Resources, Traditional Practices, Identification of Preferred Use Areas and the Relative Importance of These Sites	Distribution of Traditional Resources and TLRU within the PDA, LAA, and RAA, Site Accessibility and Efforts to Reconcile (Mitigations)
Species hunted by KFN and identified as species of interest in relation to the Project include elk, moose, white-tailed deer, mule deer, rabbit, ruffed grouse, sharptailed grouse, Canada goose, mallard duck, and merganser duck. Hunting: KFN stated that hunting big game species such as moose, elk and white-tailed deer generally occurs in the fall and early winter and is "a pillar of the Blood Tribe/Kainai traditional food provisioning system." KFN hunters feed dozens of community members on a regular basis from their hunting, food processing, and sharing practices (KFN TUS 2018, p. 61).	In addition to the measures proposed to mitigate potential effects on wildlife and biodiversity, and on vegetation and wetlands, as described above, Alberta Transportation will implement the following measures to mitigate potential effects on hunting: • Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods. • Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations and Alberta Transportation will advise Indigenous groups on post-construction land access management. Trapping: KFN indicated that they do not currently trap for food in the PDA or exercise commercial trapping rights.
The Elbow River valley is habitat for many species of game that KFN members hunt for subsistence and ceremonial purposes. KFN stated there is good potential to hunt ruffed grouse and other game birds along the wooded portions of the banks of the Elbow River.	
Should the Project be approved, and Conservation Area A be made accessible, KFN indicated they intend to use the area to exercise their rights to hunt, particularly for elk, moose, white-tailed deer, mule deer, and grouse.	
KFN indicated that agreements are in place with local landowners in the PDA to provide access to KFN members for the purposes of subsistence hunting.	
In March 2018, two KFN hunters scouted the PDA for several hours and identified a moose and deer. KFN decided against harvesting the moose due to the location of the animal, number of hunters, and time of day. KFN explained that "normally they hunt in a group of four to six men so they can assist one another with processing and packing out meat after a kill." KFN indicated they will return in the fall to hunt because the terrain and quality of habitat make chances of success likely. (KFN TUS 2018, p. 60).	
KFN observed the presence of fur bearing animals including beaver, muskrat, rabbit, coyote, fox, weasel and wolf in the PDA.	
<u>Source</u> : KFN TUS 2018 (CEAR #47) KFN 2018 (CEAR #47)	



ALBERTA TRANSPORTATION SPRINGBANK OFF-STREAM RESERVOIR PROJECT RESPONSE TO AGENCY CONFORMITY REVIEW OF ROUND 1, PART 2, DATED AUGUST 6, 2019

December 2019

Table 7-1 Location of Important Traditional Resources and Traditional Use Areas Relative to PDA, LAA and RAA as Identified by Indigenous Groups

Indigenous Statements on the Location of Traditional Resources, Traditional Practices, Identification of Preferred Use Areas and the Relative Importance of These Sites

Distribution of Traditional Resources and TLRU within the PDA, LAA, and RAA, Site Accessibility and Efforts to Reconcile (Mitigations)

Travel Routes

KFN noted that the RAA is an important area for travel.

KFN identified a traditional Blackfoot travel route, referred to as the North-South Trail, that passes through the Elbow River valley just west of what is now Highway 22. KFN stated that the land bears evidence of the horse and travois that were used in the past by Blackfoot to travel to other encampments. Oral history accounts suggest that this trail was used within living memory.

KFN identified a traditional east-west travel route between Fort Calgary and Morley and referred to it as the North West Mounted Police (NWMP) Trail, although the trail was said to predate the arrival of the NWMP to southern Alberta. Portions of the trail are still visible on preserved heritage rangeland within the Val Vista Ranch.

A hunting access/route was mapped by KFN.

Source:

KFN TUS 2018 (CEAR #47)

KFN 2018 (CEAR #47)

KCO and SCO TUS 2017, Research Study Joint Interim Report (p.4) Location: The North-South Trail as identified by KFN is within the PDA. The North-South Trail is within the Project construction area to the west of the floodplain berm. The NWMP Trail as identified by KFN is within the PDA; it is located within the off-stream reservoir. The hunting access/route identified by KFN is within the PDA and is intersected by the permanent Project infrastructure of the gravel road, highway right-of- way, diversion channel, off-stream dam and unnamed creek. Val Vista Ranch is in the PDA.

<u>Site Access</u>: Alberta Transportation has conducted an HRIA for the Project and no remnants of the Old North Trail have been identified within the PDA. Although trails were once present in the PDA, the high degree of cultivation makes mapping of these trails very difficult; no intact trails of precontact age have been identified within the PDA to date (EIA, Volume 3A, Section 13.2.2).

A portion of the North-South Trail identified by KFN is located within the Project construction area and it is anticipated that this site will be affected by construction of the floodplain berm. The NWMP Trail is located within the off-stream reservoir and it is not anticipated to be affected by Project construction activities. The trail will be affected in the flood and post-flood operation phase due to direct physical disturbance associated with reservoir filling or draining, damage from sediment deposition or debris, or cleanup. Construction of the Project and fencing of infrastructure will restrict access to certain areas of the Project, including portions of the hunting access/route identified by KFN.

The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites KFN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.

Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas:

- Alberta Transportation will evaluate the reported presence of trails observed by KFN and the disagreement between conventional archaeological assessment and KFN to determine
 whether a supplemental historical resources impact assessment or additional field visits by ACMWS is required. See Alberta Transportation response to Round 1 CEAA Package 2, IR210.
- Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction access management.
- In the event an unanticipated cultural resource is discovered during construction of the Project, a historical resources chance find protocol would be enacted, as required by ACMWS during construction.
- Alberta Transportation will follow current industry best practices and comply with all provincial and federal legislation. Should additional historical resources be encountered during construction, Alberta Transportation will follow current ACMWS policies and guidelines.
- Alberta Transportation will minimize disturbance to cultural and spiritual sites and subsurface impacts, and develop a protocol for recovery, collection, reporting on, and possible repatriation of artifacts found in consultation with Indigenous groups, which could include flagging, fencing, or providing signage of sites to prevent disturbance during construction.
- Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components.
- Alberta Transportation commits to offering to hold workshops with Indigenous groups to discuss mitigation measures.

Habitation, Camping, Cultural, Spiritual, Ceremonial Sites

KFN noted that cultural, spiritual, ceremonial sites are important to their people and traditional practices.

KFN noted the site of the first Catholic Mission among the Blackfoot in southern Alberta.

KFN noted that at least four main areas of historical occupancy are located in the Project area. KFN explained that these areas are currently used for traditional ceremonies and feature cultural artifacts that are of historical significance to KFN.

<u>Location</u>: The traditional camp identified by KFN that is associated with the North-South Trail is within the PDA. The traditional camp is within the Project construction area to the west of the floodplain berm. Numerous tipi rings were identified at this site. The traditional camp identified by KFN in the area to the east of the Our Lady of Peace Mission site is within the LAA. The traditional camp identified by KFN that is associated with the NWMP Trail is within the PDA; it is located within the off-stream reservoir.

The traditional winter camp identified by KFN along the banks of Val Vista Creek is within the PDA and is intersected by the permanent Project infrastructure of the off-stream dam. Features associated with this traditional camp include numerous tipi rings, fire-broken rocks, a possible medicine wheel or other stone effigy, and arrowheads/artifact scatters. The historic materials identified by KFN at the mouth of Val Vista Creek are within the PDA.

The site of the traditional camp associated with the North-South Trail identified by KFN is located within the Project construction area and it is anticipated that this site will be affected by construction of the floodplain berm.

The Our Lady of Peace Mission site and the traditional camp identified to the east are located outside the PDA and are not anticipated to be directly affected by the Project.



Table 7-1 Location of Important Traditional Resources and Traditional Use Areas Relative to PDA, LAA and RAA as Identified by Indigenous Groups

Indigenous Statements on the Location of Traditional Resources, Traditional Practices, Identification of Preferred Use Areas and the Relative Importance of These Sites

KFN identified a traditional Blackfoot camp and explained that this site would have been a suitable area for a winter camp because it has a good supply of wood, is located near a river and trees that would have provided shelter during the winter season and is not far from a steep hill that was used as a buffalo jump. Numerous tipi rings were identified at this site. Oral history accounts suggest that this area was more recently occupied (i.e., within living memory) and is associated with use of the North-South Trail. KFN stated that the location of this camp and its unique features give it special significance and that KFN members intend to return to the site to pray, make an offering, and give the area a traditional Káínai name.

A traditional camp was identified by KFN in an area to the east of the Our Lady of Peace Mission site. KFN indicated that it was likely the location of the Blood Chief's winter camp. The camping area featured trees for shelter, a spring-fed stream available year-round, and was close to meadows yet sheltered from winds.

Another traditional camp was identified by KFN that is both a historic camp and a place of more recent occupancy (i.e., within living memory) and is associated with the NWMP Trail. KFN stated that the site is with a portion of a larger ranch that has been preserved as heritage ranchland and has not been ploughed. Blackfoot workers who came to the ranch on a seasonal basis would reside in a camp in the area; this practice continued until the 1950s.

KFN identified the location of a traditional winter camp along the banks of Val Vista Creek. Features associated with this site include several tipi rings, fireplaces, fire broken rocks, a possible medicine wheel or other stone effigy, and arrowheads/artifact scatters. KFN stated it is likely that this site also contains additional features such as effigies, pottery, bones, and potential human remains.

Materials associated with traditional painting, arts and crafts were found at the mouth of the Val Vista Creek. These include surface minerals and rocks from the banks of the Elbow River that are used for baking, grinding and mixing with oils to make traditional paints.

Source:

KFN TUS 2018 (CEAR #47) KFN 2018 (CEAR #47)

Distribution of Traditional Resources and TLRU within the PDA, LAA, and RAA, Site Accessibility and Efforts to Reconcile (Mitigations)

The site of the traditional camp identified by KFN associated with the NWMP Trail is located within the off-stream reservoir and is not anticipated to be affected by Project construction activities. Flood and post-flood operation will affect the site due to direct physical disturbance associated with reservoir filling or draining, damage from sediment deposition or debris, or cleanup.

The traditional winter camp and associated features identified along the banks of Val Vista Creek is anticipated to be affected by construction of the off-stream dam.

Alberta Transportation has conducted an HRIA for the Project and no sites of high significance, such as effigies, medicine wheels, graves, pottery or tipi rings have been made in the PDA to date. Six campsites have been identified within the PDA, most of these sites are small and have been heavily disturbed by cultivation or erosion. One undisturbed precontact campsite identified in the treed uplands adjacent to the Elbow River is considered to have heritage value and ACMWS is requiring standard mitigation, to include photography, mapping and archaeological excavation of this site (Volume 3A, Section 13.2.2).

Site Access: The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites KFN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.

Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas:

- Alberta Transportation will evaluate the reported presence of campsites and features observed by KFN and the disagreement between conventional archaeological assessment and KFN to determine whether a supplemental historical resources impact assessment or additional field visits by ACMWS is required. See Alberta Transportation response to Round 1 CEAA Package 2, IR2-10.
- Alberta Transportation commits to offering to hold workshops with KFN to discuss mitigation measures to discuss impacts to habitation, camping, cultural, spiritual, ceremonial sites.
- Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components.
- Alberta Transportation will participate in discussions with ACMWS and Indigenous groups regarding further investigation of identified sites located within the designated construction site boundary.
- The disposition of artifacts and provision of GP) coordinates are under the jurisdiction of ACMWS and not Alberta Transportation. Alberta Transportation will limit disturbance, to the extent possible and practical, of cultural and spiritual sites and subsurface impacts. Alberta Transportation will follow heritage resource protection methods as mandated by the Historical Resources Act (HRA).
- Alberta Transportation will minimize disturbance to cultural and spiritual sites, and develop a protocol for recovery, collection, reporting on, and possible repatriation of artifacts found in consultation with Indigenous groups, which could include flagging, fencing, or providing signage of sites to prevent disturbance during construction.
- Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction access management.
- Alberta Transportation will follow current industry best practices and comply with all provincial and federal legislation. Should additional historical resources be encountered during construction, Alberta Transportation will follow current ACMWS policies and guidelines.
- Alberta Transportation will follow heritage resource protection methods as mandated by ACMWS and verify archaeological results with Indigenous groups.
- Alberta Transportation will commit to adhering to any conditions ACMWS applies to these sites.
- Alberta Transportation is committed to ongoing consultation with KFN, including heritage resources mitigation prior to construction.
- In the event an unanticipated cultural resource is discovered during construction of the Project a historical resources chance find protocol would be enacted, as required by ACMWS during construction.
- Alberta Transportation has developed mitigation measures to avoid or reduce physical effects on important cultural sites. Alberta Transportation is of the view that these mitigations will help preserve the cultural sites and locations and reduce loss of connection to ancestors.
- At the request of Indigenous groups, Alberta Transportation will participate in ceremonies (if invited) prior to the start of construction, including making offerings.



Table 7-1 Location of Important Traditional Resources and Traditional Use Areas Relative to PDA, LAA and RAA as Identified by Indigenous Groups

Indigenous Statements on the Location of Traditional Resources, Traditional Practices, Identification of Preferred Use Areas and the Relative Importance of These Sites	Distribution of Traditional Resources and TLRU within the PDA, LAA, and RAA, Site Accessibility and Efforts to Reconcile (Mitigations)
KCO and SCO TUS 2017 Research Study Joint Interim Report (cited in KFN SR1 SCRT Aug 2014- Aug 2019 Specific Concern #7, 15)	

Piikani Nation (PN)

Fish and Fishing

In relation to a similar project, PN noted the impact on various fish species which become trapped in standing water, over a period of time where little or no consideration was given to the impact upon the fish, causing PN to organize an annual fish rescue where stranded fish are returned to the river.

Source:

PN TUS 2018 (CEAR #48) PN 2018 (CEAR #48)

Fish and Fishing:

<u>Location</u>: The comments by PN express concerns about impacts to fish observed in similar projects.

Site Access: Current use sites and areas located outside the PDA are not anticipated to be directly affected by the Project. The construction of the diversion channel will result in the loss of 1,854 m² of fish habitat on the bed and banks of Elbow River and 300 m² of fish habitat at the interception of the tributary ID1350. Potential habitat offset gains will be addressed as part of the Fisheries Act authorization process for the Project: a habitat offset plan will be developed and submitted for review and will take into consideration input from Indigenous groups, DFO and stakeholders. It will also align with local fish management objectives.

With the implementation of mitigation, the Project is unlikely to reduce the productivity or sustainability of a commercial, recreational or Aboriginal fishery as defined by the *Fisheries Act*. During dry operations, there will be no changes to flow in Elbow River, and therefore no alterations to the quality of fish habitat. Overall, the Project is not expected to limit the availability of traditional resources for current use in the RAA (see Volume 3A, Section 8.4.4 and Section 14.8.1).

The Project will create access through the development of a permanent portage for Elbow River.

The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites PN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.

Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas:

- Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.
- Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods.
- Structures will be designed so that storm water runoff and wash water from the access roads, decks, side slopes, and approaches are directed into a retention pond or vegetated area to remove suspended solids, dissipate velocity, and prevent sediment and other deleterious substances from entering watercourses.
- Works in water will be timed with respect to the RAPs wherever possible. For Elbow River, the RAP is May 01 July 15 and September 16 April 15. Condition and use of RAPs will be provided within further Project permitting and authorization under the Fisheries Act. For planning purposes, the Elbow River RAP will be applied as an avoidance and mitigation measure.
- To allow for fish passage and construction of the structures within the Elbow River, the Elbow River will be temporarily diverted, and flows will be maintained downstream by the construction of a temporary bypass channel.
- Drainage areas within the reservoir will be graded to reduce stranding of fish during release of retained flood water from the reservoir.
- Boulders will be added to increase the bed roughness of the channel immediately downstream of the diversion structure, which will increase water depths and reduce velocities.
- Boulder v-weir structures will be constructed in the channel downstream of the gates to provide slower velocity and deeper resting zones.
- A monitoring program will be undertaken to identify if fish passage is impeded for migratory salmonids or other fish species, including bull or cutthroat trout.
- Maintenance, debris removal on the structure, and on the fish passage structures will occur to accommodate fish passage.
- Debris will be cleaned from the structure gates after a flood recedes to allow unimpeded fish passage upstream over the structure.



Indigenous Statements on the Location of Traditional Resources, Traditional Practices, Identification of Preferred Use Areas and the Relative Importance of These Sites	Distribution of Traditional Resources and TLRU within the PDA, LAA, and RAA, Site Accessibility and Efforts to Reconcile (Mitigations)
	• Isolated pools will be identified, marked, and a determination by a qualified aquatic environmental specialist will be made as to whether there are stranded fish in the pool that require rescue and relocation to secure habitats in Elbow River. When the water has been fully drained, the unnamed creek will also be surveyed to identify isolated pools where fi might be stranded.
	• Where debris removal from the structures is required, debris removal will be timed to avoid disruption to sensitive fish life stages (i.e., outside the RAP), unless the debris and its accumulation is immediately threatening to the integrity of the structure or relates to an emergency (i.e., risk of structure failure).
	During post-flood reservoir maintenance, areas that had isolated pools may be graded to prevent the isolation of fish in successive flood events.
	Annual offset monitoring to assess condition of habitat offsetting measures and identify potential remediation measures:
	- Success of offsetting measures determined by criteria that determine if offsetting is functioning as intended and to identify contingencies if monitoring shows deficiencies.
	 Confirmation that offsetting components meet the design requirements.
	 Confirmation that the terms of the DFO Authorization are met.
	A post-construction report will be provided to DFO at the completion of construction that will outline the as-built condition of the offsetting measures. In addition to a photographic log as-built engineer drawings, and construction monitoring, post- construction measurements will include:
	Location and measurements of the structures on the bed and banks.
	Location and quantity of the vegetation reclamation.
	Location and measurements of the Fish Passage Mitigation Structure.
	Fish habitat, abundance, distribution, and benthic invertebrate monitoring in previously sampled reaches (1-12).
	Location and measurements of required fisheries offsetting measures.
ints and Plant Harvesting	
ints:	Plants:
noted that the following plant species are culturally	Species: Berry bushes and trees, traditional herbs and roots, willow, cottonwood, poplar, muskeg and dogwood.
ignificant including but not limited to various berry bushes and trees, traditional herbs and roots, willow,	Locations: PN did not identify specific plant locations sites within the PDA, LAA, or RAA. Berry bushes (within PDA), traditional herbs (within PDA), traditional herbs and roots (within PDA), willows (within PDA), cottonwood (PDA), poplar (within PDA), berry trees (within PDA), muskeg (within PDA), dogwood (within PDA).
ottonwood, poplar, muskeg and dogwood.	Site Access: Traditionally used plant species will be directly affected due to vegetation removal and grading associated with construction, affecting 168 ha associated with permanent

Plant Harvesting:

PN indicated the presence of traditional herbs and medicinal plants within the area of the flood basin.

PN noted that plant harvesting is a culturally significant practice.

Source:

PN TUS 2018 (CEAR #48)

PN 2018 (CEAR #48)

Project infrastructure and approximately 566 ha of temporary workspace. Although individual plants will be removed from the PDA, none of the traditionally used species identified will be lost in the LAA, nor will vegetation communities supporting traditionally used plants be lost from the PDA (see the EIA, Volume 3A, Section 10.4).

Many of the potentially affected grassland and wetland plant communities have intrinsic adaptations to periodic flooding, while other species such as poplar and spruce would be less tolerant to flooding due to having a low anaerobic tolerance. Mortality of traditional use species found in upland plant communities is expected. However, these species are widespread and are expected to re-establish by natural recruitment; permanent loss of traditional use species is not predicted. Overall, residual effects on vegetation and wetlands post-flood would not result in the loss of native upland or wetland plant communities, nor would it result in the loss of wetland function from the LAA (see the EIA, Volume 3B, Section 10.2).

Mitigations:

- At the end of construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded to meet AEP reclamation requirements. Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important.
- Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction.
- Restrict construction activities to the approved construction footprint.
- Reduce the removal of vegetation in wetlands to the extent possible.
- Where possible, conduct ground-level cutting/mowing/mulching of wetland vegetation instead of grubbing.



Table 7-1 Location of Important Traditional Resources and Traditional Use Areas Relative to PDA, LAA and RAA as Identified by Indigenous Groups

Indigenous Statements on the Location of Traditional Resources, Traditional Practices, Identification of Preferred Use Areas and the Relative Importance of These Sites	Distribution of Traditional Resources and TLRU within the PDA, LAA, and RAA, Site Accessibility and Efforts to Reconcile (Mitigations)
	Where applicable, in areas not impacted by the permanent Project footprint, if ground conditions are encountered that create potential for rutting, admixing or compaction, minimize ground disturbance by using a protective layer such as matting or biodegradable geotextile and clay ramps or other approved materials between wetland root/seed bed and construction equipment.
	Native areas disturbed by the Project would be reseeded using an Alberta Transportation native custom seed mix.
	Alberta Transportation will not apply herbicide within 30 m of plant species or ecological communities of management concern, wetland or waterbody. Spot spraying, wicking, mowing, or hand picking are acceptable measures for control of regulated weeds in this area.
	• A licensed industrial pesticide applicator would be contracted to select and apply all herbicide in compliance with the procedures as outlined in the Code of Practice for Pesticides (GoA 2010).
	Alberta Transportation will provide PN the opportunity for two site visits, one during construction and one post-construction to observe application of prescribed mitigation measures and provide feedback.
	• Following construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded with a native custom seed mix to meet AEP reclamation requirements.
	Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important.
	Plant Harvesting:
	Locations: PN did not identify specific plant harvesting sites within the PDA, LAA, or RAA but PN noted that plant harvesting is a culturally significant practice.
	Site Access: Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction.
	The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites PN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.
	Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.
	In addition to the measures proposed to mitigate potential effects on wildlife and biodiversity, and on vegetation and wetlands, as described above, Alberta Transportation will implement the following measures to mitigate potential effects on plant harvesting:
	Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods.
	Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods.
	Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction.
	Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction access management.
	Alberta Transportation is committed to ongoing consultation with PN, including identifying opportunities for PN to participate in Project activities.



Table 7-1 Location of Important Traditional Resources and Traditional Use Areas Relative to PDA, LAA and RAA as Identified by Indigenous Groups

Indigenous Statements on the Location of Traditional
Resources, Traditional Practices, Identification of
Preferred Use Areas and the Relative Importance of
These Sites

Distribution of Traditional Resources and TLRU within the PDA, LAA, and RAA, Site Accessibility and Efforts to Reconcile (Mitigations)

Wildlife and Hunting and Trapping

Wildlife:

PN noted that the following wildlife species are culturally significant including but are not limited to white elk, mule deer, bald and gold eagles, grizzly bears, magpies, moose, wolf, coyote, cougar, raptors and beaver.

During a site visit, PN noticed signs of a bear foraging for tender dogwood roots.

Hunting and Trapping:

PN noted that hunting and trapping is a culturally significant practice, however, they did not indicate that hunting and trapping occurred within the PDA.

Source:

PN TUS 2018 (CEAR #48) PN 2018 (CEAR #48)

Wildlife:

<u>Species</u>: White elk, mule deer, bald and gold eagles, grizzly bears, magpies, moose, wolf, coyote, cougar, raptors and beaver.

Location and Site Access: The site of signs of a bear foraging for tender dogwood roots was not disclosed by PN, white elk tracks (within PDA), mule deer tracks (within PDA), bald eagle (within PDA), grizzly bear and 2 cubs (within PDA), bear evidence foraging for roots (within PDA), grizzly sow and cub (within PDA), moose (within PDA), beaver habitat (within PDA).

Site Access: The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Native trees and shrubs should re-establish over time. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see the EIA, Volume 3A, Section 11.4.2). Impacts to wildlife are expected to be minimum and temporary.

<u>Mitigations</u>: In addition to the measures proposed to mitigate potential effects on vegetation and wetlands described above, Alberta Transportation will implement the following measures to mitigate potential effects on wildlife and biodiversity:

- Pre-construction surveys will be conducted to identify wildlife features (e.g., nests, dens) and appropriate site-specific mitigation developed.
- Where possible, construction activities during the RAP for the KWBZ identified along Elbow River (December 15 to April 30) will be avoided or reduced. This will limit potential sensory disturbance to wintering ungulates (ESRD 2015, GoA 2017). If construction activities must occur during this time period, a wildlife mitigation and monitoring plan will be developed in consultation with regulators, which will include monitoring ungulate habitat use and response to human disturbance.
- Restrict all construction activities to the approved construction footprint.
- Where possible, temporary workspaces and access roads will be in areas that avoid wildlife features and native vegetation (e.g., shrubland, treed areas, wetlands). Existing access roads and previously disturbed areas will be used, where feasible.
- Where fencing is proposed to restrict livestock access to Project structures (e.g., diversion channel), wildlife-friendly fencing will be installed to allow ungulate passage.
- If an active nest or den is found, it will be subject to a provincial or federal disturbance setback buffer and site-specific mitigation.
- The diversion channel will be built with 3H:1V side slopes, which is within the range that most large mammals (e.g., elk,) are known to traverse (McCorquodale 2003; Frair et al. 2005; Mao et al. 2005; The Bow Corridor Ecosystem Advisory Group 2012).
- The side slopes and bottom of the diversion channel will be vegetated, except under the proposed bridges and at Pirmez Creek. Vegetated areas will provide a more conducive wildlife passage across the channel.
- To maintain ungulate movement within the KWBZ, the floodplain berm will be revegetated with materials conducive for ungulate movement. The section of reinforced concrete (approximately 250 m) closest to Elbow River will be covered with topsoil and seeded with native grasses. The central portion of the floodplain berm includes approximately 550 m of exposed riprap, where sections will be filled with substrate finer than riprap, such as sand, gravel and vegetation to allow for more walkable sections (Austin and Garland 2001; Huijser et al. 2008; Clevenger 2011). The south portion, farthest from Elbow River, will be a 450 m earthen embankment vegetated with native grasses.
- A remote camera program will be designed with AEP to identify whether the diversion channel acts as a barrier to wildlife movement during dry operations, especially for ungulates, and determine the effectiveness of mitigation implemented throughout the diversion channel. This will include monitoring along Elbow River to determine if wildlife use of the KWBZ has been affected by the construction and operation of the Project. Although the specific details and design of the remote camera program will be determined with AEP prior to construction, the following describes the basis of a preliminary approach.
- During the Project dry operation phase, a total of 14 remote cameras will be deployed in the wildlife LAA and monitor wildlife movement for at least one-year post-construction. The six remote cameras along the Elbow River will remain at the same locations as during the construction phase. Four remote cameras will be deployed soon after completion of Project construction and placed at the same locations as pre-construction baseline surveys near Highway 22 (i.e., near the raised portion of the highway at the north end of the wildlife LAA). An additional four remote cameras will be installed along wildlife friendly fencing at the edge of the diversion channel at crossable sections where there is vegetation. Remote cameras at the diversion channel will be spaced approximately 1 km apart.
- A wildlife biologist will visit the cameras every four months during construction and operation to change out memory cards and batteries and check on the overall status of equipment (e.g., positioning, weather related malfunctions, animal or human tampering of equipment).
- During dry operations, monitoring of wildlife movement using remote cameras would occur for at least one year following construction.



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Indigenous Statements on the Location of Traditional Resources, Traditional Practices, Identification of Preferred Use Areas and the Relative Importance of These Sites	Distribution of Traditional Resources and TLRU within the PDA, LAA, and RAA, Site Accessibility and Efforts to Reconcile (Mitigations)
	• There were no beaver dams or lodges identified within the construction footprint for the Project during the baseline wildlife surveys completed within the LAA and, as a result, Alberta Transportation is not expecting to remove any dams or lodges. If an active beaver dam is identified within the construction footprint at a later date, mitigation for dam removal will be developed with the appropriate agencies (e.g., AEP) and the relevant permit(s) obtained, as required.
	At the end of construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded to meet AEP reclamation requirements.
	Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important.
	Alberta Transportation is committed to ongoing consultation with PN, including identifying opportunities for PN to participate in Project activities.
	Hunting and Trapping:
	Location: PN did not identify specific hunting and trapping sites within the PDA, LAA, or RAA.
	Site Access: The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see Volume 3A, Section 11.4.2). Impacts to hunting and trapping are expected to be minimal and temporary.
	The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites PN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.
	Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.
	In addition to the measures proposed to mitigate potential effects on wildlife and biodiversity, and on vegetation and wetlands, as described above, Alberta Transportation will implement the following measures to mitigate potential effects on trapping:
	Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods.
	Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction land access management.
	Alberta Transportation is committed to ongoing consultation with PN, including identifying opportunities for PN to participate in Project activities.
Travel Routes	
PN indicated the location of an old trail which was used pre- and post-contact called the Old Stoney Trail (also	Location: This trail is located along the east of Elbow River riverbank (Elbow River is within the PDA). The North-South Trail as identified by PN is within the Project construction area to the west of the floodplain berm.
known as the Old North-South Trail), which is located along the east of the Elbow River riverbank (the Elbow River is within the PDA).	Site Access: Alberta Transportation has conducted an HRIA for the Project and no remnants of the Old North Trail have been identified within the PDA. Although trails were once present in the PDA, the high degree of cultivation makes mapping of these trails very difficult; no intact trails of precontact age have been identified within the PDA to date (Volume 3A, Section 13.2.2).
Source: PN TUS 2018	A portion of the North-South Trail identified by PN is located within the Project construction area and it is anticipated that this site will be affected by construction of the floodplain berm. Construction of the Project and fencing of infrastructure will restrict access to certain areas of the Project, including portions of the hunting access/route identified by PN.
PN 2018 (CEAR #48)	The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites PN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.



Indigenous Statements on the Location of Traditional Resources, Traditional Practices, Identification of Preferred Use Areas and the Relative Importance of These Sites	Distribution of Traditional Resources and TLRU within the PDA, LAA, and RAA, Site Accessibility and Efforts to Reconcile (Mitigations)
	Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas:
	• Alberta Transportation will evaluate the reported presence of trails observed by PN and the disagreement between conventional archaeological assessment and PN to determine whether a supplemental historical resources impact assessment or additional field visits by Alberta Transportation is required. See Alberta Transportation response to Round 1 CEAA Package 2, IR2-10.
	Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction access management.
	• In the event an unanticipated cultural resource is discovered during construction of the Project, a historical resources chance find protocol would be enacted, as required by ACMWS during construction.
	Alberta Transportation will follow current industry best practices and comply with all provincial and federal legislation. Should additional historical resources be encountered during construction, Alberta Transportation will follow current ACMWS policies and guidelines.
	Alberta Transportation will minimize disturbance to cultural and spiritual sites and subsurface impacts, and develop a protocol for recovery, collection, reporting on, and possible repatriation of artifacts found in consultation with Indigenous groups, which could include flagging, fencing, or providing signage of sites to prevent disturbance during construction.
	 Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components.
	Alberta Transportation commits to offering to hold workshops with Indigenous groups to discuss mitigation measures.
	Alberta Transportation is committed to ongoing consultation with PN, including identifying opportunities for PN to participate in Project activities.
Habitation and Camping, Cultural, Spiritual, Ceremonial sites	Location: 15 locations with tipi rings were identified by PN, 10 of which contain evidence of a campsite: 14 are within the PDA, 1 campsite is within 101.32 m east of PDA, PN identified 1 site containing fire hearth stones located 169.35 m east of PDA.
PN noted that cultural, spiritual, ceremonial sites are important to their people and traditional practices.	Site Access: Of the culturally important areas within the PDA, two are intersected by permanent Project clearings. The historical site recorded by PN has the potential to be affected by construction of the gravel road, diversion channel, diversion structure and floodplain berm. Alberta Transportation is committed to ongoing engagement PN to better understand the
PN indicated the location of an uppiimaan four pole covered smoke lodge among a concentration of half circle stones.	potential effects and discuss mitigation measures, where warranted. Sites located outside the PDA are not anticipated to be affected by the Project. The site of the traditional camp associated with the North-South Trail identified by PN is located within the Project construction area and it is anticipated that this site will be affected by construction of the floodplain berm.
PN also noted the location of a lodge which was located at a short distance from a group of tipi rings and a campsite.	Alberta Transportation has conducted an HRIA for the Project and no sites of high significance, such as effigies, medicine wheels, graves, pottery or tipi rings have been made in the PDA to date. Six campsites have been identified within the PDA, most of these sites are small and have been heavily disturbed by cultivation or erosion. One undisturbed precontact campsite identified in the treed uplands adjacent to the Elbow River is considered to have heritage value and ACMWS is requiring standard mitigation, to include photography, mapping and archaeological excavation of this site (Volume 3A, Section 13.2.2.
PN indicated areas where tipi rings and evidence of other habitation, such as camp sites and fire hearth stones. PN expressed concerns about archaeological sites when	The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites PN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e.,
discovered, and how these sites are identified and catalogued. "A concern arises about what happens to	private land) would result in a positive change to the ability to exercise Section 35 rights.
the evidence and how it is handled by authorities" (PN	Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.
TUS 2018, p.18). "PN stated that the accepted practice is removal rather	• Alberta Transportation will evaluate the reported presence of campsites and features observed by PN and the disagreement between conventional archaeological assessment and PN to determine whether a supplemental historical resources impact assessment or additional field visits by Alberta Transportation is required. See Alberta Transportation response to Round 1 CEAA Package 2, IR2-10.
than preserving the last traces of the original history undisturbed and intact".	 Alberta Transportation commits to offering to hold workshops with PN to discuss mitigation measures to discuss impacts to habitation, camping, cultural, spiritual, ceremonial sites
PN expressed concern that the Project would "desecrate and destroy all traces of the original people's existence in this case the Siksikaitsitapii (PN TUS, 2018, p. 20).	 Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components.
	Alberta Transportation will participate in discussions with ACMWS and Indigenous groups regarding further investigation of identified sites located within the designated construction site boundary.
	• The disposition of artifacts and provision of GPS coordinates are under the jurisdiction of ACMWS and not Alberta Transportation. Alberta Transportation will limit disturbance, to the extent possible and practical, of cultural and spiritual sites and subsurface impacts. Alberta Transportation will follow heritage resource protection methods as mandated by the HRA.



Table 7-1 Location of Important Traditional Resources and Traditional Use Areas Relative to PDA, LAA and RAA as Identified by Indigenous Groups

Indigenous Statements on the Location of Traditional Resources, Traditional Practices, Identification of Preferred Use Areas and the Relative Importance of These Sites	Distribution of Traditional Resources and TLRU within the PDA, LAA, and RAA, Site Accessibility and Efforts to Reconcile (Mitigations)
PN identified that the PN team relies on traditional knowledge which is passed down from generation to generation to verify that entire ecosystems are affected, and has occurred to the near demise of a traditional lifestyle that relies on the natural resources for survival. PN expressed concern that a change in the river flow will cause drastic changes in the river regime and result in the loss of use to traditional clan homelands, harvesting and recreational areas used by their peoples for countless generations. Source: PN TUS2018 (CEAR #48)	 Alberta Transportation will minimize disturbance to cultural and spiritual sites, and develop a protocol for recovery, collection, reporting on, and possible repatriation of artifacts found in consultation with Indigenous groups, which could include flagging, fencing, or providing signage of sites to prevent disturbance during construction. Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and Alberta Transportation will advise Indigenous groups on post-construction access management. Alberta Transportation will follow current industry best practices and comply with all provincial and federal legislation. Should additional historical resources be encountered during construction, Alberta Transportation will follow current ACMWS policies and guidelines. Alberta Transportation will follow heritage resource protection methods as mandated by ACMWS and verify archaeological results with Indigenous groups. Alberta Transportation will commit to adhering to any conditions ACMWS applies to these sites Alberta Transportation is committed to ongoing consultation with PN, including heritage resources mitigation prior to construction. In the event an unanticipated cultural resource is discovered during construction of the Project a historical resources chance find protocol would be enacted, as required by ACMWS during construction. Alberta Transportation has developed mitigation measures to avoid or reduce physical effects on important cultural sites. Alberta Transportation is of the view that these mitigation
PN 2018 (CEAR #48)	will help preserve the cultural sites and locations and reduce loss of connection to ancestors.
Siksika Nation (SN)	
Plants and Plant Harvesting	
diversion inlet and service sluiceway are proposed to be constructed. These plants will need to be protected or relocated to another spot nearby to ensure they are available in the future for Blackfoot traditional people. Source: KCO and SCO TUS 2017 Research Study Joint Interim Report (pg. 4) (cited in SN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #14)	Locations: The location of medicinal and ceremonial plants near the diversion inlet and diversion channel are within the PDA. SN did not identify specific plant harvesting sites within the PDA, LAA, or RAA. Site Access: Traditionally used plant species will be directly affected due to vegetation removal and grading associated with construction, affecting 168 ha associated with permanel Project infrastructure and approximately 566 ha of temporary workspace. Although individual plants will be removed from the PDA, none of the traditionally used species identified will lost in the LAA, nor will vegetation communities supporting traditionally used plants be lost from the PDA (see the EIA, Volume 3A, Section 10.4). Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction. The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging we first Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designate LUA. Alberta Transportation invites SN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.

mowing, or hand picking are acceptable measures for control of regulated weeds in this area.



Indigenous Statements on the Location of Traditional Resources, Traditional Practices, Identification of Preferred Use Areas and the Relative Importance of These Sites	Distribution of Traditional Resources and TLRU within the PDA, LAA, and RAA, Site Accessibility and Efforts to Reconcile (Mitigations)
	A licensed industrial pesticide applicator would be contracted to select and apply all herbicide in compliance with the procedures as outlined in the Code of Practice for Pesticides (GoA 2010).
	Alberta Transportation will provide SN the opportunity for two site visits, one during construction and one post-construction to observe application of prescribed mitigation measures and provide feedback.
	• Following construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded with a native custom seed mix to meet AEP reclamation requirements.
	Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important.
Wildlife and Hunting and Trapping	
SN requested the ability to hunt and harvest in Area B of	Location: SN did not identify specific hunting and trapping sites within the PDA, LAA, or RAA.
the Project, as it would become Crown land. SN	Site Access: Since filing the EIA, Alberta Transportation has evolved the land use planning for the Project and is no longer contemplating establishing Areas A, B, and C in the PDA.
expressed interest in exploring uses and leasing options of Project Area C. Sources: SN meeting with Alberta Transportation (April 26, 2018) (cited in SN SR1 SCRT Aug 2014-June Aug 2019; Specific Concern #23)	The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see Volume 3A, Section 11.4.2). Impacts to hunting and trapping are expected to be minimal and temporary.
	The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites SN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.
	Mitigation: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.
	Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods.
	Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction land access management.
Travel Routes	
Elbow River was identified by SN as an important	Location: The Elbow River is within the PDA.
transportation route for the Blackfoot people. <u>Sources</u> : KCO and SCO TUS 2017. Research Study Joint Interim Report (p.4)	<u>Site Access:</u> Alberta Transportation is committed to ongoing consultation SN to better understand the potential effects and discuss mitigation measures, where warranted. Sites located outside the PDA are not anticipated to be affected by the Project.
	The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites SN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.
	Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.
	Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction access management.
	• In the event an unanticipated cultural resource is discovered during construction of the Project, a historical resources chance find protocol would be enacted, as required by ACMWS during construction.



Table 7-1 Location of Important Traditional Resources and Traditional Use Areas Relative to PDA, LAA and RAA as Identified by Indigenous Groups

Indigenous Statements on the Location of Traditional Resources, Traditional Practices, Identification of Preferred Use Areas and the Relative Importance of	
These Sites	Distribution of Traditional Resources and TLRU within the PDA, LAA, and RAA, Site Accessibility and Efforts to Reconcile (Mitigations)
	Alberta Transportation will follow current industry best practices and comply with all provincial and federal legislation. Should additional historical resources be encountered during construction, Alberta Transportation will follow current ACMWS policies and guidelines.
	Alberta Transportation will minimize disturbance to cultural and spiritual sites and subsurface impacts, and develop a protocol for recovery, collection, reporting on, and possible repatriation of artifacts found in consultation with Indigenous groups, which could include flagging, fencing, or providing signage of sites to prevent disturbance during construction.
	Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components.
	Alberta Transportation commits to offering to hold workshops with Indigenous groups to discuss mitigation measures.
	Alberta Transportation is committed to ongoing consultation with SN, including identifying opportunities for SN to participate in Project activities.
Habitation, Camping, Cultural, Spiritual, Ceremonial Sites	
SN identified a Blackfoot traditional camp site in the creek valley extending to the north-west of Elbow River,	Locations: A camp site in the creek valley extending to the north-west of Elbow River. In addition, there is a possibility that Blackfoot artifacts could be unearthed during excavation at the cliff on the west side of Elbow River. Portions of Elbow River and the Elbow River valley are in the PDA.
many tipi rings were discovered in the creek valley, as well as a buffalo rubbing stone and fire-broken rocks.	Alberta Transportation notes that SN have indicated that medicinal and ceremonial plants on both sides of Elbow River in proposed construction areas, but no site/plant-specific information has been provided.
SN expressed concern that there may be Blackfoot artifacts unearthed during excavation at the cliff on the west side of Elbow River. SN identified medicinal and ceremonial plants on both	Alberta Transportation has conducted an HRIA for the Project and no sites of high significance, such as effigies, medicine wheels, graves, pottery or tipi rings have been made in the PDA to date. Six campsites have been identified within the PDA, most of these sites are small and have been heavily disturbed by cultivation or erosion. One undisturbed precontact campsite identified in the treed uplands adjacent to the Elbow River is considered to have heritage value and Alberta Culture is requiring standard mitigation, to include photography, mapping and archaeological excavation of this site (Volume 3A, Section 13.2.2).
sides of Elbow River in proposed construction areas. <u>Sources:</u>	Site Access: Medicinal and ceremonial plants occurring on both sides of Elbow River in proposed construction areas. These may be impacted by Project activities. Mitigations for plants and plant harvesting are discussed above.
KCO and SCO TUS 2017 Research Study Joint Interim	The site of the traditional camp identified by SN is located within the Project construction area and it is anticipated that this site will be affected by construction of the floodplain berm.
Report (pg. 4, 5) (cited in SN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #5)	The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites SN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.
	Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.
	• Alberta Transportation will evaluate the reported presence of campsites and features observed by SN and the disagreement between conventional archaeological assessment and SN to determine whether a supplemental historical resources impact assessment or additional field visits by ACMWS is required. See Alberta Transportation response to Round 1 CEAA Package 2, IR2-10.
	Alberta Transportation commits to offering to hold workshops with SN to discuss mitigation measures to discuss impacts to habitation, camping, cultural, spiritual, ceremonial sites.
	Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components.
	Alberta Transportation will participate in discussions with ACMWS and Indigenous groups regarding further investigation of identified sites located within the designated construction site boundary.
	• The disposition of artifacts and provision of GPS coordinates are under the jurisdiction of ACMWS and not Alberta Transportation. Alberta Transportation will limit disturbance, to the extent possible and practical, of cultural and spiritual sites and subsurface impacts. Alberta Transportation will follow heritage resource protection methods as mandated by the HRA.
	Alberta Transportation will minimize disturbance to cultural and spiritual sites, and develop a protocol for recovery, collection, reporting on, and possible repatriation of artifacts found in consultation with Indigenous groups, which could include flagging, fencing, or providing signage of sites to prevent disturbance during construction.
	Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction access management.
	Alberta Transportation will follow current industry best practices and comply with all provincial and federal legislation. Should additional historical resources be encountered during construction, Alberta Transportation will follow current ACMWS policies and guidelines.



Indigenous Statements on the Location of Traditional Resources, Traditional Practices, Identification of Preferred Use Areas and the Relative Importance of These Sites	Distribution of Traditional Resources and TLRU within the PDA, LAA, and RAA, Site Accessibility and Efforts to Reconcile (Mitigations)
	Alberta Transportation will follow heritage resource protection methods as mandated by Alberta Culture and verify archaeological results with Indigenous groups.
	Alberta Transportation will commit to adhering to any conditions ACMWS applies to these sites.
	Alberta Transportation is committed to ongoing consultation with SN, including heritage resources mitigation prior to construction.
	• In the event an unanticipated cultural resource is discovered during construction of the Project a historical resources chance find protocol would be enacted, as required by ACMWS during construction.
	• Alberta Transportation has developed mitigation measures to avoid or reduce physical effects on important cultural sites. Alberta Transportation is of the view that these mitigations will help preserve the cultural sites and locations and reduce loss of connection to ancestors.
Stoney Nakoda Nations (SNN)	
Wildlife and Hunting and Trapping	
SNN stated there are two different trap lines in the Project area and that the area is used for trapping but did not specify their location.	Locations: SNN stated there are two different trap lines in the PDA and that the PDA is used for trapping but did not specify their location. Based on available information, there are no registered traplines within the PDA. Alberta Transportation has requested the locations of the two traplines and were the SNN members trap in order to determine if there is potential impact from the Project.
Sources:	SNN did not identify specific hunting sites within the PDA, LAA, or RAA.
SNN Engagement Meeting with Alberta Transportation (May 6, 2016) (cited in SNN SR1 SCRT Aug 2014-June Aug 2019; Specific Concern #7)	Site Access: The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Native trees and shrubs should re-establish over time. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see the EIA, Volume 3A, Section 11.4.2). Impacts to wildlife are expected to be minimum and temporary.
	The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites SNN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.
	Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.
	In addition to the measures proposed to mitigate potential effects on wildlife and biodiversity, and on vegetation and wetlands, as described above, Alberta Transportation will implement the following measures to mitigate potential effects on hunting and trapping:
	Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods.
	Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction land access management.
Tsuut'ina Nation (TN)	
Fish and Fishing	
The TN TUS recorded a total of 338 traditional LUAs	Fish:
relative to the Project, 90% of which are within the PDA, including land use, animal, habitat, cultural, gathering, and terrain sites. As directed by TN, the nature of each traditional use site has not been disclosed.	Species: char, cutties, pike, suckers, trout (including brook, brown, bull, and rainbow), char, pike and suckers and mountain whitefish
	Location: Elbow River is within the PDA.
	Site Access: Current use sites and areas located outside the PDA are not anticipated to be directly affected by the Project. The construction of the diversion channel will result in the loss of 1,854 m2 of fish habitat on the bed and banks of Elbow River and 300 m2 of fish habitat at the interception of the tributary ID1350. Potential habitat offset gains will be addressed as part of the Fisheries Act authorization process for the Project: a habitat offset plan will be developed and submitted for review and will take into consideration input from Indigenous groups, DFO and stakeholders. It will also align with local fish management objectives.



Table 7-1 Location of Important Traditional Resources and Traditional Use Areas Relative to PDA, LAA and RAA as Identified by Indigenous Groups

Indigenous Statements on the Location of Traditional
Resources, Traditional Practices, Identification of
Preferred Use Areas and the Relative Importance of
These Sites

Distribution of Traditional Resources and TLRU within the PDA, LAA, and RAA, Site Accessibility and Efforts to Reconcile (Mitigations)

Fish:

TN explained that char, cutties, pike, suckers, trout (including brook, brown, bull, and rainbow), and whitefish are present in Elbow River and in its tributaries in the Project area.

TN reported that spawning activities in Elbow river vary depending on the species, TN explained that char, pike and suckers spawn in cold water and mountain whitefish spawn in Elbow River south of the PDA as well as its tributaries in the Project area.

TN expressed concerns about effects on spawning in Elbow River and its tributaries, including mountain whitefish, as well as bull trout, which is a species at risk.

TN expressed concerns that standing waters in the Project area may contaminate fish.

Fishing:

TN reported that fishing typically occurs in spring and summer; fish are harvested for both subsistence and ceremonial purposes.

TN members have observed fluctuations in water quality in the area over time; TN also explained that there a sewage smell has been present in the past, as a result of effluent discharge from Bragg Creek, which has had an effect on use.

TN expressed concerns about effects on the ability to fish (including trout and whitefish) in the event of changes to the health and flow of the river.

TN reported that previous floods have damaged river bottoms, resulting in poor fishing for approximately three years. TN expressed concerns that subsequent floods could damage fishing for longer periods of time.

TN expressed concerns about effects on fishing, including barriers to access fishing areas, habitat loss, as well as changes in fish abundance, behaviour, health, and distribution.

TN expressed concerns that Project effects on the flow and quality of the Elbow River waters will result in effects on trout and whitefish harvesting.

TN stated that access is the primary barrier to using traditional lands, followed by environmental concerns about food sources. TN expressed concerns that the Project and other developments will affect fishing.

Mitigations:

- Structures will be designed so that storm water runoff and wash water from the access roads, decks, side slopes, and approaches are directed into a retention pond or vegetated area to remove suspended solids, dissipate velocity, and prevent sediment and other deleterious substances from entering watercourses.
- Works in water will be timed with respect to the RAPs wherever possible. For Elbow River, the RAP is May 01 July 15 and September 16 April 15. Condition and use of RAPs will be provided within further Project permitting and authorization under the Fisheries Act. For planning purposes, the Elbow River RAP will be applied as an avoidance and mitigation measure
- To allow for fish passage and construction of the structures within the Elbow River, the Elbow River will be temporarily diverted, and flows will be maintained downstream by the construction of a temporary bypass channel.
- Drainage areas within the reservoir will be graded to reduce stranding of fish during release of retained flood water from the reservoir.
- Boulders will be added to increase the bed roughness of the channel immediately downstream of the diversion structure, which will increase water depths and reduce velocities.
- Boulder v-weir structures will be constructed in the channel downstream of the gates to provide slower velocity and deeper resting zones.
- A monitoring program will be undertaken to identify if fish passage is impeded for migratory salmonids or other fish species, including bull or cutthroat trout.
- Maintenance, debris removal on the structure, and on the fish passage structures will occur to accommodate fish passage.
- Debris will be cleaned from the structure gates after a flood recedes to allow unimpeded fish passage upstream over the structure.
- Isolated pools will be identified, marked, and a determination by a qualified aquatic environmental specialist will be made as to whether there are stranded fish in the pool that require rescue and relocation to secure habitats in Elbow River. When the water has been fully drained, the unnamed creek will also be surveyed to identify isolated pools where fish might be stranded.
- Where debris removal from the structures is required, debris removal will be timed to avoid disruption to sensitive fish life stages (i.e., outside the RAP), unless the debris and its accumulation is immediately threatening to the integrity of the structure or relates to an emergency (i.e., risk of structure failure).
- During post-flood reservoir maintenance, areas that had isolated pools may be graded to prevent the isolation of fish in successive flood events.
- annual offset monitoring to assess condition of habitat offsetting measures and identify potential remediation measures:
- Success of offsetting measures determined by criteria that determine if offsetting is functioning as intended and to identify contingencies if monitoring shows deficiencies.
- Confirmation that offsetting components meet the design requirements.
- Confirmation that the terms of the DFO Authorization are met.

A post-construction report will be provided to DFO at the completion of construction that will outline the as-built condition of the offsetting measures. In addition to a photographic log, as-built engineer drawings, and construction monitoring, post-construction measurements will include:

- Location and measurements of the structures on the bed and banks.
- Location and quantity of the vegetation reclamation.
- Location and measurements of the Fish Passage Mitigation Structure.
- Fish habitat, abundance, distribution, and benthic invertebrate monitoring in previously sampled reaches (1-12).
- Location and measurements of required fisheries offsetting measures.

Fishing

<u>Location</u>: Bragg Creek is in the RAA. The PDA is within the TN Traditional Territory as identified in the TLRU Report.

<u>Site Access:</u> With the implementation of mitigation, the Project is unlikely to reduce the productivity or sustainability of a commercial, recreational or Aboriginal fishery as defined by the *Fisheries Act*. During dry operations, there will be no changes to flow in Elbow River, and therefore no alterations to the quality of fish habitat. Overall, the Project is not expected to limit the availability of traditional resources for current use in the RAA (see Volume 3A, Section 8.4.4 and Section 14.8.1).

In addition, the Project will create access through the development of a permanent portage for Elbow River.



Location of Important Traditional Resources and Traditional Use Areas Relative to PDA, LAA and RAA as Identified by Indigenous Groups Table 7-1

Indigenous Statements on the Location of Traditional Resources, Traditional Practices, Identification of Preferred Use Areas and the Relative Importance of These Sites	Distribution of Traditional Resources and TLRU within the PDA, LAA, and RAA, Site Accessibility and Efforts to Reconcile (Mitigations)
TN expressed concerns about water quality and the continued ability to fish within the traditional territory as a result of the Project. Sources:	The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites TN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.
TN TUS 2018 (cited in TN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #1)	Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.
TN 2018 (CEAR #50)	Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods.
	Alberta Transportation will avoid substantial interference with public navigation of Elbow River through the following design practices:
	As part of construction, a permanent portage will be developed around the in-stream water intake components.
	Signs directing traffic to detours will be installed during construction of road realignments and modifications.
	• Signs will be installed along the existing Elbow River channel. Multiple signs will be placed upstream and downstream of the water intake components on both banks of Elbow River. These signs will warn users on Elbow River that they are approaching in-stream water intake components and of the associated danger with this infrastructure and to direct them to a portage location.
	Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction access management.
	Alberta Transportation will create a portage to facilitate access to the river.
	To allow for fish passage and construction of the structures within the Elbow River, the Elbow River will be temporarily diverted, and flows will be maintained downstream by the construction of a temporary bypass channel.

The TN TUS recorded a total of 338 traditional LUAs relative to the Project, 90% of which are within the PDA, including land use, animal, habitat, cultural, gathering, and terrain sites. As directed by TN, the nature of each traditional use site has not been disclosed.

Plants:

TN stated that wetlands in the Project area provide important habitat for plants that provide nutritional value for animals and TN members; wetlands also provide habitat for other culturally-used plants.

TN expressed concerns about wetlands and muskeg areas in the Project area, noting that they are important habitat for beaver, elk, and other wildlife.

TN expressed concerns about berry patches in and near the PDA, which grizzly bear rely on.

TN expressed concerns about the undisturbed forested areas in the Project area, which provide important habitat and protection for wildlife.

TN expressed concerns that standing waters in the PDA may contaminate plants.

Species: Null berry, chokecherry, gooseberry, kinnikinnick (bear berry), raspberry, saskatoon berry, wild strawberry, bergamot, buffalo grass (sage), cedar, juniper, mint, mushrooms, white poplar, sweetgrass, willow (diamond and red), and yarrow, as well as other berries, grasses, sedges and trees. blueberry, chokecherry, serviceberry, prairie turnips, TN also reported that pine, spruce, and other trees are important.

Locations: TN reserve is within the LAA. Elbow River and the Elbow River valley are within the PDA. TN did not identify specific plant location sites within the PDA, LAA, or RAA.

Site Access: Traditionally used plant species will be directly affected due to vegetation removal and grading associated with construction, affecting 168 ha associated with permanent Project infrastructure and approximately 566 ha of temporary workspace. Although individual plants will be removed from the PDA, none of the traditionally used species identified will be lost in the LAA, nor will vegetation communities supporting traditionally used plants be lost from the PDA (see the EIA, Volume 3A, Section 10.4). Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction. Native trees and shrubs should re-establish over time.

Many of the potentially affected grassland and wetland plant communities have intrinsic adaptations to periodic flooding, while other species such as poplar and spruce would be less tolerant to flooding due to having a low anaerobic tolerance. Mortality of traditional use species found in upland plant communities is expected. However, these species are widespread and are expected to re-establish by natural recruitment; permanent loss of traditional use species is not predicted. Overall, residual effects on vegetation and wetlands post-flood would not result in the loss of native upland or wetland plant communities, nor would it result in the loss of wetland function from the LAA (see Volume 3B, Section 10.2). No specific recommendations or requests were made by TN regarding plant harvesting.

Mitigations: At the end of construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded to meet AEP reclamation requirements. Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important:

- Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction.
- Restrict construction activities to the approved construction footprint.
- Reduce the removal of vegetation in wetlands to the extent possible



Table 7-1 Location of Important Traditional Resources and Traditional Use Areas Relative to PDA, LAA and RAA as Identified by Indigenous Groups

Indigenous Statements on the Location of Traditional	
Resources, Traditional Practices, Identification of	
Preferred Use Areas and the Relative Importance of	
These Sites	

Distribution of Traditional Resources and TLRU within the PDA, LAA, and RAA, Site Accessibility and Efforts to Reconcile (Mitigations)

Plant Harvesting:

TN members have a strong cultural connection with medicinal and ceremonial plant harvesting in the traditional territory. TN stated that medicinal plants can be found along Elbow River. TN added that the medicinal and ceremonial plants grow in the Elbow River valley as well as in wetlands and along riparian areas which cannot be found in other areas, such as foothills.

TN observed nutritional, medicinal, and ceremonial plants growing in the Project area, including bull berry, chokecherry, gooseberry, kinnikinnick (bear berry), raspberry, saskatoon berry, wild strawberry, bergamot, buffalo grass (sage), cedar, juniper, mint, mushrooms, white poplar, sweetgrass, willow (diamond and red), and yarrow, as well as other berries, grasses, sedges and trees. TN reported that pine, spruce, and other trees are also culturally important plants, used as firewood and to build ceremonial, burial, or domestic structures and travois.

In the past, TN members relied on blueberry, chokecherry, serviceberry, and prairie turnips as the primary sources of fruits and vegetables.

TN reported that sweetgrass and some medicinal flowers are harvested in early August but noted that sweetgrass is becoming less abundant in the vicinity of the TN reserve. Sage is harvested in August and bergamot is harvested in July.

TN expressed concerns about effects on cultural and medicinal plant harvesting, including barriers to access plant harvesting areas, habitat loss, as well as changes in plant abundance.

TN expressed concerns about ceremonial and medicinal plants found in the Project area, including sweetgrass, which is becoming more difficult to find.

TN members are concerned about needing to travel farther and look harder to find medicinal and ceremonial plants.

Sources:

TN TUS 2018 (cited in TN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #1, 56)

TN 2018 (CEAR #50)

- Where possible, conduct ground level cutting/mowing/mulching of wetland vegetation instead of grubbing.
- Where applicable, in areas not impacted by the permanent Project footprint, if ground conditions are encountered that create potential for rutting, admixing or compaction, minimize ground disturbance by using a protective layer such as matting or biodegradable geotextile and clay ramps or other approved materials between wetland root/seed bed and construction equipment.
- Native areas disturbed by the Project would be reseeded using an Alberta Transportation native custom seed mix.
- Alberta Transportation will not apply herbicide within 30 m of plant species or ecological communities of management concern, wetland or waterbody. Spot spraying, wicking, mowing, or hand picking are acceptable measures for control of regulated weeds in this area.
- A licensed industrial pesticide applicator would be contracted to select and apply all herbicide in compliance with the procedures as outlined in the Code of Practice for Pesticides (GoA 2010).
- Alberta Transportation will provide TN the opportunity for two site visits, one during construction and one post-construction to observe application of prescribed mitigation measures and provide feedback.
- Following construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded with a native custom seed mix to meet AEP reclamation requirements.
- Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important.

Plant Harvesting:

Location: TN did not identify specific plant harvesting sites within the PDA, LAA, or RAA.

The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites TN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.

Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.

In addition to the measures proposed to mitigate potential effects on wildlife and biodiversity, and on vegetation and wetlands, as described above, Alberta Transportation will implement the following measures to mitigate potential effects on plant harvesting:

- Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods.
- Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods.
- Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction.
- Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction access management.
- Alberta Transportation is committed to ongoing consultation with TN, including identifying opportunities for TN to participate in Project activities.



ALBERTA TRANSPORTATION SPRINGBANK OFF-STREAM RESERVOIR PROJECT RESPONSE TO AGENCY CONFORMITY REVIEW OF ROUND 1, PART 2, DATED AUGUST 6, 2019

December 2019

Table 7-1 Location of Important Traditional Resources and Traditional Use Areas Relative to PDA, LAA and RAA as Identified by Indigenous Groups

Indigenous Statements on the Location of Traditional Resources, Traditional Practices, Identification of Preferred Use Areas and the Relative Importance of These Sites

Distribution of Traditional Resources and TLRU within the PDA, LAA, and RAA, Site Accessibility and Efforts to Reconcile (Mitigations)

Wildlife and Hunting and Trapping

The TN TUS recorded a total of 338 traditional LUAs relative to the Project, 90% of which are within the PDA, including land use, animal, habitat, cultural, gathering, and terrain sites. As directed by TN, the nature of each traditional use site has not been disclosed.

Wildlife:

TN indicated that elk, moose, deer (white-tailed and mule deer), grizzly bear, black bear, cougar, bobcat, lynx, coyote, fox, wolves, beaver, ground squirrel, mole, rabbit, duck, bald eagle, magpie, and spruce grouse are present in the Project area, and adjacent to Elbow River and its tributaries; TN noted there are mule deer located along Elbow River immediately south of the PDA.

TN reported that elk, moose, deer, duck, and spruce grouse (prairie chicken) can be found in the Wilderness Area. TN added that heron, owl, and redtail hawk are among additional birds known to be in the general Project area.

TN added that the Project area is within a wildlife migration corridor.

TN reported that the Project area contains the eastern extent of a grizzly bear habitat area, and explained that because of development, grizzly bears are losing habitat and need to follow the river to find habitat. TN explained that grizzly bears also come to feed on elk in the region.

TN explained that elk habitat used to be good in the Redwood4 area before the community was built; elk then moved toward the Springbank area.

TN stated that the Project is located in elk habitat, including calving grounds, water crossings, and migration routes. TN reported that elk calve from late May to late June; elk migrate through the TN reserve and Project area in August, October, and January. TN explained that the elk have been migrating through the area for hundreds of years and noted that bear, cougar, lynx, and wolves follow the elk.

TN explained that the elk moved their calving grounds to Springbank following development.

TN reported that moose are regularly observed at the northeast section of Highway 22 and Springbank Road.

Wildlife:

Species: Elk, moose, deer (white-tailed and mule deer), grizzly bear, black bear, cougar, bobcat, lynx, coyote, fox, wolves, beaver, ground squirrel, mole, rabbit, duck, bald eagle, magpie, and spruce grouse, heron, owl, and redtail hawk.

Location: Wilderness Area, Springbank Road, Highway 22, and Elbow River are within the PDA.

TN reserve and Redwood Meadows are within the LAA.

<u>Site Access:</u> The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Native trees and shrubs should re-establish over time. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see Volume 3A, Section 11.4.2). Impacts to wildlife are expected to be minimum and temporary.

Mitigations: In addition to the measures proposed to mitigate potential effects on vegetation and wetlands described above, Alberta Transportation will implement the following measures to mitigate potential effects on wildlife and biodiversity:

- Pre-construction surveys will be conducted to identify wildlife features (e.g., nests, dens) and appropriate site-specific mitigation developed.
- Where possible, construction activities during the RAP for the KWBZ identified along Elbow River (December 15 to April 30) will be avoided or reduced. This will limit potential sensory disturbance to wintering ungulates (ESRD 2015, GoA 2017). If construction activities must occur during this time period, a wildlife mitigation and monitoring plan will be developed in consultation with regulators, which will include monitoring ungulate habitat use and response to human disturbance.
- Restrict all construction activities to the approved construction footprint.
- Where possible, temporary workspaces and access roads will be in areas that avoid wildlife features and native vegetation (e.g., shrubland, treed areas, wetlands). Existing access roads and previously disturbed areas will be used, where feasible.
- Where fencing is proposed to restrict livestock access to Project structures (e.g., diversion channel), wildlife-friendly fencing will be installed to allow ungulate passage.
- If an active nest or den is found, it will be subject to a provincial or federal disturbance setback buffer and site-specific mitigation.
- The diversion channel will be built with 3H:1V side slopes, which is within the range that most large mammals (e.g., elk,) are known to traverse (McCorquodale 2003; Frair et al. 2005; Mao et al. 2005; The Bow Corridor Ecosystem Advisory Group 2012).
- The side slopes and bottom of the diversion channel will be vegetated, except under the proposed bridges and at Pirmez Creek. Vegetated areas will provide a more conducive wildlife passage across the channel.
- To maintain ungulate movement within the KWBZ, the floodplain berm will be revegetated with materials conducive for ungulate movement. The section of reinforced concrete (approximately 250 m) closest to Elbow River will be covered with topsoil and seeded with native grasses. The central portion of the floodplain berm includes approximately 550 m of exposed riprap, where sections will be filled with substrate finer than riprap, such as sand, gravel and vegetation to allow for more walkable sections (Austin and Garland 2001; Huijser et al. 2008; Clevenger 2011). The south portion, farthest from Elbow River, will be a 450 m earthen embankment vegetated with native grasses.
- A remote camera program will be designed with AEP, to identify whether the diversion channel acts as a barrier to wildlife movement during dry operations, especially for ungulates, and determine the effectiveness of mitigation implemented throughout the diversion channel. This will include monitoring along Elbow River to determine if wildlife use of the KWBZ has been affected by the construction and operation of the Project. Although the specific details and design of the remote camera program will be determined with AEP prior to construction, the following describes the basis of a preliminary approach.
- During the Project dry operation phase, a total of 14 remote cameras will be deployed in the wildlife LAA and monitor wildlife movement for at least one-year post-construction. The six remote cameras along the Elbow River will remain at the same locations as during the construction phase. Four remote cameras will be deployed soon after completion of Project construction and placed at the same locations as pre-construction baseline surveys near Highway 22 (i.e., near the raised portion of the highway at the north end of the wildlife LAA). An additional four remote cameras will be installed along wildlife friendly fencing at the edge of the diversion channel at crossable sections where there is vegetation. Remote cameras at the diversion channel will be spaced approximately 1 km apart.
- A wildlife biologist will visit the cameras every four months during construction and operation to change out memory cards and batteries and check on the overall status of equipment (e.g., positioning, weather related malfunctions, animal or human tampering of equipment).
- During dry operations, monitoring of wildlife movement using remote cameras would occur for at least one year following construction.



ALBERTA TRANSPORTATION SPRINGBANK OFF-STREAM RESERVOIR PROJECT RESPONSE TO AGENCY CONFORMITY REVIEW OF ROUND 1, PART 2, DATED AUGUST 6, 2019

December 2019

Table 7-1 Location of Important Traditional Resources and Traditional Use Areas Relative to PDA, LAA and RAA as Identified by Indigenous Groups

Indigenous Statements on the Location of Traditional Resources, Traditional Practices, Identification of Preferred Use Areas and the Relative Importance of These Sites

TN identified beaver habitat throughout the Project area, including the west side of Elbow River at the southwest portion of the PDA.

TN observed an eagle nest southeast of the PDA adjacent to the outlet area and explained that the eagles are likely present because they can harvest fish nearby.

TN expressed concerns that the Project may have an effect on the health of the elk herd that migrates through the Project area.

TN expressed concerns that the Project may have an effect on the landscape and, as a result, may affect beaver, grizzly bear, black bear, bald eagle, bobcat, cougar, lynx, mule deer, and wolves. TN also expressed concerns about elk calving grounds, the ability of elk to navigate through the Project area.

TN expressed concerns about the undisturbed forested areas in the Project area which provide important habitat and protection for wildlife.

TN expressed concerns that standing waters in the PDA may contaminate wildlife.

TN expressed concerns that wildlife, including moose, that use the outlet area because it is low-lying and sheltered.

Hunting:

In the past, TN members relied on antelope, beaver, buffalo, deer, duck elk, goose, mountain goat, mountain sheep, porcupine, rabbit, and squirrel harvesting, as well as egg harvesting.

TN reported that some landowners allow TN hunters to access private lands to hunt.

TN noted that development affected some local elk hunting areas.

In the past, TN travelled through the traditional territory following the seasonal availability of different foods. TN explained that the "Indian pass system", which was imposed upon TN from 1885 until the 1930s, restricted land users' ability to access hunting areas, including from the TN reserve to Rocky Mountain House, the Rocky Mountains, Chief Mountain, and Blood lands.

Distribution of Traditional Resources and TLRU within the PDA, LAA, and RAA, Site Accessibility and Efforts to Reconcile (Mitigations)

- There were no beaver dams or lodges identified within the construction footprint for the Project during the baseline wildlife surveys completed within the LAA and, as a result, Alberta Transportation is not expecting to remove any dams or lodges. If an active beaver dam is identified within the construction footprint at a later date, mitigation for dam removal will be developed with the appropriate agencies (e.g., AEP) and the relevant permit(s) obtained, as required.
- At the end of construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded to meet AEP reclamation requirements.
- Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important.
- Alberta Transportation is committed to ongoing consultation with TN, including identifying opportunities for TN to participate in Project activities.

Hunting

Species: Antelope, beaver, buffalo, deer, duck elk, goose, mountain goat, mountain sheep, porcupine, rabbit, and squirrel harvesting, as well as egg harvesting.

Locations: The PDA is within the TN Traditional Territory as identified in the TLRU Report. TN did not identify specific hunting within the PDA, LAA, or RAA.

Site Access: The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Native trees and shrubs should re-establish over time. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see the EIA, Volume 3A, Section 11.4.2). Impacts to wildlife are expected to be minimum and temporary.

The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites TN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.

Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.

In addition to the measures proposed to mitigate potential effects on wildlife and biodiversity, and on vegetation and wetlands, as described above, Alberta Transportation will implement the following measures to mitigate potential effects on trapping:

- Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components, and discuss key
 traditional harvesting periods.
- Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction land access management.
- No specific recommendations or requests were made by Tsuut'ina Nation regarding hunting.

Trapping:

Species: Coyote, fox, and wolves were trapped; also eagles.

Site Access: The PDA is within the TN Traditional Territory as identified in the TLRU Report. TN did not identify specific trapping sites within the PDA, LAA, or RAA. There are no registered traplines in the PDA, LAA or RAA.

The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see Volume 3A, Section 11.4.2). Impacts to hunting and trapping are expected to be minimal and temporary.

The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites TN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.



Table 7-1 Location of Important Traditional Resources and Traditional Use Areas Relative to PDA, LAA and RAA as Identified by Indigenous Groups

Indigenous Statements on the Location of Traditional Resources, Traditional Practices, Identification of Preferred Use Areas and the Relative Importance of These Sites	Distribution of Traditional Resources and TLRU within the PDA, LAA, and RAA, Site Accessibility and Efforts to Reconcile (Mitigations)
TN expressed concerns about effects on hunting,	Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.
including barriers to access hunting areas, habitat loss, as well as changes in wildlife abundance, behaviour, health and distribution.	Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods.
TN expressed concerns about effects on elk, which are important for traditional subsistence purposes; TN explained that the Project area contains important habitat for elk as well as the predators who feed on elk.	Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, including for hunting and fishing and Alberta Transportation will advise Indigenous groups on post-construction access management.
	No specific recommendations or requests were made by TN regarding trapping.
TN stated that access is the primary barrier to using traditional lands, followed by environmental concerns about food sources. TN expressed concerns that the Project will result in harvesters having to travel greater distances to hunt.	
Trapping:	
TN explained that coyote, fox, and wolves were trapped; eagles were trapped for ceremonial purposes.	
Sources:	
TN TUS 2018 (cited in TN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #1, 25, 69)	
TN 2018 (CEAR #50)	
Travel	
The TN TUS recorded a total of 338 traditional LUAs relative to the Project, 90% of which are within the PDA, including land use, animal, habitat, cultural, gathering, and terrain sites. As directed by TN, the nature of each traditional use site has not been disclosed.	Location: Some trails are in the PDA, some in the RAA. Site Access: Alberta Transportation has conducted an HRIA for the Project and no remnants of the Old North Trail have been identified within the PDA. Although trails were once present in the PDA, the high degree of cultivation makes mapping of these trails very difficult; no intact trails of precontact age have been identified within the PDA to date (Volume 3A, Section 13.2.2).
TN explained that trails were travelled on food or by horse and wagon or on horseback. TN identified possible	The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated

Source:

TN TUS 2018

TN 2018 (CEAR #50)

trails in the Project area.

was used by approximately 1890.

TN identified two trails in the RAA and noted that one

the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites TN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.

Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.

Alberta Transportation will evaluate the reported presence of trails observed by TN and the disagreement between conventional archaeological assessment and TN to determine whether a supplemental historical resources impact assessment or additional field visits by Alberta Transportation is required. See Alberta Transportation response to Round 1 CEAA Package 2, IR2-10.

Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction access management.

- In the event an unanticipated cultural resource is discovered during construction of the Project a historical resources chance find protocol would be enacted, as required by ACMWS during construction.
- Alberta Transportation will follow current industry best practices and comply with all provincial and federal legislation. Should additional historical resources be encountered during construction, Alberta Transportation will follow current ACMWS policies and guidelines.



Indigenous Statements on the Location of Traditional Resources, Traditional Practices, Identification of Preferred Use Areas and the Relative Importance of These Sites	Distribution of Traditional Resources and TLRU within the PDA, LAA, and RAA, Site Accessibility and Efforts to Reconcile (Mitigations)
	Alberta Transportation will minimize disturbance to cultural and spiritual sites and subsurface impacts, and develop a protocol for recovery, collection, reporting on, and possible repatriation of artifacts found in consultation with Indigenous groups, which could include flagging, fencing, or providing signage of sites to prevent disturbance during construction.
	Alberta Transportation is commitment to collaborating with Indigenous groups and stakeholders to develop a land-use management plan for the reservoir that aligns with the South Saskatchewan Regional Plan.
	All Indigenous groups with an interest in the area will be invited to participate.
	The land use management plan will address:
	 Land management for the area which will allow for management of flood waters in the off-stream reservoir during floods.
	 Practice of Treaty Rights and traditional use.
	– Monitoring, reporting on the lands.
	 Post-flood rehabilitation.
	Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, including for hunting and fishing and Alberta Transportation will advise Indigenous groups on post-construction access management.
Habitation, Camping, Cultural, Spiritual, Ceremonial	
The TN TUS recorded a total of 338 traditional LUAs relative to the Project, 90% of which are within the PDA,	Location: Approximately 90% of sites identified by TN are located within the PDA. The PDA is within the TN Traditional Territory as identified in the TLRU Report. The Elbow River and Wilderness Area are within the PDA. Chief Big Wolf's settlement and the Old Agency site are in the RAA. Site specific information was not disclosed.
including land use, animal, habitat, cultural, gathering,	Site Access: No specific recommendations or requests were made by TN regarding habitation.
and terrain sites. As directed by TN, the nature of each traditional use site has not been disclosed.	Alberta Transportation has conducted an HRIA for the Project and no sites of high significance, such as effigies, medicine wheels, graves, pottery or tipi rings have been made in the PDA to date. Six campsites have been identified within the PDA, most of these sites are small and have been heavily disturbed by cultivation or erosion. One undisturbed precontact campsit
In the past, TN members would leave winter settlements when spring arrived in order to camp together in fields during agricultural planting and harvesting seasons. TN	identified in the treed uplands adjacent to the Elbow River is considered to have heritage value and ACMWS is requiring standard mitigation, to include photography, mapping and archaeological excavation of this site (Volume 3A, Section 13.2.2).
observed evidence of camping areas in the Project area.	The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated
TN identified two original settlements on the TN reserve: one is located north of the Old Agency site in the	LUA. Alberta Transportation invites TN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.
southeast corner of the reserve, and known as Chief Bullhead's settlement; the other, Chief Big Wolf's	Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.
settlement, is located 5 km west.	Alberta Transportation commits to offering to hold workshops with TN to discuss mitigation measures to discuss impacts to habitation, camping, cultural, spiritual, ceremonial sites.
TN expressed concern regarding the selection of the SR1	Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components.
site within 359 m of the TN Reserve, and that the entire Project lies within the traditional territory.	Alberta Transportation will participate in discussions with ACMWS and Indigenous groups regarding further investigation of identified sites located within the designated construction site boundary.
TN indicated that hunting, fishing, gathering, camping, and ceremonial practices occur in the Project area, and these activities depend on resources available there. Activities outside of the Project area depend on these	• The disposition of artifacts and provision of GPS coordinates are under the jurisdiction of ACMWS and not Alberta Transportation. Alberta Transportation will limit disturbance, to the extent possible and practical, of cultural and spiritual sites and subsurface impacts. Alberta Transportation will follow heritage resource protection methods as mandated by the HRA
	Alberta Transportation will minimize disturbance to cultural and spiritual sites, and develop a protocol for recovery, collection, reporting on, and possible repatriation of artifacts found in consultation with Indigenous groups, which could include flagging, fencing, or providing signage of sites to prevent disturbance during construction.
resources as well. Old trail sites also exist within the PDA. The TN Traditional Territory includes and extends beyond the Project area, TN reserve, and the general Springbank area.	Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction access management.
	Alberta Transportation will follow current industry best practices and comply with all provincial and federal legislation. Should additional historical resources be encountered during construction, Alberta Transportation will follow current ACMWS policies and guidelines.
	Alberta Transportation will follow heritage resource protection methods as mandated by ACMWS and verify archaeological results with Indigenous groups.



Indigenous Statements on the Location of Traditional Resources, Traditional Practices, Identification of Preferred Use Areas and the Relative Importance of These Sites	Distribution of Traditional Resources and TLRU within the PDA, LAA, and RAA, Site Accessibility and Efforts to Reconcile (Mitigations)
TN stated that the floodplain topography and the Elbow River valley, as well as the presence of many important plants explains why TN chose the area as part of traditional territory. TN oral history supports that the Elbow River area began to be used by TN hundreds of years ago. TN reported camping, and other traditional activities, such as ceremonial practices, occur in the Project area; historically and culturally important sites reported by TN. TN also indicated that traditional activities that occur outside the Project area are dependent upon resources that are available within the Project area. TN members practice traditional use activities in the Wilderness Area.	 Alberta Transportation will commit to adhering to any conditions ACMWS applies to these sites. Alberta Transportation is committed to ongoing consultation with TN, including heritage resources mitigation prior to construction. In the event an unanticipated cultural resource is discovered during construction of the Project a historical resources chance find protocol would be enacted, as required by ACMWS during construction. Alberta Transportation has developed mitigation measures to avoid or reduce physical effects on important cultural sites. Alberta Transportation is of the view that these mitigatic will help preserve the cultural sites and locations and reduce loss of connection to ancestors.
TN reported a traditional LUA located on the southern edge of the Project area where materials are gathered and used in ceremonies.	
TN reported a buffalo jump along Elbow River immediately south of the PDA.	
TN reported several traditional use areas in the Project area adjacent to proposed development areas that show evidence of cultural and archaeological importance including over 100 tipi rings, fire pits, and possible grave sites.	
TN expressed concern about effects on cultural sites in the Project area that are likely to be present in undisturbed areas.	
TN reported a traditional LUA located on the southern edge of the Project area where materials are gathered and used in ceremonies.	
TN reported a buffalo jump along Elbow River immediately south of the PDA.	
Source:	
TN TUS 2018 (cited in TN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #17)	
TN 2018 (CEAR #50)	
Cultural, Spiritual, Ceremonial	



ALBERTA TRANSPORTATION SPRINGBANK OFF-STREAM RESERVOIR PROJECT RESPONSE TO AGENCY CONFORMITY REVIEW OF ROUND 1, PART 2, DATED AUGUST 6, 2019

December 2019

Table 7-1 Location of Important Traditional Resources and Traditional Use Areas Relative to PDA, LAA and RAA as Identified by Indigenous Groups

Indigenous Statements on the Location of Traditional
Resources, Traditional Practices, Identification of
Preferred Use Areas and the Relative Importance of
These Sites

Distribution of Traditional Resources and TLRU within the PDA, LAA, and RAA, Site Accessibility and Efforts to Reconcile (Mitigations)

Ermineskin Cree Nation (ECN)

Fish and Fishing

Fiel

ECN noted that the following fish species are culturally significant: Bull trout, Rainbow trout, Cutthroat trout, Burbot, Mountain Whitefish.

Fishing

ECN identified bull trout, rainbow trout, and cutthroat trout as being the main species fished in Elbow River and are fished on the Elbow river, primarily in the summer and fall and often occurs alongside medicinal plant harvesting.

ECN reported fishing on private lands within the PDA, including along the Elbow River. Fishing activities were also reported to take place: south of Redwood Meadows and to the east of Bragg Creek within TN Reserve 145, west of Redwood Meadows, northwest of Bragg Creek, southwest of Elbow River Recreational Area.

<u>Source</u>

ECN TUS 2018 (CEAR #46)

ECN 2018 (CEAR #46)

Fish

Species: Bull trout, Rainbow trout, Cutthroat trout, Burbot, Mountain Whitefish.

<u>Locations</u>: Bull trout, Rainbow trout, Cutthroat trout, Burbot, Mountain Whitefish, occur in the PDA, LAA and the RAA. Five fishing areas were mapped by ECN: two are within the PDA and three are within the LAA. Of the fishing areas within the PDA: one is intersected by permanent Project infrastructure, including the diversion channel and gravel road.

Site Access: Current use sites and areas located outside the PDA are not anticipated to be directly affected by the Project. The construction of the diversion channel will result in the loss of 1,854 m² of fish habitat on the bed and banks of Elbow River and 300 m² of fish habitat at the interception of the tributary ID1350. Potential habitat offset gains will be addressed as part of the Fisheries Act authorization process for the Project: a habitat offset plan will be developed and submitted for review and will take into consideration input from Indigenous groups, DFO and stakeholders. It will also align with local fish management objectives.

Mitigations: Structures will be designed so that storm water runoff and wash water from the access roads, decks, side slopes, and approaches are directed into a retention pond or vegetated area to remove suspended solids, dissipate velocity, and prevent sediment and other deleterious substances from entering watercourses.

- Works in water will be timed with respect to the RAPs wherever possible. For Elbow River, the RAP is May 01 July 15 and September 16 April 15. Condition and use of RAPs will be provided within further Project permitting and authorization under the Fisheries Act. For planning purposes, the Elbow River RAP will be applied as an avoidance and mitigation measure.
- To allow for fish passage and construction of the structures within the Elbow River, the Elbow River will be temporarily diverted, and flows will be maintained downstream by the construction of a temporary bypass channel.
- Drainage areas within the reservoir will be graded to reduce stranding of fish during release of stored flood water from the reservoir.
- Boulders will be added to increase the bed roughness of the channel immediately downstream of the diversion structure, which will increase water depths and reduce velocities.
- Boulder v-weir structures will be constructed in the channel downstream of the gates to provide slower velocity and deeper resting zones.
- A monitoring program will be undertaken to identify if fish passage is impeded for migratory salmonids or other fish species, including bull or cutthroat trout.
- Maintenance, debris removal on the structure, and on the fish passage structures will occur to accommodate fish passage.
- Debris will be cleaned from the diversion structure gates after a flood recedes to allow unimpeded fish passage upstream over the structure.
- Isolated pools will be identified, marked, and a determination by a qualified aquatic environmental specialist will be made as to whether there are stranded fish in the pool that require rescue and relocation to secure habitats in Elbow River. When the water has been fully drained, the unnamed creek will be surveyed to identify isolated pools where fish might be stranded.
- Where debris removal from the structures is required, debris removal will be timed to avoid disruption to sensitive fish life stages (i.e., outside the RAP), unless the debris and its accumulation is immediately threatening to the integrity of the structure or relates to an emergency (i.e., risk of structure failure).
- During post-flood reservoir maintenance, areas that had isolated pools may be graded to prevent the isolation of fish in successive flood events.
- Annual offset monitoring to assess condition of habitat offsetting measures and identify potential remediation measures:
 - Success of offsetting measures determined by criteria that determine if offsetting is functioning as intended and to identify contingencies if monitoring shows deficiencies.
 - Confirmation that offsetting components meet the design requirements.
 - Confirmation that the terms of the DFO Authorization are met.

A post-construction report will be provided to DFO at the completion of construction that will outline the as-built condition of the offsetting measures. In addition to a photographic log, as-built engineer drawings, and construction monitoring, post-construction measurements will include:

- Location and measurements of the structures on the bed and banks.
- Location and quantity of the vegetation reclamation.
- Location and measurements of the Fish Passage Mitigation Structure.



Table 7-1 Location of Important Traditional Resources and Traditional Use Areas Relative to PDA, LAA and RAA as Identified by Indigenous Groups

Indigenous Statements on the Location of Traditional	
Resources, Traditional Practices, Identification of Preferred Use Areas and the Relative Importance of These Sites	Distribution of Traditional Resources and TLRU within the PDA, LAA, and RAA, Site Accessibility and Efforts to Reconcile (Mitigations)
	Fish habitat, abundance, distribution, and benthic invertebrate monitoring in previously sampled reaches (1-12).
	Location and measurements of required fisheries offsetting measures.
	Fishing
	Site Access: With the implementation of mitigation, the Project is unlikely to reduce the productivity or sustainability of a commercial, recreational or Aboriginal fishery as defined by the Fisheries Act. During dry operations, there will be no changes to flow in Elbow River, and therefore no alterations to the quality of fish habitat. Overall, the Project is not expected to limit the availability of traditional resources for current use in the RAA (see the EIA, Volume 3A, Section 8.4.4 and Section 14.8.1).
	In addition, the Project will create access through the development of a permanent portage for Elbow River.
	The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites ECN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.
	Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.
	Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods. Alberta Transportation will avoid substantial interference with public navigation of Elbow River through the following design practices:
	As part of construction, a permanent portage will be developed around the in-stream water intake components.
	Signs directing traffic to detours will be installed during construction of road realignments and modifications.
	• Signs will be installed along the existing Elbow River channel. Multiple signs will be placed upstream and downstream of the water intake components on both banks of Elbow River. These signs will warn users on Elbow River that they are approaching in-stream water intake components and of the associated danger with this infrastructure and to direct them to a portage location.
	Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction access management.
	Alberta Transportation will create a portage to facilitate access to the river.
	• To allow for fish passage and construction of the structures within Elbow River, Elbow River will be temporarily diverted, and flows will be maintained downstream by the construction of a temporary bypass channel.
Plants and Plant Harvesting	
Plants	Plants
ECN explained that wetlands provide habitat for culturally important plants, which provide nutritional	Locations: ECN mapped seven medicinal plant areas: two are within the PDA, three are within the LAA, two are within the RAA. Of the medicinal plant areas within the PDA, one is intersected by permanent Project infrastructure including the gravel road and floodplain berm.
value for animals and ECN members. ECN identified specific areas that support a variety of traditional medicines and ceremonial plants:	Site Access: Traditionally used plant species will be directly affected due to vegetation removal and grading associated with construction, affecting 168 ha associated with permanent Project infrastructure and approximately 566 ha of temporary workspace. Although individual plants will be removed from the PDA, none of the traditionally used species identified will be lost in the LAA, nor will vegetation communities supporting traditionally used plants be lost from the PDA (see Volume 3A, Section 10.4). Alberta Transportation will provide opportunities for
West of the PDA and south of Jumping Pound	harvesting or relocating medicinal and ceremonial plants prior to construction. Native trees and shrubs should re-establish over time.
 West of Redwood Meadows and north of Bragg Creek South of Redwood Meadows and east of Bragg 	Many of the potentially affected grassland and wetland plant communities have intrinsic adaptations to periodic flooding, while other species such as poplar and spruce would be less tolerant to flooding due to having a low anaerobic tolerance. Mortality of traditional use species found in upland plant communities is expected. However, these species are widespread and are expected to re-establish by natural recruitment; permanent loss of traditional use species is not predicted. Overall, residual effects on vegetation and wetlands post-flood would not result in the loss of native upland or wetland plant communities, nor would it result in the loss of wetland function from the LAA (see the EIA, Volume 3B, Section 10.2).
Creek	Mitigations: At the end of construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded to meet AEP reclamation requirements. Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important.



Indigenous Statements on the Location of Traditional Resources, Traditional Practices, Identification of Preferred Use Areas and the Relative Importance of These Sites	Distribution of Traditional Resources and TLRU within the PDA, LAA, and RAA, Site Accessibility and Efforts to Reconcile (Mitigations)
Plant Harvesting:	Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction.
Plant gathering areas were identified by ECN:	Restrict construction activities to the approved construction footprint.
South of Jumping Pound towards the northern border	Reduce the removal of vegetation in wetlands to the extent possible.
of TN Reserve 145	Where possible, conduct ground level cutting/mowing/mulching of wetland vegetation instead of grubbing.
South of Redwood Meadows and to the east of Bragg Creek within TN Reserve 145	Where applicable, in areas not impacted by the permanent Project footprint, if ground conditions are encountered that create potential for rutting, admixing or compaction, minimize ground disturbance by using a protective layer such as matting or biodegradable geotextile and clay ramps or other approved materials between wetland root/seed bed
West of Redwood Meadows and to the northwest of	and construction equipment.
Bragg Creek	Native areas disturbed by the Project would be reseeded using an Alberta Transportation native custom seed mix.
Area bordering the western extent of TN Reserve 145, east of the Elbow River, and extending in the reserve towards the east	Alberta Transportation will not apply herbicide within 30 m of plant species or ecological communities of management concern, wetland or waterbody. Spot spraying, wicking, mowing, or hand picking are acceptable measures for control of regulated weeds in this area.
South of Highway 8 and east of Redwood Meadows	• A licensed industrial pesticide applicator would be contracted to select and apply all herbicide in compliance with the procedures as outlined in the Code of Practice for Pesticides
	 (GoA 2010). Alberta Transportation will provide ECN the opportunity for two site visits, one during construction and one post-construction to observe application of prescribed mitigation measures
Source: ECN TUS 2018 (CEAR #46)	and provide feedback.
ECN 2018 (CEAR #46)	Following construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded with a native custom seed mix to meet AEP reclamation requirements.
	Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important.
	Plant Harvesting:
	Locations: Five gathering areas were mapped by ECN: three are within the LAA, two are within the RAA, and a wood area was mapped by ECN within the RAA.
	Site Access: Traditionally used plant species will be directly affected due to vegetation removal and grading associated with construction, affecting 168 ha associated with permanent Project infrastructure and approximately 566 ha of temporary workspace. Although individual plants will be removed from the PDA, none of the traditionally used species identified will be lost in the LAA, nor will vegetation communities supporting traditionally used plants be lost from the PDA (see Volume 3A, Section 10.4). Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction.
	The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites ECN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.
	Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.
	In addition to the measures proposed to mitigate potential effects on wildlife and biodiversity, and on vegetation and wetlands, as described above, Alberta Transportation will implement the following measures to mitigate potential effects on plant harvesting:
	Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods.
	Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods.
	Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction.
	Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction access management.
	Alberta Transportation is committed to ongoing engagement with ECN, including identifying opportunities for ECN to participate in Project activities.



ALBERTA TRANSPORTATION SPRINGBANK OFF-STREAM RESERVOIR PROJECT RESPONSE TO AGENCY CONFORMITY REVIEW OF ROUND 1, PART 2, DATED AUGUST 6, 2019

December 2019

Table 7-1 Location of Important Traditional Resources and Traditional Use Areas Relative to PDA, LAA and RAA as Identified by Indigenous Groups

Indigenous Statements on the Location of Traditional
Resources, Traditional Practices, Identification of
Preferred Use Areas and the Relative Importance of
These Sites

Distribution of Traditional Resources and TLRU within the PDA, LAA, and RAA, Site Accessibility and Efforts to Reconcile (Mitigations)

Wildlife and Hunting and Trapping

Wildlife:

These wildlife resources are generally described as being generally present in the RAA: moose, grizzly bear, rabbit, coyote, cougar, muskrat, short-eared owl, elk, black bear, porcupine, weasel, lynx, bobcat, bald eagle, duck, white-tailed deer, mule deer, wolf, marten, beaver, and sharp-tailed grouse.

ECN explained that the areas south of Jumping Pound, to the west of Redwood Meadows and north of Bragg Creek host an abundance of medicinal plants, and this in turn attracts large animals, such as bears.

A bear was identified in an area containing medicinal plants to the east of Bragg Creek, on TN Reserve 145.

Field visits conducted by ECN identified wildlife and wildlife corridors near the Project:

- Herds of elk were identified to the south of Springbank Road and east of Highway 22, and to the west of Highway 22 and to the north of Springbank Road
- Elk tracks and scat were noted in the southeastern portion of the PDA
- Mule deer, as well as their tracks and scat were identified in the southeastern and southwestern portions of the PDA
- White-tailed deer were noted on TN Reserve 145 east of Bragg Creek

A landowner in the southwestern portion of the PDA noted that her property contained an osprey nest.

A bald eagle nest, with two eaglets, was identified in the southeastern portion of the PDA near the Elbow River and ECN expressed concern that it may be located near the unnamed creek. ECN noted that the bald eagle is culturally and spiritually important, and its feathers are used for ceremonial purposes.

Hunting and Trapping:

ECN noted that some landowners allow ECN members to access private lands to hunt.

Hunting on private lands has become the preferred method owing to increased displacement of wildlife from

Wildlife

<u>Species</u>: Moose, grizzly bear, rabbit, coyote, cougar, muskrat, short-eared owl, elk, black bear, porcupine, weasel, lynx, bobcat, bald eagle, osprey, duck, white-tailed deer, mule deer, wolf, marten, beaver, and sharp-tailed grouse.

<u>Locations</u>: Five wildlife areas were mapped by ECN: four are within the PDA, one is within the RAA, and two of the wildlife areas within the PDA are intersected by permanent Project infrastructure, including the gravel road and off-stream dam. A private property in the southwestern portion of the PDA contained an osprey nest. A bald eagle nest was identified in the southwestern portion of the PDA near the Elbow River.

Site Access: The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Native trees and shrubs should re-establish over time. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see the EIA, Volume 3A, Section 11.4.2). Impacts to wildlife are expected to be minimum and temporary.

Mitigations: In addition to the measures proposed to mitigate potential effects on vegetation and wetlands described above, Alberta Transportation will implement the following measures to mitigate potential effects on wildlife and biodiversity:

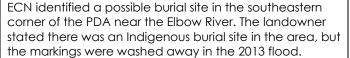
- Pre-construction surveys will be conducted to identify wildlife features (e.g., nests, dens) and appropriate site-specific mitigation developed.
- Where possible, construction activities during the RAP for the KWBZ identified along Elbow River (December 15 to April 30) will be avoided or reduced. This will limit potential sensory disturbance to wintering ungulates (ESRD 2015, GoA 2017). If construction activities must occur during this time period, a final wildlife mitigation and monitoring plan will be developed in consultation with regulators, which will include monitoring ungulate habitat use and response to human disturbance.
- Restrict all construction activities to the approved construction footprint.
- Where possible, temporary workspaces and access roads will be in areas that avoid wildlife features and native vegetation (e.g., shrubland, treed areas, wetlands). Existing access roads and previously disturbed areas will be used, where feasible.
- Where fencing is proposed to restrict livestock access to Project structures (e.g., diversion channel), wildlife-friendly fencing will be installed to allow ungulate passage.
- If an active nest or den is found, it will be subject to a provincial or federal disturbance setback buffer and site-specific mitigation.
- The diversion channel will be built with 3H:1V side slopes, which is within the range that most large mammals (e.g., elk,) are known to traverse (McCorquodale 2003; Frair et al. 2005; Mao et al. 2005; The Bow Corridor Ecosystem Advisory Group 2012).
- The side slopes and bottom of the diversion channel will be vegetated, except under the proposed bridges and at Primez Creek. Vegetated areas will provide a more conducive wildlife passage across the channel.
- To maintain ungulate movement within the KWBZ, the floodplain berm will be revegetated with materials conducive for ungulate movement. The section of reinforced concrete (approximately 250 m) closest to Elbow River will be covered with topsoil and seeded with native grasses. The central portion of the floodplain berm includes approximately 550 m of exposed riprap, where sections will be filled with substrate finer than riprap, such as sand, gravel and vegetation to allow for more walkable sections (Austin and Garland 2001; Huijser et al. 2008; Clevenger 2011). The south portion, farthest from Elbow River, will be a 450 m earthen embankment vegetated with native grasses.
- A remote camera program will be designed with AEP to identify whether the diversion channel acts as a barrier to wildlife movement during dry operations, especially for ungulates, and determine the effectiveness of mitigation implemented throughout the diversion channel. This will include monitoring along Elbow River to determine if wildlife use of the KWBZ has been affected by the construction and operation of the Project. Although the specific details and design of the remote camera program will be determined with AEP prior to construction, the following describes the basis of a preliminary approach.
- During the dry operation phase, a total of 14 remote cameras will be deployed in the wildlife LAA and monitor wildlife movement for at least one-year post-construction. The six remote cameras along the Elbow River will remain at the same locations as during the construction phase. Four remote cameras will be deployed soon after completion of Project construction and placed at the same locations as pre-construction baseline surveys near Highway 22 (i.e., near the raised portion of the highway at the north end of the wildlife LAA). An additional four remote cameras will be installed along wildlife friendly fencing at the edge of the diversion channel at crossable sections where there is vegetation. Remote cameras at the diversion channel will be spaced approximately 1 km apart.
- A wildlife biologist will visit the cameras every four months during construction and operation to change out memory cards and batteries and check on the overall status of equipment (e.g., positioning, weather related malfunctions, animal or human tampering of equipment).



Indigenous Statements on the Location of Traditional Resources, Traditional Practices, Identification of Preferred Use Areas and the Relative Importance of These Sites	Distribution of Traditional Resources and TLRU within the PDA, LAA, and RAA, Site Accessibility and Efforts to Reconcile (Mitigations)
Crown lands closer to the ECN reserve due to development and recreation activities. ECN noted that the increase in recreational hunters on Crown lands is a "source of cultural stress." ECN stated the Project area represents one of the least disturbed and accessible areas for ECN hunters. A group of hunters travelled to the PDA in 2018 to hunt moose and elk on private lands. ECN estimated that community members have harvested more than 20 large ungulates from the PDA and the areas to the northeast. Other hunting areas were identified by ECN: Private lands east of Highway 22 and to the south of Highway 1, towards Calaway Park to the east and Highway 8 to the south South of Jumping Pound South of Redwood Meadows and east of Bragg Creek on TN Reserve 145 Source: ECN TUS 2018 (CEAR #46) ECN 2018 (CEAR #46)	 During dry operations, monitoring of wildlife movement using remote cameras would occur for at least one year following construction. There were no beaver dams or lodges identified within the construction footprint for the Project during the baseline wildlife surveys completed within the LAA and, as a result, Alberta Transportation is not expecting to remove any dams or lodges. If an active bedever dam is failed within the construction footprint at a later date, mitigation for dam removal will be developed with the appropriate agencies (e.g., AEP) and the relevant permit(s) obtained, as required. At the end of construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded to meet AEP reclamation requirements. Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important. Hunting and Trapping: Locations: Hunting areas were mapped by ECN within the PDA, LAA and RAA. Site Access: The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (\$66 ha) represented by temporary workspace which will be reclaimed following construction. Although there would be temporary displacement and disturbance to wildlife during construction, on measurable change in the abundance of wildlife in the RAA is unlikely Eev Volume 3A. Section 11.42.1. Impacts to hunting and trapping are expected to be minimal and temporary. The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with fi
Travel Routes	7 Note that that is portation is continuined to originity engagement with Ecry, incloding lace maying opportunities for Ecry to participate in troject activities.
ECN noted that community members continue to travel and use areas within the PDA, LAA and RAA for traditional purposes. Travel occurs via highways, roads and trails in all seasons. Source: ECN TUS 2018 (CEAR #46) ECN 2018 (CEAR #46)	Locations: 16 access routes were mapped by ECN: five are within the PDA, seven are within the LAA, four are within the RAA. Of the access routes within the PDA, four are intersected by permanent Project infrastructure, including the gravel road, diversion channel, off-stream dam, and highway right-of-way. Site Access: Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction access management. Portions of the access routes identified by ECN that are located within the designated construction footprint will be directly affected by construction activities and fencing of infrastructure will restrict access to certain areas of the Project. Highway 22 will be raised above the design flood level, and culverts installed to prevent the highway from flooding. Traffic will be maintained along Highway 22 by shifting the new lanes west. A new bridge will be required where Highway 22 crosses the diversion channel. Highway 22, Township Road 242 and Township Road 244 will not be affected by flood magnitudes up to and including the design flood. Springbank Road will remain above water for the 1:10 year flood and larger magnitudes up to approximately the 1:50 year flood. For floods larger than the 1:50 year flood, Springbank Road will be partially submerged, and traffic will be detoured to Highway 22 by means of Range Road 40 and Township Road 250. During construction, there will be no road closures with the exception of Range Road 41 which currently dead-ends south of Springbank Road; it will be permanently clossed.



Indigenous Statements on the Location of Traditional Resources, Traditional Practices, Identification of Preferred Use Areas and the Relative Importance of These Sites	Distribution of Traditional Resources and TLRU within the PDA, LAA, and RAA, Site Accessibility and Efforts to Reconcile (Mitigations)
	The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites First Nations and stakeholders to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.
	Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.
	• Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction access management.
	• In the event an unanticipated cultural resource is discovered during construction of the Project a historical resources chance find protocol would be enacted, as required by ACMWS during construction.
	Alberta Transportation will follow current industry best practices and comply with all provincial and federal legislation. Should additional historical resources be encountered during construction, Alberta Transportation will follow current ACMWS policies and guidelines.
	• Alberta Transportation will minimize disturbance to cultural and spiritual sites and subsurface impacts, and develop a protocol for recovery, collection, reporting on, and possible repatriation of artifacts found in consultation with Indigenous groups, which could include flagging, fencing, or providing signage of sites to prevent disturbance during construction
	Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components.
	Alberta Transportation commits to offering to hold workshops with Indigenous groups to discuss mitigation measures.
Habitation, Camping, Cultural, Spiritual, Ceremonial Sites	
ECN noted that community members continue to camp and use areas within the PDA, LAA and RAA for traditional purposes.	Locations: Six occupancy areas were mapped by ECN: four are within the LAA and two are within the RAA. Two historical were mapped by ECN within the PDA, one is intersected by permanent Project infrastructure, including the gravel road, diversion channel, diversion structure and floodplain berm. Five spiritual areas were mapped by ECN: two are within the LAA and three are within the RAA.
ECN identified a traditional camping ground for community members traveling through the Elbow River area, to the southwest of the intersection of Highway 22 and Highway 8. ECN noted that community members camp in the Bragg Creek area and the Elbow River Recreation Area while travelling to fish and gather medicinal plants.	A number of areas of spiritual and ceremonial significance were identified by ECN, including the TN powwow grounds to the southeast of Highway 22 between Redwood Meadows and Bragg Creek, as well as the Sun Dance grounds located on TN Reserve 145. These areas of spiritual and ceremonial significance are located outside the RAA.
	Site Access: The occupancy areas identified by ECN are located outside the PDA and are not anticipated to be affected by the Project. The historical site mapped by ECN has the potential to be affected by construction of the gravel road, diversion channel, diversion structure and floodplain berm. Alberta Transportation is committed to ongoing engagement EC to better understand the potential effects and discuss mitigation measures, where warranted. Sites located outside the PDA are not anticipated to be affected by the Project.
	Alberta Transportation has conducted an HRIA for the Project and no sites of high significance, such as effigies, medicine wheels, graves, pottery or tipi rings have been made in the PDA to date. Six campsites have been identified within the PDA, most of these sites are small and have been heavily disturbed by cultivation or erosion. One undisturbed precontact campsi
ECN identified three occupancy sites on the TN Reserve 145 where an ECN Elder stays with family while visiting.	identified in the treed uplands adjacent to the Elbow River is considered to have heritage value and ACMWS is requiring standard mitigation, to include photography, mapping and archaeological excavation of this site (Volume 3A, Section 13.2.2).
CN noted that cultural, spiritual, ceremonial sites are mportant to their people and traditional practices.	The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of
ECN noted that areas within the PDA, LAA and RAA contain important cultural, spiritual, ceremonial sites.	the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the des LUA. Alberta Transportation invites ECN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing condition
ECN identified a potential tipi ring at the edge of a trail in a traditional camping area adjacent to the Elbow River	private land) would result in a positive change to the ability to exercise Section 35 rights. <u>Mitigations</u> : Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.



in the southwestern portion of the PDA.

- Alberta Transportation will evaluate the reported presence of campsites and features observed by KFN and the disagreement between conventional archaeological assessment and KFN to determine whether a supplemental historical resources impact assessment or additional field visits by ACMWS is required. See Alberta Transportation response to Round 1 CEAA Package 2, IR2-10.
- Alberta Transportation commits to offering to hold workshops with ECN to discuss mitigation measures to discuss impacts to habitation, camping, cultural, spiritual, ceremonial sites.
- Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components.



Table 7-1 Location of Important Traditional Resources and Traditional Use Areas Relative to PDA, LAA and RAA as Identified by Indigenous Groups

Indigenous Statements on the Location of Traditional Resources, Traditional Practices, Identification of Preferred Use Areas and the Relative Importance of These Sites	Distribution of Traditional Resources and TLRU within the PDA, LAA, and RAA, Site Accessibility and Efforts to Reconcile (Mitigations)
A number of areas of spiritual and ceremonial significance were identified by ECN, including the TN powwow grounds to the southeast of Highway 22 between Redwood Meadows and Bragg Creek, as well as the Sun Dance grounds located on TN Reserve 145. There is also a cultural camp for youth to the east of the Sun Dance grounds. Source: ECN TUS 2018 (CEAR #46) ECN 2018 (CEAR #46)	 Alberta Transportation will participate in discussions with ACMWS and Indigenous groups regarding further investigation of identified sites located within the designated construction site boundary. The disposition of artifacts and provision of GPS coordinates are under the jurisdiction of ACMWS and not Alberta Transportation. Alberta Transportation will limit disturbance, to the extent possible and practical, of cultural and spiritual sites and subsurface impacts. Alberta Transportation will follow heritage resource protection methods as mandated by the HRA. Alberta Transportation will minimize disturbance to cultural and spiritual sites, and develop a protocol for recovery, collection, reporting on, and possible repatriction of artifacts found in consultation with Indigenous groups, which could include flagging, fencing, or providing signage of sites to prevent disturbance during construction. Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction access management. Alberta Transportation will follow current industry best practices and comply with all provincial and federal legislation. Should additional historical resources be encountered during construction, Alberta Transportation will follow current ACMWS policies and guidelines. Alberta Transportation will follow heritage resource protection methods as mandated by ACMWS and verify archaeological results with Indigenous groups. Alberta Transportation will commit to adhering to any conditions ACMWS applies to these sites. Alberta Transportation is committed to ongoing engagement with ECN, including heritage resources mitigation prior to construction. In the event an unanticipated cultural resource is discovered during construction of the Project a historical resources chance
Louis Bull Tribe (LBT)	will help preserve the contour sites and received less of confidencin to directions.
General Comments	
No site-specific information has been provided but LBT expressed concern about the loss of accessible Crown lands on which to practice Aboriginal and Treaty rights being a long-term residual effect of the Project. LBT identified moose, deer, cougar, coyote, wolf and grizzly bear as species of cultural importance and noted	Species: Moose, deer, cougar, coyote, wolf and grizzly bear. Locations: LBT did not identify specific traditional use sites, including hunting and trapping, fishing, plant gathering, or habitation, vamping, vultural, spiritual, ceremonial sites, within the PDA, LAA, or RAA. Site Access: The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see the EIA, Volume
they are harvested for sustenance, pelts and other uses. LBT stated that community members have not hunted, trapped, gathered plants or travelled extensively in the Project area due to the private ownership of most of the lands. Sources:	3A, Section 11.4.2 of the ElA). Impacts to hunting and trapping are expected to be minimal and temporary. The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites LBT to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.
LBT TUS 2018 (CEAR #1228) LBT 2018 (CEAR #49) Letter from LBT to CEAA (June 18, 2018)	Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas. In addition to the measures proposed to mitigate potential effects on wildlife and biodiversity, and on vegetation and wetlands, as described above, Alberta Transportation will implement the following measures to mitigate potential effects on harvesting:
	 Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods. Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction land access management.



Table 7-1 Location of Important Traditional Resources and Traditional Use Areas Relative to PDA, LAA and RAA as Identified by Indigenous Groups

Indigenous Statements on the Location of Traditional		
Resources, Traditional Practices, Identification of		
Preferred Use Areas and the Relative Importance of		
These Sites		

Distribution of Traditional Resources and TLRU within the PDA, LAA, and RAA, Site Accessibility and Efforts to Reconcile (Mitigations)

Montana First Nation (MFN)

General Comments

MFN expressed concern regarding medicinal and ceremonial plants in the Project area, but no site-specific information has been provided.

Source:

MFN Meeting with Alberta Transportation (June 27, 2018) (cited in MFN SR1 SCRT Oct 2016- Sept 2019; Specific Concern #16)

Locations: MFN did not identify specific traditional use sites, including hunting and trapping, fishing, plant gathering, or habitation, camping, cultural, spiritual, ceremonial sites, within the PDA, LAA, or RAA.

Site Access: The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites MFN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.

Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.

In addition to the measures proposed to mitigate potential effects on wildlife and biodiversity, and on vegetation and wetlands, as described above, Alberta Transportation will implement the following measures to mitigate potential effects on plant gathering.

- Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction.
- Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction access management.

Samson Cree Nation (SCN)

Fish and Fishing

SCN has and continues to exercise its fishing rights. As such, the potential destruction of fish and fish habitat is of particular concern to SCN.

SCN expressed concern that westslope cutthroat trout in the PDA was not considered.

Source

SCN 2018 (CEAR #52) (cited in SCN SR1 SCRT Oct 2016-Sept 2019, Specific Concern #11, 12)

Fish

Species: Westslope cutthroat trout.

Locations: The Elbow River is within the PDA. Pure strain westslope cutthroat trout do not exist within the PDA, LAA or RAA. See Alberta Transportation Response to Round 1, CEAA Package 3, IR3-30.

<u>Site Access:</u> Current use sites and areas located outside the PDA are not anticipated to be directly affected by the Project. The construction of the diversion channel will result in the loss of 1,854 m² of fish habitat on the bed and banks of Elbow River and 300 m² of fish habitat at the interception of the tributary ID1350. Potential habitat offset gains will be addressed as part of the *Fisheries Act* authorization process for the Project: a habitat offset plan will be developed and submitted for review and will take into consideration input from Indigenous groups, DFO and stakeholders. It will also align with local fish management objectives.

Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.

- Structures will be designed so that storm water runoff and wash water from the access roads, decks, side slopes, and approaches are directed into a retention pond or vegetated area to remove suspended solids, dissipate velocity, and prevent sediment and other deleterious substances from entering watercourses.
- Works in water will be timed with respect to the RAPs wherever possible. For Elbow River, the RAP is May 01 July 15 and September 16 April 15. Condition and use of RAPs will be provided within further Project permitting and authorization under the Fisheries Act. For planning purposes, the Elbow River RAP will be applied as an avoidance and mitigation measure
- To allow for fish passage and construction of the structures within the Elbow River, the Elbow River will be temporarily diverted, and flows will be maintained downstream by the construction of a temporary bypass channel.
- Drainage areas within the reservoir will be graded to reduce stranding of fish during release of retained flood water from the reservoir.
- Boulders will be added to increase the bed roughness of the channel immediately downstream of the diversion structure, which will increase water depths and reduce velocities.
- Boulder v-weir structures will be constructed in the channel downstream of the gates to provide slower velocity and deeper resting zones.
- A monitoring program will be undertaken to identify if fish passage is impeded for migratory salmonids or other fish species, including bull or cutthroat trout.
- Maintenance, debris removal on the structure, and on the fish passage structures will occur to accommodate fish passage.



Indigenous Statements on the Location of Traditional Resources, Traditional Practices, Identification of Preferred Use Areas and the Relative Importance of These Sites	Distribution of Traditional Resources and TLRU within the PDA, LAA, and RAA, Site Accessibility and Efforts to Reconcile (Mitigations)
	Debris will be cleaned from the diversion structure gates after a flood recedes to allow unimpeded fish passage upstream over the structure.
	• Isolated pools will be identified, marked, and a determination by a Qualified Aquatic Environmental Specialist will be made as to whether there are stranded fish in the pool that require rescue and relocation to secure habitats in Elbow River. When the water has been fully drained, the unnamed creek will be surveyed to identify isolated pools where fish might be stranded.
	Where debris removal from the structures is required, debris removal will be timed to avoid disruption to sensitive fish life stages (i.e., outside the RAP), unless the debris and its accumulation is immediately threatening to the integrity of the structure or relates to an emergency (i.e., risk of structure failure).
	During post-flood reservoir maintenance, areas that had isolated pools may be graded to prevent the isolation of fish in successive flood events.
	annual offset monitoring to assess condition of habitat offsetting measures and identify potential remediation measures:
	- Success of offsetting measures determined by criteria that determine if offsetting is functioning as intended and to identify contingencies if monitoring shows deficiencies.
	 Confirmation that offsetting components meet the design requirements.
	 Confirmation that the terms of the DFO Authorization are met.
	A post-construction report will be provided to DFO at the completion of construction that will outline the as-built condition of the offsetting measures. In addition to a photographic log, as-built engineer drawings, and construction monitoring, post-construction measurements will include:
	Location and measurements of the structures on the bed and banks.
	Location and quantity of the vegetation reclamation.
	Location and measurements of the Fish Passage Mitigation Structure.
	Fish habitat, abundance, distribution, and benthic invertebrate monitoring in previously sampled reaches (1-12).
	Location and measurements of required fisheries offsetting measures.
	<u>Fishing</u>
	<u>Site Access:</u> With the implementation of mitigation, the Project is unlikely to reduce the productivity or sustainability of a commercial, recreational or Aboriginal fishery as defined by the <i>Fisheries Act</i> . During dry operations, there will be no changes to flow in Elbow River, and therefore no alterations to the quality of fish habitat. Overall, the Project is not expected to limit the availability of traditional resources for current use in the RAA (see Volume 3A, Section 8.4.4 and Section 14.8.1).
	In addition, the Project will create access through the development of a permanent portage for Elbow River.
	The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites SCN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.
	Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.
	Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods. Alberta Transportation will avoid substantial interference with public navigation of Elbow River through the following design practices:
	 As part of construction, a permanent portage will be developed around the in-stream water intake components.
	Signs directing traffic to detours will be installed during construction of road realignments and modifications.
	• Signs will be installed along the existing Elbow River channel. Multiple signs will be placed upstream and downstream of the water intake components on both banks of Elbow River. These signs will warn users on Elbow River that they are approaching in-stream water intake components and of the associated danger with this infrastructure and to direct them to a portage location.
	Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction access management.



Table 7-1 Location of Important Traditional Resources and Traditional Use Areas Relative to PDA, LAA and RAA as Identified by Indigenous Groups

Indigenous Statements on the Location of Traditional Resources, Traditional Practices, Identification of Preferred Use Areas and the Relative Importance of These Sites	Distribution of Traditional Resources and TLRU within the PDA, LAA, and RAA, Site Accessibility and Efforts to Reconcile (Mitigations)
	Alberta Transportation will create a portage to facilitate access to the river.
	To allow for fish passage and construction of the structures within the Elbow River, the Elbow River will be temporarily diverted, and flows will be maintained downstream by the construction of a temporary bypass channel.
Wildlife and Hunting	
SCN has and continues to exercise its hunting rights. As such, the potential destruction of wildlife habitat is of	Locations: SCN did not identify hunting sites, within the PDA, LAA, or RAA. The site of signs of a bear foraging for tender dogwood roots was not disclosed by SCN, SCN did not identify specific hunting and trapping sites within the PDA, LAA, or RAA.
particular concern to SCN. In addition, it is likely that SCN hunting rights will be impacted during the construction and operation of the Project. <u>Source</u> :	Site Access: The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see Volume 3A, Section 11.4.2). Impacts to hunting and trapping are expected to be minimal and temporary.
SCN 2018 (CEAR # 52) (cited in SCN SR1 SCRT Oct 2016- Sept 2019; Specific Concern #2)	The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites SCN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.
	Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.
	In addition to the measures proposed to mitigate potential effects on wildlife and biodiversity, and on vegetation and wetlands, as described above, Alberta Transportation will implement the following measures to mitigate potential effects on hunting:
	Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods.
	Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction land access management.
Métis Nation of Alberta, Region 3	
General Comments	
Members of MNAR3 have harvested plants, caught fish, and hunted/trapped in the Project area.	Locations: MFN did not identify specific traditional use sites, including hunting and trapping, fishing, plant gathering, or habitation, camping, cultural, spiritual, ceremonial sites, within the PDA, LAA, or RAA.
MNAR3 expressed concern that the impacts to country foods from reservoir construction has the potential to limit access or have adverse effects on the ability of members to access country foods.	Site Access: The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Although there would be temporary displacement and disturbance during construction, a measurable change in the abundance of wildlife, fish or plants in the RAA is unlikely (see the EIA, Volume 3A, Section 11.4.2). Impacts to harvesting and country is expected to be minimal and temporary.
Source:	Current use sites and areas located outside the PDA are not anticipated to be directly affected by the Project.
MNAR3 Letter to Alberta Transportation (March 21, 2019) (cited in MNAR3 SR1 Table Oct 2016-Sept 2019; Specific Concern #5)	The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation is available to meet with MNAR3 to discuss the LUA.
	Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.



December 2019

Table 7-1 Location of Important Traditional Resources and Traditional Use Areas Relative to PDA, LAA and RAA as Identified by Indigenous Groups

Indigenous Statements on the Location of Traditional Resources, Traditional Practices, Identification of Preferred Use Areas and the Relative Importance of These Sites	Distribution of Traditional Resources and TLRU within the PDA, LAA, and RAA, Site Accessibility and Efforts to Reconcile (Mitigations)
	In addition to the measures proposed to mitigate potential effects on wildlife and biodiversity, and on vegetation and wetlands, as described above, Alberta Transportation will implement the following measures to mitigate potential effects on harvesting of country food:
	Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods.
	Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction land access management.



Table 7-2 Indigenous Group Views on the Project's Potential Effects Potential Effects Traditional Land and Resource Use and Alberta Transportation's Responses

Views related to Potential Effects on TLRU	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
General Comments and Concern			
Indigenous groups have expressed concerns regarding potential Project impacts on TLRU.	Multiple sources see below	Alberta Transportation has undertaken efforts to obtain primary information regarding Indigenous TLRU.	In order to obtain primary information regarding potential Project impacts, Alberta Transportation has funded numerous TUS's.
Indigenous groups have expressed concerns regarding use of secondary versus primary		Alberta Transportation has incorporated primary information related to Indigenous TLRU within its Project design and its environmental assessment.	Details of Alberta Transportation's efforts to collect primary information regarding potential Project impacts on Indigenous TLRU through its various Indigenous engagement activities are presented in Table 7-1.
sources of information to evaluate potential site-specific Project impacts on TLRU. Indigenous groups have expressed concerns		Alberta Transportation has compiled a listing of Site-Specific Concerns expressed by Indigenous groups, including the relationship of TLRU sites within the PDA, LAA, RAA (see Table 7-2).	
that site specific impacts of the Project on TLRU have not been adequately assessed.		Alberta Transportation has compiled a listing of Site-Specific oncerns expressed by Indigenous groups regarding the relative importance of resources, preferred use areas, as well as access to the areas and resources (see Table 7-2).	
		Alberta Transportation have considered potential site-specific Project impacts on Indigenous TLRU.	
		Alberta Transportation have developed a full suite of mitigations measures to reduce impacts to Indigenous TLRU.	
		Site-specific mitigation measures related to Indigenous TLRU are described in Table 7-2.	
Kainai First Nation/Blood Tribe (KFN)			
KFN is concerned that the Proponent has not made adequate efforts to obtain information	 KFN Letter to Alberta Transportation (January 5, 2018) and DEMA (June 25, 2018) (cited in KFN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #1) KFN 2018 (CEAR # 47) (cited in KFN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #1, 3, 4) KFN TUS 2018 (CEAR # 47) (Pg. 19-29, 41-45) 	Alberta Transportation has undertaken efforts to obtain information regarding the traditional territories of KFN information.	Alberta Transportation have outlined details of its Indigenous engagement activities in Table 7-1.
about the traditional territory of KFN and has failed to adequately assess the impacts to		Alberta Transportation has compiled a listing of Site-Specific Concerns expressed by KFN including the relationship of TLRU sites within the PDA, LAA, RAA (see Table 7-2).	On March 23, 2018, Alberta Transportation sent detailed responses to Specific Concerns raised to date by providing a copy of Table 7-7 SR1 Project Specific Concerns and Responses - Kainai First Nation from the March 2018 EIA. Alberta Transportation funded a Project specific KFN TUS. Alberta Transportation provided a written response on August 9, 2019 and met on October 17, 2019 to discuss the response.
the current use of lands for traditional purposes and potential impacts to KFN rights.		Alberta Transportation has compiled a listing of Site-Specific Concerns expressed by KFN regarding the relative importance of resources, preferred use areas, as well as	
		access to the areas and resources (see table 7-2).	
		Alberta Transportation have considered potential site-specific Project impacts on KFN TLRU.	
•		Alberta Transportation have developed a full suite of mitigations measures to	In December 2019, Alberta Transportation provided written responses to the KFN Technical Review dated June 2018, which included these
		reduce impacts to KFN TLRU. Mitigation measures related to KFN TLRU are described in Table 7-2.	concerns as Question 7 through 12. Alberta Transportation will offer to meet with KFN regarding the written responses.
			Through these engagement efforts Alberta Transportation have worked with KFN to identify issues of concern regarding impacts on TLRU.



Table 7-2 Indigenous Group Views on the Project's Potential Effects Potential Effects Traditional Land and Resource Use and Alberta Transportation's Responses

Views related to Potential Effects on TLRU	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
Piikani Nation (PN)			
PN is concerned that the Proponent has not adequately assessed impacts on PN TLRU.	PN 2018 (CEAR #48)PN Meeting with Alberta	Alberta Transportation has undertaken efforts to obtain primary information regarding PN TLRU.	Alberta Transportation have outlined details of its Indigenous engagement activities in Table 7-1.
PN requests that Alberta Transportation discuss how issues of concern to PN, their Treaty and Aboriginal Rights, traditional	Transportation (December 17, 2018); (cited in PN SR1	Alberta Transportation has compiled a listing of Site-Specific Concerns expressed by PN including the relationship of TLRU sites within the PDA, LAA, RAA (see Table 7-2).	At the meeting held on December 17, 2018, Alberta Transportation reassured PN that they were listening to their concerns and taking them
knowledge, and its traditional and contemporary land uses has been used in	SCRT August 2014-June 2019; Specific Concern # 3, 8)	Alberta Transportation has compiled a listing of Site-Specific Concerns expressed by N regarding the relative importance of resources, preferred use areas, as well as access to the areas and resources (see table 7-2).	into account for the Project. In December 2019, Alberta Transportation provided written responses to the PN Technical Review dated June 2018, which included these
 Project planning and site selection. The PN voiced concerns that their concerns would not be taken into account. 		Alberta Transportation have considered potential site-specific Project impacts on PN TLRU.	concerns as Question 46. Alberta Transportation will offer to meet with PN regarding the written responses.
would not be taken into account.		Alberta Transportation have developed a full suite of mitigations measures to reduce impacts to PN TLRU.	Alberta Transportation funded a Project specific PN TUS. Alberta Transportation provided a written response in December 2019 and will offer to meet with PN regarding the written responses.
		Mitigation measures related to PN TLRU are described in Table 7-2.	Through these engagement efforts Alberta Transportation have worked with PN to identify issues of concern regarding impacts on TLRU.
Tsuut'ina Nation (TN)			
TN expressed concerns about the methodology used in the EIA and TUS	TN Meeting with Alberta Transportation (December	As per direction from TN, Alberta Transportation have not compiled a listing of site-specific concerns.	Alberta Transportation have outlined details of its Indigenous engagement activities in Table 7-1.
 Response regarding Treaty rights. In accordance with the terms of use, when identifying the relative location of TN use 	6, 2018 cited in TN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #2)	Project design. Alberta Transportation have developed a full suite of mitigations measures to reduce impacts to TN TLRU. Mitigation measures related to TN TLRU are described in Table 7-2.	Alberta Transportation funded a Project specific TN TUS. Alberta Transportation provided a written response on November 23, 2018 and met on December 6, 2018 to discuss the response.
areas, all hunting, trapping, fishing, plant gathering, travel, habitation, and cultural or ceremonial areas or other areas associated with traditional activities are generally referred to as "traditional use areas".	 TN 2018. Email to Alberta Transportation (May 11, 2018) TN TUS 2018 		Under cover dated January 28, 2019, Alberta Transportation requested that TN provide its views and perspectives on its Aboriginal and Treaty rights, cultural and experiential values, and country foods. TN responded in February 2018 and declined to provide its views on these topics.
 In addition, the specific locations of traditional use areas have not been disclosed in this document. 			Through these engagement efforts Alberta Transportation have worked with TN to identify issues of concern regarding impacts on TRLU.
TN has put the following conditions on the use of the information in the TLRU Report:			
 Alberta Transportation is permitted to identify whether the specific locations of traditional use sites are either inside or outside of the Project Development Area, LAA, or RAA. 			
 Alberta Transportation is not permitted to identify specific locations of traditional use sites. 			
 Alberta Transportation is permitted to identify use sites generally as "traditional use areas". 			



Table 7-2 Indigenous Group Views on the Project's Potential Effects Potential Effects Traditional Land and Resource Use and Alberta Transportation's Responses

Alberta Transportation has compiled a listing of Site-Specific Concerns expressed by SCN regarding the relative importance of resources, preferred use areas, as well as Alberta Transportation has asked for permission to use the information	Views related to Potential Effects on TLRU	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
Termination for the SNI Project, and not for any other purpose accept with the winthin permission of the IN. Fig. 1 (CNI III S0 III p. 38) Fig. 2 (CNI III S0 III p. 38) Fig. 3 (CNI III S0 III p. 38) Fig. 4 (CNI III S0 III p. 38) Fig. 4 (CNI III S0 III p. 38) Fig. 5 (CNI III p.	disclose the specific nature of the			
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resource constraints. reduce impacts to ECN TLRU. Mitigation measures related to ECN TLRU are described in Table 7-2. Mitigation measures related to ECN TLRU are described in Table 7-2. MRN expressed concerns about how the EIA was conducted without directly engaging with MFN. MRN Expressed concerns about how the EIA was conducted without directly engaging with MFN. MRN SET SCT Oct 2016-Sept 2019 SCRT: Specific Concern #1] MRN 2018 (CEAR #51) MRN 2018 (CEAR #5	that are carried out within the confines of			
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Laccess to the areas and resources (see table 7-2)		20112011 11 10)		



Table 7-2 Indigenous Group Views on the Project's Potential Effects Potential Effects Traditional Land and Resource Use and Alberta Transportation's Responses

Views related to Potential Effects on TLRU	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps	
		Alberta Transportation have considered potential site-specific Project impacts on SCN TLRU.	Through these engagement efforts Alberta Transportation have worked with SCN to identify issues of concern regarding impacts on TLRU.	
		Alberta Transportation have developed a full suite of mitigations measures to reduce impacts to SCN TLRU.		
		Mitigation measures related to SCN TLRU are described in Table 7-2.		
Métis Nation of Alberta, Region 3 (MNAR3)				
EIA should not be deemed complete as many Indigenous groups have not completed	MNAR3 Email to CEAA (November 16, 2017)	Alberta Transportation has undertaken efforts to obtain primary information regarding MNAR3 TLRU.	Alberta Transportation have outlined details of its Indigenous engagement activities in Table 7-1.	
their studies.	(cited in MNAR3 SR1 SCRT	Alberta Transportation has compiled a listing of Site-Specific Concerns expressed by	Alberta Transportation funded a Project specific MNAR3 TUS.	
Concern that the EIA resubmission is deadline is in March and the MNAR 3 TUS will not be	Oct 2016-Sept 2019; Specific Concern #17)	Specific Concern #17)	MNAR3 including the relationship of TLRU sites within the PDA, LAA, RAA (see Table 7-2).	On March 23, 2018, Alberta Transportation sent detailed responses to Specific Concerns raised to date by providing a copy of Table 7-12 f
completed; concern that information from TUS will not be included.	MNAR3 TLRU workshop (Fabruary 22, 2018); (cited)	iary 22, 2018); (cited is Nation of Alberta, Alberta transportation rias compiled a listing of sile-specific Concerns expressed by MNAR3 regarding the relative importance of resources, preferred use areas, as well as access to the areas and resources (see table 7-2)	the March 2018 EIA.	
103 WIII HOT BE ITICIOGEG.	in Métis Nation of Alberta, Region SR1 SCRT Oct 2016-Sept 2019; Specific		On May 23, 2018, Alberta Transportation met with MNAR3 to review their Specific Concerns and the responses and proposed mitigation measures	
		Alberta Transportation have considered potential site-specific Project impacts on	in Table 7-12.	
	Concern #23)	MNAR3 TLRU.	Through these engagement efforts Alberta Transportation have worked	
		Alberta Transportation have developed a full suite of mitigations measures to reduce impacts to MNAR3 TLRU.	with MNAR3 to identify issues of concern regarding impacts on TLRU.	
		Mitigation measures related to MNAR3 TLRU are described in Table 7-2.		



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Conformity IR2-08

Topic: Indigenous Health and Country Foods

Sources:

EIS Guidelines Part 2, Section 6.1.9; 6.3.4

EIS Volume 3A, Section 14 and 15

EIS Volume 3B, Section 14 and 15

Ermineskin Cree Nation and Blood Tribe – Springbank EIS Technical Comments (CEAR # 46, 47)

CEAA Information Requests Related to the Environmental Impact Statement Round 1 Part 2, IR2-08

Alberta Transportation Responses to IR Round 1, SR1 CEAA IR Package 2, June 14, 2019

Context and Rationale

In CEAA Information Requests Related to the Environmental Impact Statement Round 1 Part 2, IR2-08, the Agency required the proponent to provide information on the availability of and access to country foods and to describe how findings on country foods affect the assessment of effects of changes to the environment on Indigenous peoples. The cover letter to the information requests and the EIS Guidelines further direct the proponent to present points of disagreement between the views of Alberta Transportation and Indigenous groups, along with a description of efforts undertaken to reconcile these differences and a rationale for conclusions.

Alberta Transportation's response to IR2-08 includes information on the availability of and access to country foods and the roles of country foods in health, wellbeing, governance, and rights (Indigenous groups' views presented in Table IR8-1). However, synthesis and analysis of this information is not included. The response notes that exact locations regarding the harvesting of country foods were not disclosed. The Agency does not require detailed information on locations. However, understanding the importance of various harvesting areas and the overlap of these with changes to the environment is necessary to a full understanding the effects of these changes to Indigenous peoples.

Information Requests:

a) Present a discussion, informed by Indigenous groups' views, on the relative importance of the PDA, LAA, and RAA to the availability of and access to country foods of importance.



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b) Identify and discuss areas of disparity between the views of Indigenous groups and Alberta Transportation on potential effects to the availability of and access to country foods and subsequent effects on current use, health and socio-economic conditions, and physical and cultural heritage, efforts made to reconcile the disparities, and rationale for conclusions on matters for which disparity in views remains.

Response

The context and rationale outlined above states that "...Alberta Transportation's response to CEAA Conformity IR2-08 includes information on the availability of and access to country foods and the roles of country foods in health, wellbeing, governance, and rights (Indigenous groups' views presented in Table 8-1). However, synthesis and analysis of this information is not included." Alberta Transportation has taken steps to address the concerns outlined in this question, including additional information requested in parts a) and b).

Since 2014, Alberta Transportation has implemented (and continues to implement) Project Specific Indigenous Engagement to collect Indigenous views and concerns related to potential Project impacts. The engagement includes the funding of TUS, provision of Project related information, facilitation of TLRU workshops, general correspondence, community meetings and Indigenous site-visits. Through this engagement Alberta Transportation has compiled, assessed and analyzed statements of concern from Indigenous groups regarding Indigenous health and country foods.

Table 8-1 includes information on the relative importance of the PDA, LAA, and RAA to the distribution, availability of and access to country foods of importance, along with mitigations that have been developed to address and reconcile Specific Concerns raised by each Indigenous groups. Table 8-2 contains comments and statements of concern expressed by Indigenous groups with respect to the role of country foods as they relate to health, socioeconomic conditions, and physical and cultural heritage including potential areas of disparity, along with Alberta Transportation's response and efforts to consult, engage, and reconcile these views.

a) Alberta Transportation has reviewed feedback received to date regarding the relative importance of the PDA, LAA, and RAA to the availability of and access to country foods of importance. This has been gathered through various engagement and reporting processes including SoCs, engagement meetings, correspondence and TUS reports received. This information has been compiled into SCRTs (provided in CEAA Conformity IR2-01, Appendix 1-2). The TUS conducted by Indigenous groups provide most of this information.

Alberta Transportation reviewed and analysed the results of the TUS reports received. This analysis of TUS reports received from Kanai First Nation, Ermineskin Cree Nation, Louis Bull Tribe, and Tsuut'ina Nation is provided in Alberta Transportation's response to CEAA Conformity IR2-01, Appendix 1-1. Excerpts of these attachments specific to the analysis of potential effects on the availability of and access to country foods and any potential



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subsequent effects on health and socio-economic conditions, and physical and cultural heritage are provided in Table 8-1. In addition, Alberta Transportation has provided a written response to Indigenous groups, apart from Piikani Nation and Métis Nation of Alberta, Region 3, which will receive written responses to their TUS in December 2019. Alberta Transportation has met with Tsuut'ina Nation, Kainai First Nation, Louis Bull Tribe, and Ermineskin Cree Nation to discuss the response to their TUS, including site specific information regarding country foods. Alberta Transportation will meet with Piikani Nation and Métis Nation of Alberta, Region 3.

Site specific information raised by each Indigenous group with respect to availability of and access to country foods and any potential subsequent effects on Indigenous health, socioeconomic conditions, and physical and cultural heritage are presented in Table 8-1, and where possible, a description of site-specific Project effects and mitigation measures is provided.

Alberta Transportation recognizes and respects the importance that Indigenous peoples place on harvesting resources, harvesting areas and how these may be affected by environmental changes. Alberta Transportation has, to the extent possible and within its understanding of the impact, addressed the concerns by describing effects on continued accessibility and proposing mitigations such as the development of principles for future land use, which will be discussed in more detail below.



Table 8-1 Indigenous Statements on the Relative Importance of the PDA, LAA, and RAA to the Availability of and Access to Country Foods of Importance

Indigenous Statements on country foods, including for medicinal and ceremonial purposes

Distribution of Country Foods of Importance (including for medicinal and ceremonial purposes) within the PDA, LAA, and RAA, Accessibility and Efforts to Reconcile Indigenous Concerns through Mitigations

Kainai First Nation/Blood Tribe (KFN)

Fish and Fishing

Fish

KFN stated that Elbow River provides habitat for rainbow trout, cutthroat trout, brook trout, bull trout and rocky mountain whitefish.

KFN identified a spawning area in a tributary of Elbow River and mapped an area of Elbow River as bull trout and cutthroat trout habitat.

Fishing:

Species fished by KFN include rainbow trout, rocky mountain whitefish, and cutthroat trout.

KFN noted that portions of the PDA that intersect Elbow River are currently used to fish for trout and rocky mountain whitefish.

KFN explained that Elbow River is accessible near the bridge on Highway 22 by anglers on foot. Fishing in that area occurs regularly in the summer and fall. Another access point for KFN fishers is near the mouth of Val Vista Creek where it flows into the Elbow River.

KFN mapped several locations that would be suitable for angling along the Elbow River. These locations include areas that are accessible by the public and with negotiated access through private lands.

KFN explained that Elbow River has changed dramatically since the 2013 floods, making it less predictable for anglers, but it is still a good potential source of fish.

Source:

KFN TUS 2018 (CEAR #47)

KFN 2018 (CEAR #47)

Fish

Species: Rainbow trout, cutthroat trout, brook trout, bull trout and rocky mountain whitefish.

<u>Locations</u>: The Elbow River is within the PDA. The fish spawning area identified by KFN is within the LAA. The bull trout and cutthroat trout habitat identified by KFN is within the PDA, and is intersected by the diversion channel, diversion structure, floodplain berm, and gravel road.

Site Access: Current use sites and areas located outside the PDA are not anticipated to be directly affected by the Project. The construction of the diversion channel will result in the loss of 1,854 m² of fish habitat on the bed and banks of Elbow River and 300 m² of fish habitat at the interception of the tributary ID1350. Potential habitat offset gains will be addressed as part of the *Fisheries Act* authorization process for the Project: a habitat offset plan will be developed and submitted for review and will take into consideration input from Indigenous groups, DFO and stakeholders. It will also align with local fish management objectives.

Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.

- Structures will be designed so that storm water runoff and wash water from the access roads, decks, side slopes, and approaches are directed into a retention pond or vegetated area to remove suspended solids, dissipate velocity, and prevent sediment and other deleterious substances from entering watercourses.
- Works in water will be timed with respect to the RAPs wherever possible. For Elbow River, the RAP is May 01 July 15 and September 16 April 15. Condition and use of RAPs will be provided within further Project permitting and authorization under the *Fisheries Act*. For planning purposes, the Elbow River RAP will be applied as an avoidance and mitigation measure.
- To allow for fish passage and construction of the structures within Elbow River, the river will be diverted, and flows will be maintained downstream by the construction of a temporary bypass channel.
- Drainage areas within the reservoir will be graded to reduce stranding of fish during release of retained flood water from the reservoir.
- Boulders will be added to increase the bed roughness of the channel immediately downstream of the diversion structure, which will increase water depths and reduce velocities.
- Boulder v-weir structures will be constructed in the channel downstream of the gates to provide slower velocity and deeper resting zones.
- A monitoring program will be undertaken to identify if fish passage is impeded for migratory salmonids or other fish species, including bull or cutthroat trout.
- Maintenance, debris removal on the structure, and on the fish passage structures will occur to accommodate fish passage.
- Debris will be cleaned from the structure gates after a flood recedes to allow unimpeded fish passage upstream over the structure.
- Isolated pools will be identified, marked, and a determination by a qualified aquatic environmental specialist will be made as to whether there are stranded fish in the pool that require rescue and relocation to secure habitats in Elbow River. When the water has been fully drained, the unnamed creek will also be surveyed to identify isolated pools where fish might be stranded.
- Where debris removal from the structures is required, debris removal will be timed to avoid disruption to sensitive fish life stages (i.e., outside the RAP), unless the debris and its accumulation is immediately threatening to the integrity of the structure or relates to an emergency (i.e., risk of structure failure).
- During post-flood reservoir maintenance, areas that had isolated pools may be graded to prevent the isolation of fish in successive flood events.
- Annual offset monitoring to assess condition of habitat offsetting measures and identify potential remediation measures:
 - Success of offsetting measures determined by criteria that determine if offsetting is functioning as intended and to identify contingencies if monitoring shows deficiencies.
 - Confirmation that offsetting components meet the design requirements.
 - Confirmation that the terms of the DFO Authorization are met.

A post-construction report will be provided to DFO at the completion of construction that will outline the as-built condition of the offsetting measures. In addition to a photographic log, as-built engineer drawings, and construction monitoring, post-construction measurements will include:

- Location and measurements of the structures on the bed and banks.
- Location and quantity of the vegetation reclamation.
- location and measurements of the Fish Passage Mitigation Structure.



Table 8-1 Indigenous Statements on the Relative Importance of the PDA, LAA, and RAA to the Availability of and Access to Country Foods of Importance

Indigenous Statements on country foods, including for medicinal and ceremonial purposes	Distribution of Country Foods of Importance (including for medicinal and ceremonial purposes) within the PDA, LAA, and RAA, Accessibility and Efforts to Reconcile Indigenous Concerns through Mitigations
	Fish habitat, abundance, distribution, and benthic invertebrate monitoring in previously sampled reaches (1-12).
	Location and measurements of required fisheries offsetting measures.
	Fishing
	Species: Rainbow trout, rocky mountain whitefish, and cutthroat trout.
	Site Access: With the implementation of mitigation, the Project is unlikely to reduce the productivity or sustainability of a commercial, recreational or Aboriginal fishery as defined by the Fisheries Act. During dry operations, there will be no changes to flow in Elbow River, and therefore no alterations to the quality of fish habitat. Overall, the Project is not expected to limit the availability of traditional resources for current use in the RAA (see Volume 3A, Section 8.4.4 and Section 14.8.1).
	In addition, the Project will create access through the development of a permanent portage for Elbow River.
	The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites KFN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.
	Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.
	Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods. Alberta Transportation will avoid substantial interference with public navigation of Elbow River through the following design practices:
	As part of construction, a permanent portage will be developed around the in-stream water intake components.
	Signs directing traffic to detours will be installed during construction of road realignments and modifications.
	• Signs will be installed along the existing Elbow River channel. Multiple signs will be placed upstream and downstream of the water intake components on both banks of Elbow River. These signs will warn users on Elbow River that they are approaching in-stream water intake components and of the associated danger with this infrastructure and to direct them to a portage location.
	Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction access management.
	Alberta Transportation will create a portage to facilitate access to the river.
	To allow for fish passage and construction of the structures within Elbow River, Elbow River will be temporarily diverted, and flows will be maintained downstream by the construction of a temporary bypass channel.
Plants and Plant Harvesting	
KFN stated that the PDA encompasses several landscape	Plants:
types, including natural fescue grassland, aspen forests, mixedwood forests and groves of coniferous trees.	Species: Bull berry, chokecherry, saskatoon berry, gooseberry, wild strawberry, blueberry, aapinaakinaman, otsipiis (willow), sage, sweetgrass, lodgepole pine, pine, spruce, aspen, cottonwood, black birch, diamond willow, sooyootispiskoo, aaakitooyisi, sooyaistaa, bachelor root, rose bush (rose hips), yarrow, porcupine plant, shooting star plant, and several
KFN indicated that the ecological setting of the Project area is conducive to the growth of a wide variety of trees, shrubs and grasses that are used for subsistence, medicinal, ceremonial, construction, artisanal, and fuel use.	undisclosed medicinal plants. Locations: The wetland and old growth stand identified by KFN are within the PDA. The old growth stand is intersected by permanent Project infrastructure, including the off-stream reservoir dam. 20 culturally important plant areas were identified by KFN: 15 are within the PDA, 5 are within the LAA. Val Vista Ranch is in the PDA.
Culturally important plants observed by KFN include: bull berry, chokecherry, saskatoon berry, gooseberry, wild strawberry, blueberry, aapinaakinaman, otsipiis (willow), sage, sweetgrass, lodgepole pine, pine, spruce, aspen, cottonwood, black birch, diamond willow, sooyootispiskoo, aaakitooyisi, sooyaistaa, bachelor root, rose bush (rose hips), yarrow, porcupine plant, shooting star plant, and several undisclosed medicinal plants.	Site Access: Of the culturally important plant areas within the PDA, 2 are intersected by permanent Project infrastructure, including the gravel road, off-stream dam, unnamed creek and floodplain berm. Traditionally used plant species within the PDA will be directly affected due to vegetation removal and grading associated with construction, affecting 168 ha associated with permanent Project infrastructure and approximately 566 ha of temporary workspace. Although individual plants will be removed from the PDA, none of the traditionally used species identified will be lost in the LAA, nor will vegetation communities supporting traditionally used plants be lost from the PDA (see the EIA, Volume 3A, Section 10.4). Native trees and shrubs should re-establish over time.



Table 8-1 Indigenous Statements on the Relative Importance of the PDA, LAA, and RAA to the Availability of and Access to Country Foods of Importance

Indigenous Statements on country foods, including for medicinal and ceremonial purposes	Distribution of Country Foods of Importance (including for medicinal and ceremonial purposes) within the PDA, LAA, and RAA, Accessibility and Efforts to Reconcile Indigenous Concerns through Mitigations
KFN and SN noted that there are medicinal and ceremonial plants located on both sides of the Elbow River where the diversion inlet and service sluiceway are proposed to be constructed. These plants will need to be protected or relocated to another spot nearby to ensure they are available	Many of the potentially affected grassland and wetland plant communities have intrinsic adaptations to periodic flooding, while other species such as poplar and spruce would be less tolerant to flooding due to having a low anaerobic tolerance. Mortality of traditional use species found in upland plant communities is expected. However, these species are widespread and are expected to re-establish by natural recruitment; permanent loss of traditional use species is not predicted. Overall, residual effects on vegetation and wetlands post-flood would not result in the loss of native upland or wetland plant communities, nor would it result in the loss of wetland function from the LAA (see the EIA, Volume 3B, Section 10.2).
in the future for Blackfoot traditional people. <u>Source</u> : KFN TUS 2018 (CEAR #47)	Mitigations: At the end of construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded to meet AEP reclamation requirements. Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important.
KFN 2018 (CEAR #47)	In addition, Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods.
KCO and SCO TUS 2017 Research Study Joint Interim Report (pg. 4) (cited in SN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #14)	 Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction. Restrict construction activities to the approved construction footprint.
	 Reduce the removal of vegetation in wetlands to the extent possible. Where possible, conduct ground level cutting/mowing/mulching of wetland vegetation instead of grubbing.
	 Where applicable, in areas not impacted by the permanent Project footprint, if ground conditions are encountered that create potential for rutting, admixing or compaction, minimize ground disturbance by using a protective layer such as matting or biodegradable geotextile and clay ramps or other approved materials between wetland root/seed bed and construction equipment.
	Native areas disturbed by the Project would be reseeded using an Alberta Transportation native custom seed mix.
	Alberta Transportation will not apply herbicide within 30 m of plant species or ecological communities of management concern, wetland or waterbody. Spot spraying, wicking, mowing, or hand picking are acceptable measures for control of regulated weeds in this area.
	A licensed industrial pesticide applicator would be contracted to select and apply all herbicide in compliance with the procedures as outlined in the Code of Practice for Pesticides (GoA 2010b).
	Plant Harvesting
	Site Access: Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction.
	The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites KFN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.
	Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.
	In addition to the measures proposed to mitigate potential effects on wildlife and biodiversity, and on vegetation and wetlands, as described above, Alberta Transportation will implement the following measures to mitigate potential effects on plant harvesting:
	Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction access management.
	Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important.

Alberta Transportation commits to offering to hold workshops with KFN to discuss mitigation measures.



Table 8-1 Indigenous Statements on the Relative Importance of the PDA, LAA, and RAA to the Availability of and Access to Country Foods of Importance

Indigenous Statements on country foods, including for medicinal and ceremonial purposes

Distribution of Country Foods of Importance (including for medicinal and ceremonial purposes) within the PDA, LAA, and RAA, Accessibility and Efforts to Reconcile Indigenous

Concerns through Mitigations

Wildlife and Hunting and Trapping

Wildlife:

KFN identified elk, moose, white-tailed deer, mule deer, grizzly bear, black bear, wolf, beaver, rabbit, skunk, ruffed grouse, sharp-tailed grouse, eagle, hawk, osprey, raven, Canada goose, trumpeter swan, heron, sandhill crane, mallard duck, merganser duck, pintail snipes, and magpie as present in the Project area and of interest to KFN.

KFN explained the importance of the Elbow River to wildlife, noting that the river is the "blood in the veins of the earth and provides sustenance to the game."

The Elbow River was identified as a critical wildlife habitat and migration corridor.

KFN identified areas of high-quality habitat for elk, moose, white-tailed deer, and mule deer, as well as signs of ungulates, including scat, tracks and marks on trees.

KFN identified areas of furbearer habitat, including a beaver dam in a tributary of the Elbow River and beaver habitat on Val Vista Ranch.

KFN identified grizzly bear habitat and signs of grizzly bear and black bear, including scat, claw marks, digs, and torn trees. KFN noted that the local landowners shared photographic evidence from a wildlife trail camera of grizzly bears in the area.

Signs of black bear, wolf, cougar and fox were identified by KFN. Coyote tracks were also observed.

KFN stated that there are many species of birds that nest and live in the Project area, including eagle, owl, crow, magpies, Sitisaisi, and Omahkaasittipimakinnaman.

KFN identified a wetland within natural grassland on the Val Vista Ranch that provides ideal habitat for nesting birds and a stopping place for migratory birds.

Another wetland was identified that is a stopping place for trumpeter swans, herons, sandhill cranes, Canada goose, mallard ducks, and pintail snipes.

KFN also observed ruffed grouse, merganser ducks, Canada geese, and several other bird habitat features. KFN emphasized the interconnectedness of the environment, explaining that the Project area provides habitat for bird, animal and plant species that all support one another.

Wildlife:

<u>Species:</u> Elk, moose, white-tailed deer, mule deer, grizzly bear, black bear, wolf, beaver, rabbit, skunk, ruffed grouse, sharp-tailed grouse, eagle, hawk, osprey, raven, Canada goose, trumpeter swan, heron, sandhill crane, mallard duck, merganser duck, pintail snipes, and magpie owl, crow, Sitisaisi, and Omahkaasittipimakinnaman.

Locations:

<u>Ungulates:</u> KFN identified 24 ungulate habitat areas: 21 are within the PDA, 3 are within the LAA. Of the ungulate habitat areas within the PDA, 11 are intersected by permanent Project infrastructure, including the highway right-of-way, gravel road, new bridge, off-stream dam, unnamed creek, diversion channel, floodplain berm, and emergency spillway. Val Vista Ranch is in the PDA.

<u>Furbearers:</u> Signs of black bear, wolf, cougar, fox and coyote (including tracks) were identified by KFN within the PDA. Four furbearer habitat areas were identified by KFN within the PDA. One of the furbearer habitat areas within the PDA is intersected by permanent Project infrastructure, including the gravel road, off-stream dam, unnamed creek. KFN identified 6 bear habitat areas: 3 are within the PDA, 3 are within the LAA.

<u>Birds:</u> 11 bird habitat areas were identified by KFN: 10 bird habitat areas (including the wetland on the Val Vista Ranch) are within the PDA, 1 is within the LAA. Of the bird habitat areas within the PDA, 1 is intersected by permanent Project infrastructure, including the gravel road, off-stream dam, unnamed creek.

Site Access: The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see Volume 3A, Section 11.4.2).

<u>Mitigations</u>: In addition to the measures proposed to mitigate potential effects on vegetation and wetlands described above, Alberta Transportation will implement the following measures to mitigate potential effects on wildlife and biodiversity:

- Pre-construction surveys will be conducted to identify wildlife features (e.g., nests, dens) and appropriate site-specific mitigation developed.
- Where possible, construction activities during the RAP for the KWBZ identified along Elbow River (December 15 to April 30) will be avoided or reduced. This will limit potential sensory disturbance to wintering ungulates (ESRD 2015, GoA 2017). If construction activities must occur during this time period, a wildlife mitigation and monitoring plan will be developed in consultation with regulators, which will include monitoring ungulate habitat use and response to human disturbance.
- Restrict all construction activities to the approved construction footprint.
- Where possible, temporary workspaces and access roads will be in areas that avoid wildlife features and native vegetation (e.g., shrubland, treed areas, wetlands). Existing access roads and previously disturbed areas will be used, where feasible.
- Where fencing is proposed to restrict livestock access to Project structures (e.g., diversion channel), wildlife-friendly fencing will be installed to allow ungulate passage.

Hunting:

Species: elk, moose, white-tailed deer, mule deer, rabbit, ruffed grouse, sharp-tailed grouse, Canada goose, mallard duck, and merganser duck.

<u>Locations:</u> Elbow River and the Elbow River valley are within the PDA. KFN identified 6 current hunting areas that are within the PDA. Of these, 4 are intersected by permanent Project infrastructure, including the gravel, off-stream dam, diversion channel, emergency spillway, unnamed creek.

<u>Site Access:</u> The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see Volume 3A, Section 11.4.2).

The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites KFN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.



Table 8-1 Indigenous Statements on the Relative Importance of the PDA, LAA, and RAA to the Availability of and Access to Country Foods of Importance

Indigenous Statements on country foods, including for medicinal and ceremonial purposes	Distribution of Country Foods of Importance (including for medicinal and ceremonial purposes) within the PDA, LAA, and RAA, Accessibility and Efforts to Reconcile Indigenous Concerns through Mitigations
Species hunted by KFN and identified as species of interest in relation to the Project include elk, moose, white-tailed deer, mule deer, rabbit, ruffed grouse, sharp-tailed grouse, Canada	Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.
	In addition to the measures proposed to mitigate potential effects on wildlife and biodiversity, and on vegetation and wetlands, as described above, Alberta Transportation will implement the following measures to mitigate potential effects on hunting:
goose, mallard duck, and merganser duck. Hunting:	Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods.
KFN stated that hunting big game species such as moose, elk and white-tailed deer generally occurs in the fall and early winter and is "a pillar of the Blood Tribe/Kainai traditional food provisioning system." KFN hunters feed dozens of community members on a regular basis from their hunting, food processing, and sharing practices.	Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction land access management.
The Elbow River valley is habitat for many species of game that KFN members hunt for subsistence and ceremonial purposes. KFN stated there is good potential to hunt ruffed grouse and other game birds along the wooded portions of the banks of the Elbow River.	
should the Project be approved, and Conservation Area A be made accessible, KFN indicated they intend to use the area to exercise their rights to hunt, particularly for elk, moose, white-ailed deer, mule deer, and grouse.	
KFN indicated that agreements are in place with local andowners in the PDA to provide access to KFN members for the purposes of subsistence hunting.	
In March 2018, two KFN hunters scouted the PDA for several hours and identified a moose and deer. KFN decided against harvesting the moose due to the location of the animal, number of hunters, and time of day. KFN explained that "normally they hunt in a group of four to six men so they can assist one another with processing and packing out meat after a kill." KFN indicated they will return in the fall to hunt because the terrain and quality of habitat make chances of success likely.	
KFN observed the presence of fur bearing animals including beaver, muskrat, rabbit, coyote, fox, weasel and wolf in the PDA.	
Source:	
(FN TUS 2018 (CEAR #47)	
KFN 2018 (CEAR #47)	



Table 8-1 Indigenous Statements on the Relative Importance of the PDA, LAA, and RAA to the Availability of and Access to Country Foods of Importance

Indigenous Statements on country foods, including for medicinal and ceremonial purposes	Distribution of Country Foods of Importance (including for medicinal and ceremonial purposes) within the PDA, LAA, and RAA, Accessibility and Efforts to Reconcile Indigenous Concerns through Mitigations
Piikani Nation (PN)	

Fish and Fishing

In relation to a similar project, PN noted the impact on various fish species which become trapped in standing water, over a period of time where little or no consideration was given to the impact upon the fish, causing PN to organize an annual fish rescue where stranded fish are returned to the river.

Source:

PN TUS 2018

PN 2018 (CEAR #48)

Fish and Fishing:

<u>Location</u>: The comments by PN express concerns about impacts to fish observed in similar projects.

<u>Site Access</u>: Current use sites and areas located outside the PDA are not anticipated to be directly affected by the Project. The construction of the diversion channel will result in the loss of 1,854 m2 of fish habitat on the bed and banks of Elbow River and 300 m2 of fish habitat at the interception of the tributary ID1350. Potential habitat offset gains will be addressed as part of the *Fisheries Act* authorization process for the Project: a habitat offset plan will be developed and submitted for review and will take into consideration input from Indigenous groups, DFO and stakeholders. It will also align with local fish management objectives.

With the implementation of mitigation, the Project is unlikely to reduce the productivity or sustainability of a commercial, recreational or Aboriginal fishery as defined by the *Fisheries Act*. During dry operations, there will be no changes to flow in Elbow River, and therefore no alterations to the quality of fish habitat. Overall, the Project is not expected to limit the availability of traditional resources for current use in the RAA (see Volume 3A, Section 8.4.4 and Section 14.8.1).

The Project will create access through the development of a permanent portage for Elbow River.

The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites PN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.

Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.

- Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.
- Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components, and discuss key
 traditional harvesting periods.
- Structures will be designed so that storm water runoff and wash water from the access roads, decks, side slopes, and approaches are directed into a retention pond or vegetated area to remove suspended solids, dissipate velocity, and prevent sediment and other deleterious substances from entering watercourses.
- Works in water will be timed with respect to the RAPs wherever possible. For Elbow River, the RAP is May 01 July 15 and September 16 April 15. Condition and use of RAPs will be provided within further Project permitting and authorization under the *Fisheries Act*. For planning purposes, the Elbow River RAP will be applied as an avoidance and mitigation measure.
- To allow for fish passage and construction of the structures within the Elbow River, the Elbow River will be temporarily diverted, and flows will be maintained downstream by the construction of a temporary bypass channel.
- Drainage areas within the reservoir will be graded to reduce stranding of fish during release of retained flood water from the reservoir.
- Boulders will be added to increase the bed roughness of the channel immediately downstream of the diversion structure, which will increase water depths and reduce velocities.
- Boulder v-weir structures will be constructed in the channel downstream of the gates to provide slower velocity and deeper resting zones.
- A monitoring program will be undertaken to identify if fish passage is impeded for migratory salmonids or other fish species, including bull or cutthroat trout.
- Maintenance, debris removal on the structure, and on the fish passage structures will occur to accommodate fish passage.
- Debris will be cleaned from the structure gates after a flood recedes to allow unimpeded fish passage upstream over the structure.
- Isolated pools will be identified, marked, and a determination by a qualified aquatic environmental specialist will be made as to whether there are stranded fish in the pool that require rescue and relocation to secure habitats in Elbow River. When the water has been fully drained, the unnamed creek will also be surveyed to identify isolated pools where fish might be stranded.
- Where debris removal from the structures is required, debris removal will be timed to avoid disruption to sensitive fish life stages (i.e., outside the RAP), unless the debris and its accumulation is immediately threatening to the integrity of the structure or relates to an emergency (i.e., risk of structure failure).
- During post-flood reservoir maintenance, areas that had isolated pools may be graded to prevent the isolation of fish in successive flood events.



Table 8-1 Indigenous Statements on the Relative Importance of the PDA, LAA, and RAA to the Availability of and Access to Country Foods of Importance

Indigenous Statements on country foods, including for medicinal and ceremonial purposes	Distribution of Country Foods of Importance (including for medicinal and ceremonial purposes) within the PDA, LAA, and RAA, Accessibility and Efforts to Reconcile Indigenous Concerns through Mitigations
	 Annual offset monitoring to assess condition of habitat offsetting measures and identify potential remediation measures: Success of offsetting measures determined by criteria that determine if offsetting is functioning as intended and to identify contingencies if monitoring shows deficiencies.
	 Soccess of onsening measures determined by chiefla that determine if onsening is fortellorling as interlided and to identify confining thousands are interlided. Confirmation that offsetting components meet the design requirements.
	 Confirmation that the terms of the DFO Authorization are met.
	A post-construction report will be provided to DFO at the completion of construction that will outline the as-built condition of the offsetting measures. In addition to a photographic log, as-built engineer drawings, and construction monitoring, post- construction measurements will include:
	 Location and measurements of the structures on the bed and banks.
	 Location and quantity of the vegetation reclamation.
	 Location and measurements of the Fish Passage Mitigation Structure.
	 Fish habitat, abundance, distribution, and benthic invertebrate monitoring in previously sampled reaches (1-12).
	 Location and measurements of required fisheries offsetting measures.
	Location and measurements of required fisheries offsetting measures.
Plants and Plant Harvesting	
PN noted that the following plant species are culturally	Plants:
significant including but not limited to various berry bushes and	Species: Berry bushes and trees, traditional herbs and roots, willow, cottonwood, poplar, muskeg and dogwood.
trees, traditional herbs and roots, willow, cottonwood, poplar, muskeg and dogwood.	Locations: PN did not identify specific plant locations sites within the PDA, LAA, or RAA. Berry bushes (within PDA), traditional herbs (within PDA), traditional herbs and roots (within PDA), willows (within PDA), cottonwood (PDA), poplar (within PDA), berry trees (within PDA), muskeg (within PDA), dogwood (within PDA).
PN indicated the presence of traditional herbs and medicinal plants within the area of the flood basin. PN noted that plant harvesting is a culturally significant	Site Access: Traditionally used plant species will be directly affected due to vegetation removal and grading associated with construction, affecting 168 ha associated with permanent Project infrastructure and approximately 566 ha of temporary workspace. Although individual plants will be removed from the PDA, none of the traditionally used species identified will be lost in the LAA, nor will vegetation communities supporting traditionally used plants be lost from the PDA (see the EIA, Volume 3A, Section 10.4).
practice. <u>Source:</u> PN TUS 2018 PN 2018 (CEAR # 48)	Many of the potentially affected grassland and wetland plant communities have intrinsic adaptations to periodic flooding, while other species such as poplar and spruce would be less tolerant to flooding due to having a low anaerobic tolerance. Mortality of traditional use species found in upland plant communities is expected. However, these species are widespread and are expected to re-establish by natural recruitment; permanent loss of traditional use species is not predicted. Overall, residual effects on vegetation and wetlands post-flood would not result in the loss of native upland or wetland plant communities, nor would it result in the loss of wetland function from the LAA (see the EIA, Volume 3B, Section 10.2).
	Mitigations: At the end of construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded to meet AEP reclamation requirements. Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important.
	Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction.
	Restrict construction activities to the approved construction footprint.
	Reduce the removal of vegetation in wetlands to the extent possible.
	Where possible, conduct ground-level cutting/mowing/mulching of wetland vegetation instead of grubbing.
	• Where applicable, in areas not impacted by the permanent Project footprint, if ground conditions are encountered that create potential for rutting, admixing or compaction, minimize ground disturbance by using a protective layer such as matting or biodegradable geotextile and clay ramps or other approved materials between wetland root/seed bed and construction equipment.
	Native areas disturbed by the Project would be reseeded using an Alberta Transportation native custom seed mix.
	• Alberta Transportation will not apply herbicide within 30 m of plant species or ecological communities of management concern, wetland or waterbody. Spot spraying, wicking, mowing, or hand picking are acceptable measures for control of regulated weeds in this area.
	A licensed industrial pesticide applicator would be contracted to select and apply all herbicide in compliance with the procedures as outlined in the Code of Practice for Pesticides (GoA 2010b).
	Alberta Transportation will provide PN the opportunity for two site visits, one during construction and one post-construction to observe application of prescribed mitigation measures and provide feedback.



Table 8-1 Indigenous Statements on the Relative Importance of the PDA, LAA, and RAA to the Availability of and Access to Country Foods of Importance

Indigenous Statements on country foods, including for medicinal and ceremonial purposes	Distribution of Country Foods of Importance (including for medicinal and ceremonial purposes) within the PDA, LAA, and RAA, Accessibility and Efforts to Reconcile Indigenous Concerns through Mitigations
	Following construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded with a native custom seed mix to meet AEP reclamation requirements.
	Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important.
	Plant Harvesting:
	Locations: PN did not identify specific plant harvesting sites within the PDA, LAA, or RAA but PN noted that plant harvesting is a culturally significant practice.
	Site Access: Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction.
	The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites PN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.
	Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.
	In addition to the measures proposed to mitigate potential effects on wildlife and biodiversity, and on vegetation and wetlands, as described above, Alberta Transportation will implement the following measures to mitigate potential effects on plant harvesting:
	Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods.
	Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods.
	Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction.
	Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction access management.
	Alberta Transportation is committed to ongoing consultation with PN, including identifying opportunities for PN to participate in Project activities.
Wildlife and Hunting and Trapping	
Wildlife:	Wildlife:
PN noted that the following wildlife species are culturally	Species: white elk, mule deer, bald and gold eagles, grizzly bears, magpies, moose, wolf, coyote, cougar, raptors and beaver.
significant including but are not limited to white elk, mule deer, bald and gold eagles, grizzly bears, magpies, moose, wolf, coyote, cougar, raptors and beaver.	Location: The site of signs of a bear foraging for tender dogwood roots was not disclosed by PN, white elk tracks (within PDA), mule deer tracks (within PDA), bald eagle (within PDA), gold eagle (within PDA), evidence of bear foraging for roots (within PDA), magpie nests (within PDA), grizzly bear and 2 cubs (within PDA), bear evidence foraging for roots (within PDA), grizzly sow and cub (within PDA), moose (within PDA), beaver habitat (within PDA).
During a site visit, PN noticed signs of a bear foraging for tender dogwood roots.	Site Access: The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction.
Hunting and Trapping:	Native trees and shrubs should re-establish over time. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in
PN noted that hunting and trapping is a culturally significant	the abundance of wildlife in the RAA is unlikely (see the EIA, Volume 3A, Section 11.4.2). Impacts to wildlife are expected to be minimum and temporary.
practice, however, they did not indicate that hunting and trapping occurred within the PDA.	Mitigations: In addition to the measures proposed to mitigate potential effects on vegetation and wetlands described above, Alberta Transportation will implement the following measures to mitigate potential effects on wildlife and biodiversity:
Source:	Pre-construction surveys will be conducted to identify wildlife features (e.g., nests, dens) and appropriate site-specific mitigation developed.
PN TUS 2018	Where possible, construction activities during the RAP for the KWBZ identified along Elbow River (December 15 to April 30) will be avoided or reduced. This will limit potential
PN 2018 (CEAR #48)	sensory disturbance to wintering ungulates (ESRD 2015, GoA 2017). If construction activities must occur during this time period, a wildlife mitigation and monitoring plan will be developed in consultation with regulators, which will include monitoring ungulate habitat use and response to human disturbance.
	Restrict all construction activities to the approved construction footprint.



Table 8-1 Indigenous Statements on the Relative Importance of the PDA, LAA, and RAA to the Availability of and Access to Country Foods of Importance

Indigenous Statements on country foods, including for medicinal and ceremonial purposes	Distribution of Country Foods of Importance (including for medicinal and ceremonial purposes) within the PDA, LAA, and RAA, Accessibility and Efforts to Reconcile Indigenous Concerns through Mitigations
	Where possible, temporary workspaces and access roads will be in areas that avoid wildlife features and native vegetation (e.g., shrubland, treed areas, wetlands). Existing access roads and previously disturbed areas will be used, where feasible.
	Where fencing is proposed to restrict livestock access to Project structures (e.g., diversion channel), wildlife-friendly fencing will be installed to allow ungulate passage.
	If an active nest or den is found, it will be subject to a provincial or federal disturbance setback buffer and site-specific mitigation.
	• The diversion channel will be built with 3H:1V side slopes, which is within the range that most large mammals (e.g., elk,) are known to traverse (McCorquodale 2003; Frair et al. 2005; Mao et al. 2005; The Bow Corridor Ecosystem Advisory Group 2012).
	The side slopes and bottom of the diversion channel will be vegetated, except under the proposed bridges and at Pirmez Creek. Vegetated areas will provide a more conducive wildlife passage across the channel.
	• To maintain ungulate movement within the KWBZ, the floodplain berm will be revegetated with materials conducive for ungulate movement. The section of reinforced concrete (approximately 250 m) closest to Elbow River will be covered with topsoil and seeded with native grasses. The central portion of the floodplain berm includes approximately 550 m of exposed riprap, where sections will be filled with substrate finer than riprap, such as sand, gravel and vegetation to allow for more walkable sections (Austin and Garland 2001; Huijser et al. 2008; Clevenger 2011). The south portion, farthest from Elbow River, will be a 450 m earthen embankment vegetated with native grasses.
	• A remote camera program will be designed with AEP to identify whether the diversion channel acts as a barrier to wildlife movement during dry operations, especially for ungulates, and determine the effectiveness of mitigation implemented throughout the diversion channel. This will include monitoring along Elbow River to determine if wildlife use of the KWBZ has been affected by the construction and operation of the Project. Although the specific details and design of the remote camera program will be determined with AEP prior to construction, the following describes the basis of a preliminary approach.
	• During the Project dry operation phase, a total of 14 remote cameras will be deployed in the wildlife LAA and monitor wildlife movement for at least one-year post-construction. The six remote cameras along the Elbow River will remain at the same locations as during the construction phase. Four remote cameras will be deployed soon after completion of Project construction and placed at the same locations as pre-construction baseline surveys near Highway 22 (i.e., near the raised portion of the highway at the north end of the wildlife LAA). An additional four remote cameras will be installed along wildlife friendly fencing at the edge of the diversion channel at crossable sections where there is vegetation. Remote cameras at the diversion channel will be spaced approximately 1 km apart.
	• A wildlife biologist will visit the cameras every four months during construction and operation to change out memory cards and batteries and check on the overall status of equipment (e.g., positioning, weather related malfunctions, animal or human tampering of equipment).
	During dry operations, monitoring of wildlife movement using remote cameras would occur for at least one year following construction.
	• There were no beaver dams or lodges identified within the construction footprint for the Project during the baseline wildlife surveys completed within the LAA and, as a result, Alberta Transportation is not expecting to remove any dams or lodges. If an active beaver dam is identified within the construction footprint at a later date, mitigation for dam removal will be developed with the appropriate agencies (e.g., AEP) and the relevant permit(s) obtained, as required.
	At the end of construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded to meet AEP reclamation requirements.
	Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important.
	Alberta Transportation is committed to ongoing consultation with PN, including identifying opportunities for PN to participate in Project activities.
	Hunting and Trapping:
	Location: PN did not identify specific hunting and trapping sites within the PDA, LAA, or RAA.
	Site Access: The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see Volume 3A, Section 11.4.2).
	The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites PN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.



Table 8-1 Indigenous Statements on the Relative Importance of the PDA, LAA, and RAA to the Availability of and Access to Country Foods of Importance

Indigenous Statements on country foods, including for medicinal and ceremonial purposes	Distribution of Country Foods of Importance (including for medicinal and ceremonial purposes) within the PDA, LAA, and RAA, Accessibility and Efforts to Reconcile Indigenous Concerns through Mitigations
	Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.
	In addition to the measures proposed to mitigate potential effects on wildlife and biodiversity, and on vegetation and wetlands, as described above, Alberta Transportation will implement the following measures to mitigate potential effects on trapping:
	Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods.
	Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction land access management.
	Alberta Transportation is committed to ongoing consultation with PN, including identifying opportunities for PN to participate in Project activities.
Siksika Nation (SN)	
Plants and Plant Harvesting	
SN noted that there are medicinal and ceremonial plants located on both sides of the Elbow River where the diversion	Locations: The location of medicinal and ceremonial plants near the diversion inlet and diversion channel are within the PDA. SN did not identify specific plant harvesting sites within the PDA, LAA, or RAA.
inlet and service sluiceway are proposed to be constructed. These plants will need to be protected or relocated to another spot nearby to ensure they are available in the future for Blackfoot traditional people. Sources: KCO and SCO TUS Research Study Joint Interim Report, 2017, pg. 4 (cited in SN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #14)	Site Access: Traditionally used plant species will be directly affected due to vegetation removal and grading associated with construction, affecting 168 ha associated with permanent Project infrastructure and approximately 566 ha of temporary workspace. Although individual plants will be removed from the PDA, none of the traditionally used species identified will be lost in the LAA, nor will vegetation communities supporting traditionally used plants be lost from the PDA (see the EIA, Volume 3A, Section 10.4). Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction.
	The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites SN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.
	Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.
	• At the end of construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded to meet AEP reclamation requirements. Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important.
	 Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction.
	Restrict construction activities to the approved construction footprint.
	Reduce the removal of vegetation in wetlands to the extent possible.
	Where possible, conduct ground level cutting/mowing/mulching of wetland vegetation instead of grubbing.
	• Where applicable, in areas not impacted by the permanent Project footprint, if ground conditions are encountered that create potential for rutting, admixing or compaction, minimize ground disturbance by using a protective layer such as matting or biodegradable geotextile and clay ramps or other approved materials between wetland root/seed bed and construction equipment.
	Native areas disturbed by the Project would be reseeded using an Alberta Transportation native custom seed mix.
	Alberta Transportation will not apply herbicide within 30 m of plant species or ecological communities of management concern, wetland or waterbody. Spot spraying, wicking, mowing, or hand picking are acceptable measures for control of regulated weeds in this area.
	A licensed industrial pesticide applicator would be contracted to select and apply all herbicide in compliance with the procedures as outlined in the Code of Practice for Pesticides (GoA 2010b).
	Alberta Transportation will provide SN the opportunity for two site visits, one during construction and one post-construction to observe application of prescribed mitigation measures and provide feedback.



Table 8-1 Indigenous Statements on the Relative Importance of the PDA, LAA, and RAA to the Availability of and Access to Country Foods of Importance

Indigenous Statements on country foods, including for medicinal and ceremonial purposes	Distribution of Country Foods of Importance (including for medicinal and ceremonial purposes) within the PDA, LAA, and RAA, Accessibility and Efforts to Reconcile Indigenous Concerns through Mitigations
	Following construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded with a native custom seed mix to meet AEP reclamation requirements.
	Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important.
Wildlife and Hunting	
SN requested the ability to hunt and harvest in Area B of the	Location: SN did not identify specific hunting and trapping sites within the PDA, LAA, or RAA.
Project, as it would become Crown land. SN expressed interest in exploring uses and leaving entires of Project Area C	Site Access: Since filing the EIA, Alberta Transportation has evolved the land use planning for the Project and is no longer contemplating establishing Areas A, B, and C in the PDA.
in exploring uses and leasing options of Project Area C. <u>Sources</u> : Meeting between SN and Alberta Transportation, April 26, 2018 (cited in SN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #23)	The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see Volume 3A, Section 11.4.2).
	The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites SN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.
	Mitigation: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.
	Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods.
	Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction land access management.
Stoney Nakoda Nations (SNN)	
Wildlife and Hunting and Trapping	
SNN stated there are two different trap lines in the Project area and that the area is used for trapping but did not specify their location.	Locations: SNN stated there are two different trap lines in the PDA and that the PDA is used for trapping but did not specify their location. Based on available information, there are no registered traplines within the PDA. Alberta Transportation has requested the locations of the two traplines and where the SNN members trap in order to determine if there is potential impact from the Project. SNN did not identify specific hunting sites within the PDA, LAA, or RAA.
Sources:	Site Access: The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting
SNN Engagement Meeting with Alberta Transportation (May 4, 2016) (cited in SNN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #7)	168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Native trees and shrubs should re-establish over time. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see the EIA, Volume 3A, Section 11.4.2). Impacts to wildlife are expected to be minimum and temporary.
	The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the design and the position of the PDA relative to existing and the position of the PDA relative to existing and the position of the PDA relative to existing and the position of the PDA relative to existing and the position of the PDA relative to existing and the position of the PDA relative to existing and the position of the PDA relative to existing and the position of the PDA relative to existing and the position of the PDA relative to existing and the position of the PDA relative to existing and the position of the PDA relative to existing and the position of the PDA relative to existing and the position of the PDA relative to existing and the position of the PDA relative to existing and the position of the PDA relative to existing and the position of the PDA relative to existing and the position of the PDA relative to existing and the position of the PDA relative to existing and the PDA relative to exist and the PDA relative

conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.



Table 8-1 Indigenous Statements on the Relative Importance of the PDA, LAA, and RAA to the Availability of and Access to Country Foods of Importance

Indigenous Statements on country foods, including for medicinal and ceremonial purposes	Distribution of Country Foods of Importance (including for medicinal and ceremonial purposes) within the PDA, LAA, and RAA, Accessibility and Efforts to Reconcile Indigenous Concerns through Mitigations
	Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.
	In addition to the measures proposed to mitigate potential effects on wildlife and biodiversity, and on vegetation and wetlands, as described above, Alberta Transportation will implement the following measures to mitigate potential effects on hunting and trapping:
	Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods.
	Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction land access management.

Tsuut'ina Nation (TN)

Fish and Fishing

The TN TUS recorded a total of 338 traditional LUAs relative to the Project, 90% of which are within the PDA, including land use, animal, habitat, cultural, gathering, and terrain sites. As directed by TN, the nature of each traditional use site has not been disclosed.

Fish:

TN explained that char, cutties, pike, suckers, trout (including brook, brown, bull, and rainbow), and whitefish are present in Elbow River and in its tributaries in the Project area.

TN reported that spawning activities in Elbow river vary depending on the species, TN explained that char, pike and suckers spawn in cold water and mountain whitefish spawn in Elbow River south of the PDA as well as its tributaries in the Project area.

TN expressed concerns about effects on spawning in Elbow River and its tributaries, including mountain whitefish, as well as bull trout, which is a species at risk.

TN expressed concerns that standing waters in the Project area may contaminate fish.

Fishing:

TN reported that fishing typically occurs in spring and summer; fish are harvested for both subsistence and ceremonial purposes.

TN members have observed fluctuations in water quality in the area over time; TN also explained that there a sewage smell has been present in the past, as a result of effluent discharge from Bragg Creek, which has had an effect on use.

TN expressed concerns about effects on the ability to fish (including trout and whitefish) in the event of changes to the health and flow of the river.

Fish:

<u>Species</u>: Char, cutties, pike, suckers, trout (including brook, brown, bull, and rainbow), char, pike and suckers and mountain whitefish <u>Location</u>: Elbow River is within the PDA.

Site Access: Current use sites and areas located outside the PDA are not anticipated to be directly affected by the Project. The construction of the diversion channel will result in the loss of 1,854 m2 of fish habitat on the bed and banks of Elbow River and 300 m2 of fish habitat at the interception of the tributary ID1350. Potential habitat offset gains will be addressed as part of the *Fisheries Act* authorization process for the Project: a habitat offset plan will be developed and submitted for review and will take into consideration input from Indigenous groups, DFO and stakeholders. It will also align with local fish management objectives.

Mitigations:

- Structures will be designed so that storm water runoff and wash water from the access roads, decks, side slopes, and approaches are directed into a retention pond or vegetated area to remove suspended solids, dissipate velocity, and prevent sediment and other deleterious substances from entering watercourses.
- Works in water will be timed with respect to the RAPs wherever possible. For Elbow River, the RAP is May 01 July 15 and September 16 April 15. Condition and use of RAPs will be provided within further Project permitting and authorization under the Fisheries Act. For planning purposes, the Elbow River RAP will be applied as an avoidance and mitigation measure.
- To allow for fish passage and construction of the structures within the Elbow River, the Elbow River will be temporarily diverted, and flows will be maintained downstream by the construction of a temporary bypass channel.
- Drainage areas within the reservoir will be graded to reduce stranding of fish during release of retained flood water from the reservoir.
- Boulders will be added to increase the bed roughness of the channel immediately downstream of the diversion structure, which will increase water depths and reduce velocities.
- Boulder v-weir structures will be constructed in the channel downstream of the gates to provide slower velocity and deeper resting zones.
- A monitoring program will be undertaken to identify if fish passage is impeded for migratory salmonids or other fish species, including bull or cutthroat trout.
- Maintenance, debris removal on the structure, and on the fish passage structures will occur to accommodate fish passage.
- Debris will be cleaned from the structure gates after a flood recedes to allow unimpeded fish passage upstream over the structure.
- Isolated pools will be identified, marked, and a determination by a qualified aquatic environmental specialist will be made as to whether there are stranded fish in the pool that require rescue and relocation to secure habitats in Elbow River. When the water has been fully drained, the unnamed creek will also be surveyed to identify isolated pools where fish might be stranded.
- Where debris removal from the structures is required, debris removal will be timed to avoid disruption to sensitive fish life stages (i.e., outside the RAP), unless the debris and its accumulation is immediately threatening to the integrity of the structure or relates to an emergency (i.e., risk of structure failure).
- During post-flood reservoir maintenance, areas that had isolated pools may be graded to prevent the isolation of fish in successive flood events.
- Annual offset monitoring to assess condition of habitat offsetting measures and identify potential remediation measures:
 - Success of offsetting measures determined by criteria that determine if offsetting is functioning as intended and to identify contingencies if monitoring shows deficiencies.



Indigenous Statements on the Relative Importance of the PDA, LAA, and RAA to the Availability of and Access to Country Foods of Importance Table 8-1

Indigenous Statements on country foods, including for Distribution of Country Foods of Importance (including for medicinal and ceremonial purposes) within the PDA, LAA, and RAA, Accessibility and Efforts to Reconcile Indigenous medicinal and ceremonial purposes **Concerns through Mitigations** TN reported that previous floods have damaged river bottoms, Confirmation that offsetting components meet the design requirements. resulting in poor fishing for approximately three years. TN Confirmation that the terms of the DFO Authorization are met. expressed concerns that subsequent floods could damage A post-construction report will be provided to DFO at the completion of construction that will outline the as-built condition of the offsetting measures. In addition to a photographic fishing for longer periods of time.

TN expressed concerns about effects on fishing, including barriers to access fishing areas, habitat loss, as well as changes in fish abundance, behaviour, health, and distribution.

TN expressed concerns that Project effects on the flow and quality of the Elbow River waters will result in effects on trout and whitefish harvestina.

TN stated that access is the primary barrier to using traditional lands, followed by environmental concerns about food sources. TN expressed concerns that the Project and other developments will affect fishing.

TN expressed concerns about water quality and the continued ability to fish within the traditional territory as a result of the Project.

Sources:

TN TUS 2018 (cited in TN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #1)

TN 2018 (CEAR #50)

• Location and measurements of the structures on the bed and banks. Location and quantity of the vegetation reclamation.

- Location and measurements of the Fish Passage Mitigation Structure.
- Fish habitat, abundance, distribution, and benthic invertebrate monitoring in previously sampled reaches (1-12).

log, as-built engineer drawings, and construction monitoring, post-construction measurements will include:

• Location and measurements of required fisheries offsetting measures.

Fishing:

Location: Bragg Creek is in the RAA. The PDA is within the TN Traditional Territory as identified in the TLRU Report.

Site Access: With the implementation of mitigation, the Project is unlikely to reduce the productivity or sustainability of a commercial, recreational or Aboriginal fishery as defined by the Fisheries Act. During dry operations, there will be no changes to flow in Elbow River, and therefore no alterations to the quality of fish habitat. Overall, the Project is not expected to limit the availability of traditional resources for current use in the RAA (see Volume 3A, Section 8.4.4 and Section 14.8.1).

In addition, the Project will create access through the development of a permanent portage for Elbow River.

The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites TN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.

Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.

- Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods.
- Alberta Transportation will avoid substantial interference with public navigation of Elbow River through the following design practices:
 - as part of construction, a permanent portage will be developed around the in-stream water intake components
 - signs directing traffic to detours will be installed during construction of road realignments and modifications
- Signs will be installed along the existing Elbow River channel. Multiple signs will be placed upstream and downstream of the water intake components on both banks of Elbow River. These signs will warn users on Elbow River that they are approaching in-stream water intake components and of the associated danger with this infrastructure and to direct them to a portage location.
- Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction access management.
- Alberta Transportation will create a portage to facilitate access to the river.
- To allow for fish passage and construction of the structures within the Elbow River, the Elbow River will be temporarily diverted, and flows will be maintained downstream by the construction of a temporary bypass channel.



Table 8-1 Indigenous Statements on the Relative Importance of the PDA, LAA, and RAA to the Availability of and Access to Country Foods of Importance

Indigenous Statements on country foods, including for medicinal and ceremonial purposes

Distribution of Country Foods of Importance (including for medicinal and ceremonial purposes) within the PDA, LAA, and RAA, Accessibility and Efforts to Reconcile Indigenous

Concerns through Mitigations

Plants and Plant Harvesting

The TN TUS recorded a total of 338 traditional LUAs relative to the Project, 90% of which are within the PDA, including land use, animal, habitat, cultural, gathering, and terrain sites. As directed by TN, the nature of each traditional use site has not been disclosed.

Plants:

TN stated that wetlands in the Project area provide important habitat for plants that provide nutritional value for animals and TN members; wetlands also provide habitat for other culturally used plants.

TN expressed concerns about wetlands and muskeg areas in the Project area, noting that they are important habitat for beaver, elk, and other wildlife.

TN expressed concerns about berry patches in and near the PDA, which grizzly bear rely on.

TN expressed concerns about the undisturbed forested areas in the Project area, which provide important habitat and protection for wildlife.

TN expressed concerns that standing waters in the PDA may contaminate plants.

Plant Harvesting:

TN members have a strong cultural connection with medicinal and ceremonial plant harvesting in the traditional territory. TN stated that medicinal plants can be found along Elbow River. TN added that the medicinal and ceremonial plants grow in the Elbow River valley as well as in wetlands and along riparian areas which cannot be found in other areas, such as foothills.

TN observed nutritional, medicinal, and ceremonial plants growing in the Project area, including bull berry, chokecherry, gooseberry, kinnikinnick (bear berry), raspberry, saskatoon berry, wild strawberry, bergamot, buffalo grass (sage), cedar, juniper, mint, mushrooms, white poplar, sweetgrass, willow (diamond and red), and yarrow, as well as other berries, grasses, sedges and trees. TN reported that pine, spruce, and other trees are also culturally important plants, used as firewood and to build ceremonial, burial, or domestic structures and travois.

In the past, TN members relied on blueberry, chokecherry, serviceberry, and prairie turnips as the primary sources of fruits and vegetables.

Plants:

<u>Species</u>: Bull berry, chokecherry, gooseberry, kinnikinnick (bear berry), raspberry, saskatoon berry, wild strawberry, bergamot, buffalo grass (sage), cedar, juniper, mint, mushrooms, white poplar, sweetgrass, willow (diamond and red), and yarrow, as well as other berries, grasses, sedges and trees. blueberry, chokecherry, serviceberry, prairie turnips, TN also reported that pine, spruce, and other trees are important.

Locations: TN reserve is within the LAA. Elbow River and the Elbow River valley are within the PDA. TN did not identify specific plant location sites within the PDA, LAA, or RAA.

Site Access: Traditionally used plant species will be directly affected due to vegetation removal and grading associated with construction, affecting 168 ha associated with permanent Project infrastructure and approximately 566 ha of temporary workspace. Although individual plants will be removed from the PDA, none of the traditionally used species identified will be lost in the LAA, nor will vegetation communities supporting traditionally used plants be lost from the PDA (see the EIA, Volume 3A, Section 10.4). Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction. Native trees and shrubs should re-establish over time.

Many of the potentially affected grassland and wetland plant communities have intrinsic adaptations to periodic flooding, while other species such as poplar and spruce would be less tolerant to flooding due to having a low anaerobic tolerance. Mortality of traditional use species found in upland plant communities is expected. However, these species are widespread and are expected to re-establish by natural recruitment; permanent loss of traditional use species is not predicted. Overall, residual effects on vegetation and wetlands post-flood would not result in the loss of native upland or wetland plant communities, nor would it result in the loss of wetland function from the LAA (see Volume 3B, Section 10.2). No specific recommendations or requests were made by TN regarding plant harvesting.

<u>Mitigations</u>: At the end of construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded to meet AEP reclamation requirements. Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important.

- Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction.
- Restrict construction activities to the approved construction footprint.
- Reduce the removal of vegetation in wetlands to the extent possible.
- Where possible, conduct ground level cutting/mowing/mulching of wetland vegetation instead of grubbing.
- Where applicable, in areas not impacted by the permanent Project footprint, if ground conditions are encountered that create potential for rutting, admixing or compaction, minimize ground disturbance by using a protective layer such as matting or biodegradable geotextile and clay ramps or other approved materials between wetland root/seed bed and construction equipment.
- Native areas disturbed by the Project would be reseeded using an Alberta Transportation native custom seed mix.
- Alberta Transportation will not apply herbicide within 30 m of plant species or ecological communities of management concern, wetland or waterbody. Spot spraying, wicking, mowing, or hand picking are acceptable measures for control of regulated weeds in this area.
- A licensed industrial pesticide applicator would be contracted to select and apply all herbicide in compliance with the procedures as outlined in the Code of Practice for Pesticides (GoA 2010).
- Alberta Transportation will provide TN the opportunity for two site visits, one during construction and one post-construction to observe application of prescribed mitigation measures and provide feedback.
- Following construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded with a native custom seed mix to meet AEP reclamation requirements.
- Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important.



Table 8-1 Indigenous Statements on the Relative Importance of the PDA, LAA, and RAA to the Availability of and Access to Country Foods of Importance

Indigenous Statements on country foods, including for medicinal and ceremonial purposes

Distribution of Country Foods of Importance (including for medicinal and ceremonial purposes) within the PDA, LAA, and RAA, Accessibility and Efforts to Reconcile Indigenous

Concerns through Mitigations

TN reported that sweetgrass and some medicinal flowers are harvested in early August but noted that sweetgrass is becoming less abundant in the vicinity of the TN reserve. Sage is harvested in August and bergamot is harvested in July.

TN expressed concerns about effects on cultural and medicinal plant harvesting, including barriers to access plant harvesting areas, habitat loss, as well as changes in plant abundance.

TN expressed concerns about ceremonial and medicinal plants found in the Project area, including sweetgrass, which is becoming more difficult to find.

TN members are concerned about needing to travel farther and look harder to find medicinal and ceremonial plants.

Sources:

TN TUS 2018 (cited in TN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #1, 56)

TN 2018 (CEAR #50)

Plant Harvesting:

Location: TN did not identify specific plant harvesting sites within the PDA, LAA, or RAA.

The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites TN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.

Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.

In addition to the measures proposed to mitigate potential effects on wildlife and biodiversity, and on vegetation and wetlands, as described above, Alberta Transportation will implement the following measures to mitigate potential effects on plant harvesting:

- Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods.
- Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods.
- Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction.
- Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction access management.
- Alberta Transportation is committed to ongoing consultation with TN, including identifying opportunities for TN to participate in Project activities

Wildlife and Hunting and Trapping

The TN TUS recorded a total of 338 traditional LUAs relative to the Project, 90% of which are within the PDA, including land use, animal, habitat, cultural, gathering, and terrain sites. As directed by TN, the nature of each traditional use site has not been disclosed.

Wildlife:

TN indicated that elk, moose, deer (white-tailed and mule deer), grizzly bear, black bear, cougar, bobcat, lynx, coyote, fox, wolves, beaver, ground squirrel, mole, rabbit, duck, bald eagle, magpie, and spruce grouse are present in the Project area, and adjacent to Elbow River and its tributaries; TN noted there are mule deer located along Elbow River immediately south of the PDA.

TN reported that elk, moose, deer, duck, and spruce grouse (prairie chicken) can be found in the Wilderness Area. TN added that heron, owl, and redtail hawk are among additional birds known to be in the general Project area.

TN added that the Project area is within a wildlife migration corridor.

TN reported that the Project area contains the eastern extent of a grizzly bear habitat area, and explained that because of development, grizzly bears are losing habitat and need to follow the river to find habitat. TN explained that grizzly bears also come to feed on elk in the region.

Wildlife:

<u>Species</u>: Elk, moose, deer (white-tailed and mule deer), grizzly bear, black bear, cougar, bobcat, lynx, coyote, fox, wolves, beaver, ground squirrel, mole, rabbit, duck, bald eagle, magpie, and spruce grouse, heron, owl, and redtail hawk.

Location: Wilderness Area, Springbank Road, Highway 22, and Elbow River are within the PDA. TN reserve and Redwood Meadows are within the LAA.

<u>Site Access:</u> The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Native trees and shrubs should re-establish over time. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see Volume 3A, Section 11.4.2). Impacts to wildlife are expected to be minimum and temporary.

Mitigations: In addition to the measures proposed to mitigate potential effects on vegetation and wetlands described above, Alberta Transportation will implement the following measures to mitigate potential effects on wildlife and biodiversity:

- Pre-construction surveys will be conducted to identify wildlife features (e.g., nests, dens) and appropriate site-specific mitigation developed.
- Where possible, construction activities during the RAP for the KWBZ identified along Elbow River (December 15 to April 30) will be avoided or reduced. This will limit potential sensory disturbance to wintering ungulates (ESRD 2015, GoA 2017). If construction activities must occur during this time period, a wildlife mitigation and monitoring plan will be developed in consultation with regulators, which will include monitoring ungulate habitat use and response to human disturbance.
- Restrict all construction activities to the approved construction footprint.
- Where possible, temporary workspaces and access roads will be in areas that avoid wildlife features and native vegetation (e.g., shrubland, treed areas, wetlands). Existing access roads and previously disturbed areas will be used, where feasible.
- Where fencing is proposed to restrict livestock access to Project structures (e.g., diversion channel), wildlife-friendly fencing will be installed to allow ungulate passage.
- If an active nest or den is found, it will be subject to a provincial or federal disturbance setback buffer and site-specific mitigation.
- The diversion channel will be built with 3H:1V side slopes, which is within the range that most large mammals (e.g., elk,) are known to traverse (McCorquodale 2003; Frair et al. 2005; Mao et al. 2005; The Bow Corridor Ecosystem Advisory Group 2012).



Table 8-1 Indigenous Statements on the Relative Importance of the PDA, LAA, and RAA to the Availability of and Access to Country Foods of Importance

Indigenous Statements on country foods, including for medicinal and ceremonial purposes

TN explained that elk habitat used to be good in the Redwood4 area before the community was built; elk then moved toward the Springbank area.

TN stated that the Project is located in elk habitat, including calving grounds, water crossings, and migration routes. TN reported that elk calve from late May to late June; elk migrate through the TN reserve and Project area in August, October, and January.

TN explained that the elk have been migrating through the area for hundreds of years and noted that bear, cougar, lynx, and wolves follow the elk.

TN explained that the elk moved their calving grounds to Springbank following development.

TN reported that moose are regularly observed at the northeast section of Highway 22 and Springbank Road.

TN identified beaver habitat throughout the Project area, including the west side of Elbow River at the southwest portion of the PDA.

TN observed an eagle nest southeast of the PDA adjacent to the outlet and explained that the eagles are likely present because they can harvest fish nearby.

TN expressed concerns that the Project may have an effect on the health of the elk herd that migrates through the Project area

TN expressed concerns that the Project may have an effect on the landscape and, as a result, may affect beaver, grizzly bear, black bear, bald eagle, bobcat, cougar, lynx, mule deer, and wolves. TN also expressed concerns about elk calving grounds, the ability of elk to navigate through the Project area.

TN expressed concerns about the undisturbed forested areas in the Project area which provide important habitat and protection for wildlife.

TN expressed concerns that standing waters in the PDA may contaminate wildlife.

TN expressed concerns that wildlife, including moose, that use the outlet area because it is low-lying and sheltered.

Hunting

In the past, TN members relied on antelope, beaver, buffalo, deer, duck elk, goose, mountain goat, mountain sheep, porcupine, rabbit, and squirrel harvesting, as well as egg harvesting.

TN reported that some landowners allow TN hunters to access private lands to hunt.

Distribution of Country Foods of Importance (including for medicinal and ceremonial purposes) within the PDA, LAA, and RAA, Accessibility and Efforts to Reconcile Indigenous

Concerns through Mitigations

- The side slopes and bottom of the diversion channel will be vegetated, except under the proposed bridges and at Pirmez Creek. Vegetated areas will provide a more conducive wildlife passage across the channel.
- To maintain ungulate movement within the KWBZ, the floodplain berm will be revegetated with materials conducive for ungulate movement. The section of reinforced concrete (approximately 250 m) closest to Elbow River will be covered with topsoil and seeded with native grasses. The central portion of the floodplain berm includes approximately 550 m of exposed riprap, where sections will be filled with substrate finer than riprap, such as sand, gravel and vegetation to allow for more walkable sections (Austin and Garland 2001; Huijser et al. 2008; Clevenger 2011). The south portion, farthest from Elbow River, will be a 450 m earthen embankment vegetated with native grasses.
- A remote camera program will be designed with AEP, to identify whether the diversion channel acts as a barrier to wildlife movement during dry operations, especially for ungulates, and determine the effectiveness of mitigation implemented throughout the diversion channel. This will include monitoring along Elbow River to determine if wildlife use of the KWBZ has been affected by the construction and operation of the Project. Although the specific details and design of the remote camera program will be determined with AEP prior to construction, the following describes the basis of a preliminary approach.
- During the Project dry operation phase, a total of 14 remote cameras will be deployed in the wildlife LAA and monitor wildlife movement for at least one-year post-construction. The six remote cameras along the Elbow River will remain at the same locations as during the construction phase. Four remote cameras will be deployed soon after completion of Project construction and placed at the same locations as pre-construction baseline surveys near Highway 22 (i.e., near the raised portion of the highway at the north end of the wildlife LAA). An additional four remote cameras will be installed along wildlife friendly fencing at the edge of the diversion channel at crossable sections where there is vegetation. Remote cameras at the diversion channel will be spaced approximately 1 km apart.
- A wildlife biologist will visit the cameras every four months during construction and operation to change out memory cards and batteries and check on the overall status of equipment (e.g., positioning, weather related malfunctions, animal or human tampering of equipment).
- During dry operations, monitoring of wildlife movement using remote cameras would occur for at least one year following construction.
- There were no beaver dams or lodges identified within the construction footprint for the Project during the baseline wildlife surveys completed within the LAA and, as a result, Alberta Transportation is not expecting to remove any dams or lodges. If an active beaver dam is identified within the construction footprint at a later date, mitigation for dam removal will be developed with the appropriate agencies (e.g., AEP) and the relevant permit(s) obtained, as required.
- At the end of construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded to meet AEP reclamation requirements.
- Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important.
- Alberta Transportation is committed to ongoing consultation with TN, including identifying opportunities for TN to participate in Project activities.

Hunting:

<u>Species</u>: Antelope, beaver, buffalo, deer, duck elk, goose, mountain goat, mountain sheep, porcupine, rabbit, and squirrel harvesting, as well as egg harvesting. Locations: The PDA is within the TN Traditional Territory as identified in the TLRU Report. TN did not identify specific hunting within the PDA, LAA, or RAA

Site Access: The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Native trees and shrubs should re-establish over time. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see the EIA, Volume 3A, Section 11.4.2). Impacts to wildlife are expected to be minimum and temporary.

The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites TN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.



Table 8-1 Indigenous Statements on the Relative Importance of the PDA, LAA, and RAA to the Availability of and Access to Country Foods of Importance

Indigenous Statements on country foods, including for medicinal and ceremonial purposes Distribution of Country Foods of I

TN noted that development affected some local elk hunting areas.

In the past, TN travelled through the traditional territory following the seasonal availability of different foods. TN explained that the "Indian pass system", which was imposed upon TN from 1885 until the 1930s, restricted land users' ability to access hunting areas, including from the TN reserve to Rocky Mountain House, the Rocky Mountains, Chief Mountain, and Blood lands.

TN expressed concerns about effects on hunting, including barriers to access hunting areas, habitat loss, as well as changes in wildlife abundance, behaviour, health and distribution.

TN expressed concerns about effects on elk, which are important for traditional subsistence purposes; TN explained that the Project area contains important habitat for elk as well as the predators who feed on elk.

TN stated that access is the primary barrier to using traditional lands, followed by environmental concerns about food sources. TN expressed concerns that the Project will result in harvesters having to travel greater distances to hunt.

Trapping:

TN explained that coyote, fox, and wolves were trapped; eagles were trapped for ceremonial purposes.

<u>Source</u>

TN TUS 2018 (cited in TN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #1, 25, 69)

TN 2018 (CEAR #50)

Distribution of Country Foods of Importance (including for medicinal and ceremonial purposes) within the PDA, LAA, and RAA, Accessibility and Efforts to Reconcile Indigenous Concerns through Mitigations

Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.

In addition to the measures proposed to mitigate potential effects on wildlife and biodiversity, and on vegetation and wetlands, as described above, Alberta Transportation will implement the following measures to mitigate potential effects on trapping:

- Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods.
- Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction land access management.
- No specific recommendations or requests were made by TN regarding hunting.

Trapping:

Species: Coyote, fox, and wolves were trapped; also eagles.

<u>Site Access:</u> The PDA is within the TN Traditional Territory as identified in the TLRU Report. TN did not identify specific trapping sites within the PDA, LAA, or RAA. There are no registered traplines in the PDA, LAA or RAA.

The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see Volume 3A, Section 11.4.2).

The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites TN participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.

Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.

- Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods.
- Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, including for hunting and fishing and Alberta Transportation will advise Indigenous groups on post-construction access management.
- No specific recommendations or requests were made by TN regarding trapping.

Ermineskin Cree Nation (ECN)

Fish and Fishing

Fish

ECN noted that the following fish species are culturally significant: Bull trout, Rainbow trout, Cutthroat trout, Burbot, Mountain Whitefish.

Fishing

ECN identified bull trout, rainbow trout, and cutthroat trout as being the main species fished in Elbow River and are fished on the Elbow river, primarily in the summer and fall and often occurs alongside medicinal plant harvesting.

Fish

Species: Bull trout, Rainbow trout, Cutthroat trout, Burbot, Mountain Whitefish.

Locations: Bull trout, Rainbow trout, Cutthroat trout, Burbot, Mountain Whitefish, occur in the PDA, LAA and the RAA. Five fishing areas were mapped by ECN: two are within the PDA and three are within the LAA. Of the fishing areas within the PDA: one is intersected by permanent Project infrastructure, including the diversion channel and gravel road.

<u>Site Access:</u> Current use sites and areas located outside the PDA are not anticipated to be directly affected by the Project. The construction of the diversion channel will result in the loss of 1,854 m² of fish habitat on the bed and banks of Elbow River and 300 m² of fish habitat at the interception of the tributary ID1350. Potential habitat offset gains will be addressed as part of the *Fisheries Act* authorization process for the Project: a habitat offset plan will be developed and submitted for review and will take into consideration input from Indigenous groups, DFO and stakeholders. It will also align with local fish management objectives.



Table 8-1 Indigenous Statements on the Relative Importance of the PDA, LAA, and RAA to the Availability of and Access to Country Foods of Importance

Indigenous Statements on country foods, including for medicinal and ceremonial purposes	Distribution of Country Foods of Importance (including for medicinal and ceremonial purposes) within the PDA, LAA, and RAA, Accessibility and Efforts to Reconcile Indigenous Concerns through Mitigations
ECN reported fishing on private lands within the PDA, including along the Elbow River. Fishing activities were also reported to take place: south of Redwood Meadows and to the east of Bragg Creek within TN Reserve 145, west of Redwood Meadows, northwest of Bragg Creek, southwest of Elbow River Recreational Area. Sources:	Mitigations: Structures will be designed so that storm water runoff and wash water from the access roads, decks, side slopes, and approaches are directed into a retention pond or vegetated area to remove suspended solids, dissipate velocity, and prevent sediment and other deleterious substances from entering watercourses.
	• Works in water will be timed with respect to the RAPs wherever possible. For Elbow River, the RAP is May 01 – July 15 and September 16 – April 15. Condition and use of RAPs will be provided within further Project permitting and authorization under the <i>Fisheries Act</i> . For planning purposes, the Elbow River RAP will be applied as an avoidance and mitigation measure.
	To allow for fish passage and construction of the structures within the Elbow River, the Elbow River will be temporarily diverted, and flows will be maintained downstream by the construction of a temporary bypass channel.
ECN TUS 2018 (CEAR #46)	Drainage areas within the reservoir will be graded to reduce stranding of fish during release of stored flood water from the reservoir.
ECN 2018 (CEAR #46)	Boulders will be added to increase the bed roughness of the channel immediately downstream of the diversion structure, which will increase water depths and reduce velocities.
	Boulder v-weir structures will be constructed in the channel downstream of the gates to provide slower velocity and deeper resting zones.
	A monitoring program will be undertaken to identify if fish passage is impeded for migratory salmonids or other fish species, including bull or cutthroat trout.
	Maintenance, debris removal on the structure, and on the fish passage structures will occur to accommodate fish passage.
	Debris will be cleaned from the diversion structure gates after a flood recedes to allow unimpeded fish passage upstream over the structure.
	• Isolated pools will be identified, marked, and a determination by a qualified aquatic environmental specialist will be made as to whether there are stranded fish in the pool that require rescue and relocation to secure habitats in Elbow River. When the water has been fully drained, the unnamed creek will be surveyed to identify isolated pools where fish might be stranded.
	• Where debris removal from the structures is required, debris removal will be timed to avoid disruption to sensitive fish life stages (i.e., outside the RAP), unless the debris and its accumulation is immediately threatening to the integrity of the structure or relates to an emergency (i.e., risk of structure failure).
	During post-flood reservoir maintenance, areas that had isolated pools may be graded to prevent the isolation of fish in successive flood events.
	Annual offset monitoring to assess condition of habitat offsetting measures and identify potential remediation measures:
	- Success of offsetting measures determined by criteria that determine if offsetting is functioning as intended and to identify contingencies if monitoring shows deficiencies.
	 Confirmation that offsetting components meet the design requirements.
	 Confirmation that the terms of the DFO Authorization are met.
	A post-construction report will be provided to DFO at the completion of construction that will outline the as-built condition of the offsetting measures. In addition to a photographic log, as-built engineer drawings, and construction monitoring, post-construction measurements will include:
	Location and measurements of the structures on the bed and banks.
	Location and quantity of the vegetation reclamation.
	Location and measurements of the Fish Passage Mitigation Structure.
	Fish habitat, abundance, distribution, and benthic invertebrate monitoring in previously sampled reaches (1-12).
	Location and measurements of required fisheries offsetting measures.
	Fishing
	Site Access: With the implementation of mitigation, the Project is unlikely to reduce the productivity or sustainability of a commercial, recreational or Aboriginal fishery as defined by the Fisheries Act. During dry operations, there will be no changes to flow in Elbow River, and therefore no alterations to the quality of fish habitat. Overall, the Project is not expected to limit the availability of traditional resources for current use in the RAA (see the EIA, Volume 3A, Section 8.4.4 and Section 14.8.1).
	In addition, the Project will create access through the development of a permanent portage for Elbow River.
	The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites ECN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.



Indigenous Statements on country foods, including for medicinal and ceremonial purposes	Distribution of Country Foods of Importance (including for medicinal and ceremonial purposes) within the PDA, LAA, and RAA, Accessibility and Efforts to Reconcile Indigenous Concerns through Mitigations
	Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.
	• Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods. Alberta Transportation will avoid substantial interference with public navigation of Elbow River through the following design practices:
	as part of construction, a permanent portage will be developed around the in-stream water intake components.
	signs directing traffic to detours will be installed during construction of road realignments and modifications.
	• Signs will be installed along the existing Elbow River channel. Multiple signs will be placed upstream and downstream of the water intake components on both banks of Elbow River. These signs will warn users on Elbow River that they are approaching in-stream water intake components and of the associated danger with this infrastructure and to direct them to a portage location.
	Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction access management.
	Alberta Transportation will create a portage to facilitate access to the river.
	• To allow for fish passage and construction of the structures within Elbow River, Elbow River will be temporarily diverted, and flows will be maintained downstream by the construction of a temporary bypass channel.
Plants and Plant Harvesting	
Plants	Plants
ECN explained that wetlands provide habitat for culturally important plants, which provide nutritional value for animals and ECN members.	Locations: ECN mapped seven medicinal plant areas: two are within the PDA, three are within the LAA, two are within the RAA. Of the medicinal plant areas within the PDA, one intersected by permanent Project infrastructure including the gravel road and floodplain berm.
	Site Access: Traditionally used plant species will be directly affected due to vegetation removal and grading associated with construction, affecting 168 ha associated with
ECN identified specific areas that support a variety of raditional medicines and ceremonial plants:	permanent Project infrastructure and approximately 566 ha of temporary workspace. Although individual plants will be removed from the PDA, none of the traditionally used species identified will be lost in the LAA, nor will vegetation communities supporting traditionally used plants be lost from the PDA (see Volume 3A, Section 10.4). Alberta
West of the PDA and south of Jumping Pound	Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction. Native trees and shrubs should re-establish over time.

- West of Redwood Meadows and north of Bragg Creek
- South of Redwood Meadows and east of Bragg Creek

Plant Harvesting:

Plant gathering areas were identified by ECN:

- South of Jumping Pound towards the northern border of TN Reserve 145
- South of Redwood Meadows and to the east of Bragg Creek within TN Reserve 145
- West of Redwood Meadows and to the northwest of Bragg Creek
- Area bordering the western extent of TN Reserve 145, east of the Elbow River, and extending in the reserve towards the east
- South of Highway 8 and east of Redwood Meadows

<u>Source</u>:

ECN TUS 2018 (CEAR #46)

ECN 2018 (CEAR #46)

Many of the potentially affected grassland and wetland plant communities have intrinsic adaptations to periodic flooding, while other species such as poplar and spruce would be less tolerant to flooding due to having a low anaerobic tolerance. Mortality of traditional use species found in upland plant communities is expected. However, these species are widespread and are expected to re-establish by natural recruitment; permanent loss of traditional use species is not predicted. Overall, residual effects on vegetation and wetlands post-flood would not result in the loss of native upland or wetland plant communities, nor would it result in the loss of wetland function from the LAA (see the EIA, Volume 3B, Section 10.2).

Mitigations: At the end of construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded to meet AEP reclamation requirements. Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important.

- Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction.
- Restrict construction activities to the approved construction footprint.
- Reduce the removal of vegetation in wetlands to the extent possible.
- Where possible, conduct ground level cutting/mowing/mulching of wetland vegetation instead of grubbing.
- Where applicable, in areas not impacted by the permanent Project footprint, if ground conditions are encountered that create potential for rutting, admixing or compaction, minimize ground disturbance by using a protective layer such as matting or biodegradable geotextile and clay ramps or other approved materials between wetland root/seed bed and construction equipment.
- Native areas disturbed by the Project would be reseeded using an Alberta Transportation native custom seed mix.
- Alberta Transportation will not apply herbicide within 30 m of plant species or ecological communities of management concern, wetland or waterbody. Spot spraying, wicking, mowing, or hand picking are acceptable measures for control of regulated weeds in this area.
- A licensed industrial pesticide applicator would be contracted to select and apply all herbicide in compliance with the procedures as outlined in the Code of Practice for Pesticides (GoA 2010).



Table 8-1 Indigenous Statements on the Relative Importance of the PDA, LAA, and RAA to the Availability of and Access to Country Foods of Importance

Indigenous Statements on country foods, including for medicinal and ceremonial purposes	Distribution of Country Foods of Importance (including for medicinal and ceremonial purposes) within the PDA, LAA, and RAA, Accessibility and Efforts to Reconcile Indigenous Concerns through Mitigations
	Alberta Transportation will provide ECN the opportunity for two site visits, one during construction and one post-construction to observe application of prescribed mitigation measures and provide feedback.
	• Following construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded with a native custom seed mix to meet AEP reclamation requirements.
	• Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important.
	Plant Harvesting:
	Locations: Five gathering areas were mapped by ECN: three are within the LAA, two are within the RAA, and a wood area was mapped by ECN within the RAA.
	Site Access: Traditionally used plant species will be directly affected due to vegetation removal and grading associated with construction, affecting 168 ha associated with permanent Project infrastructure and approximately 566 ha of temporary workspace. Although individual plants will be removed from the PDA, none of the traditionally used species identified will be lost in the LAA, nor will vegetation communities supporting traditionally used plants be lost from the PDA (see Volume 3A, Section 10.4). Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction.
	The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. I light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites ECN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.
	Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.
	In addition to the measures proposed to mitigate potential effects on wildlife and biodiversity, and on vegetation and wetlands, as described above, Alberta Transportation will implement the following measures to mitigate potential effects on plant harvesting:
	Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods.
	Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods.
	Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction.
	Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction access management.
	Alberta Transportation is committed to ongoing engagement with ECN, including identifying opportunities for ECN to participate in Project activities.

Wildlife:

These wildlife resources are generally described as being generally present in the RAA: moose, grizzly bear, rabbit, coyote, cougar, muskrat, short-eared owl, elk, black bear, porcupine, weasel, lynx, bobcat, bald eagle, duck, white-tailed deer, mule deer, wolf, marten, beaver, and sharp-tailed grouse.

ECN explained that the areas south of Jumping Pound, to the west of Redwood Meadows and north of Bragg Creek host an abundance of medicinal plants, and this in turn attracts large animals, such as bears.

A bear was identified in an area containing medicinal plants to the east of Bragg Creek, on TN Reserve 145.

Wildlife

Species: Moose, grizzly bear, rabbit, coyote, cougar, muskrat, short-eared owl, elk, black bear, porcupine, weasel, lynx, bobcat, bald eagle, osprey, duck, white-tailed deer, mule deer, wolf, marten, beaver, and sharp-tailed grouse.

<u>Locations</u>: Five wildlife areas were mapped by ECN: four are within the PDA, one is within the RAA, and two of the wildlife areas within the PDA are intersected by permanent Project infrastructure, including the gravel road and off-stream dam. A private property in the southwestern portion of the PDA contained an osprey nest. A bald eagle nest was identified in the southeastern portion of the PDA near the Elbow River.

Site Access: The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Native trees and shrubs should re-establish over time. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see the EIA, Volume 3A, Section 11.4.2). Impacts to wildlife are expected to be minimum and temporary.



Table 8-1 Indigenous Statements on the Relative Importance of the PDA, LAA, and RAA to the Availability of and Access to Country Foods of Importance

Indigenous Statements on country foods, including for Distribution of Country Foods of Importance (including for medicinal and ceremonial purposes) within the PDA, LAA, and RAA, Accessibility and Efforts to Reconcile Indigenous **Concerns through Mitigations** medicinal and ceremonial purposes Field visits conducted by ECN identified wildlife and wildlife Mitigations: In addition to the measures proposed to mitigate potential effects on vegetation and wetlands described above, Alberta Transportation will implement the following corridors near the Project: measures to mitigate potential effects on wildlife and biodiversity: Herds of elk were identified to the south of Springbank • Pre-construction surveys will be conducted to identify wildlife features (e.g., nests, dens) and appropriate site-specific mitigation developed. Road and east of Highway 22, and to the west of Highway Where possible, construction activities during the RAP for the KWBZ identified along Elbow River (December 15 to April 30) will be avoided or reduced. This will limit potential 22 and to the north of Springbank Road sensory disturbance to wintering ungulates (ESRD 2015, GoA 2017). If construction activities must occur during this time period, a final wildlife mitigation and monitoring plan will Elk tracks and scat were noted in the southeastern portion be developed in consultation with regulators, which will include monitoring ungulate habitat use and response to human disturbance. of the PDA Restrict all construction activities to the approved construction footprint. Mule deer, as well as their tracks and scat were identified Where possible, temporary workspaces and access roads will be in areas that avoid wildlife features and native vegetation (e.g., shrubland, treed areas, wetlands). Existing in the southeastern and southwestern portions of the PDA access roads and previously disturbed areas will be used, where feasible. White-tailed deer were noted on TN Reserve 145 east of Where fencing is proposed to restrict livestock access to Project structures (e.g., diversion channel), wildlife-friendly fencing will be installed to allow ungulate passage. Braga Creek • If an active nest or den is found, it will be subject to a provincial or federal disturbance setback buffer and site-specific mitigation. A landowner in the southwestern portion of the PDA noted • The diversion channel will be built with 3H:1V side slopes, which is within the range that most large mammals (e.g., elk,) are known to traverse (McCorquodale 2003; Frair et al. that her property contained an osprey nest. 2005; Mao et al. 2005; The Bow Corridor Ecosystem Advisory Group 2012). A bald eagle nest, with two eaglets, was identified in the The side slopes and bottom of the diversion channel will be vegetated, except under the proposed bridges and at Primez Creek. Vegetated areas will provide a more southeastern portion of the PDA near the Elbow River and ECN conducive wildlife passage across the channel. expressed concern that it may be located where the outlet • To maintain ungulate movement within the KWBZ, the floodplain berm will be revegetated with materials conducive for ungulate movement. The section of reinforced channel is proposed to be constructed. ECN noted that the concrete (approximately 250 m) closest to Elbow River will be covered with topsoil and seeded with native grasses. The central portion of the floodplain berm includes bald eagle is culturally and spiritually important, and its approximately 550 m of exposed riprap, where sections will be filled with substrate finer than riprap, such as sand, gravel and vegetation to allow for more walkable sections feathers are used for ceremonial purposes. (Austin and Garland 2001; Huijser et al. 2008; Clevenger 2011). The south portion, farthest from Elbow River, will be a 450 m earthen embankment vegetated with native grasses. **Hunting:** A remote camera program will be designed with AEP to identify whether the diversion channel acts as a barrier to wildlife movement during dry operations, especially for ECN noted that some landowners allow ECN members to ungulates, and determine the effectiveness of mitigation implemented throughout the diversion channel. This will include monitoring along Elbow River to determine if wildlife access private lands to hunt. use of the KWBZ has been affected by the construction and operation of the Project. Although the specific details and design of the remote camera program will be determined with AEP prior to construction, the following describes the basis of a preliminary approach. Hunting on private lands has become the preferred method owing to increased displacement of wildlife from Crown lands During the dry operation phase, a total of 14 remote cameras will be deployed in the wildlife LAA and monitor wildlife movement for at least one-year post-construction. The six closer to the ECN reserve due to development and recreation remote cameras along the Elbow River will remain at the same locations as during the construction phase. Four remote cameras will be deployed soon after completion of Project construction and placed at the same locations as pre-construction baseline surveys near Highway 22 (i.e., near the raised portion of the highway at the north end of the wildlife LAA). An additional four remote cameras will be installed alona wildlife friendly fencing at the edge of the diversion channel at crossable sections where there is ECN noted that the increase in recreational hunters on Crown vegetation. Remote cameras at the diversion channel will be spaced approximately 1 km apart. lands is a "source of cultural stress." A wildlife biologist will visit the cameras every four months during construction and operation to change out memory cards and batteries and check on the overall status of ECN stated the Project area represents one of the least equipment (e.g., positioning, weather related malfunctions, animal or human tampering of equipment). disturbed and accessible areas for ECN hunters. During dry operations, monitoring of wildlife movement using remote cameras would occur for at least one year following construction. A group of hunters travelled to the PDA in 2018 to hunt moose • There were no beaver dams or lodges identified within the construction footprint for the Project during the baseline wildlife surveys completed within the LAA and, as a result, and elk on private lands. ECN estimated that community Alberta Transportation is not expecting to remove any dams or lodges. If an active beaver dam is identified within the construction footprint at a later date, mitigation for dam members have harvested more than 20 large ungulates from the PDA and the areas to the northeast. removal will be developed with the appropriate agencies (e.g., AEP) and the relevant permit(s) obtained, as required. At the end of construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded to meet AEP reclamation Other hunting areas were identified by ECN: Private lands east of Highway 22 and to the south of • Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous Highway 1, towards Calaway Park to the east and groups as to species that are culturally important. Highway 8 to the south South of Jumping Pound



TN Reserve 145

South of Redwood Meadows and east of Bragg Creek on

Table 8-1 Indigenous Statements on the Relative Importance of the PDA, LAA, and RAA to the Availability of and Access to Country Foods of Importance

Indigenous Statements on country foods, including for medicinal and ceremonial purposes	Distribution of Country Foods of Importance (including for medicinal and ceremonial purposes) within the PDA, LAA, and RAA, Accessibility and Efforts to Reconcile Indigenous Concerns through Mitigations
Source:	Hunting:
ECN TUS 2018 (CEAR #46)	Locations: Hunting areas were mapped by ECN within the PDA, LAA and RAA.
ECN 2018 (CEAR #46)	Site Access: The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see Volume 3A, Section 11.4.2).
	The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites ECN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.
	Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.
	In addition to the measures proposed to mitigate potential effects on wildlife and biodiversity, and on vegetation and wetlands, as described above, Alberta Transportation will implement the following measures to mitigate potential effects on trapping:
	Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods.
	Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction land access management.
	Alberta Transportation is committed to ongoing engagement with ECN, including identifying opportunities for ECN to participate in Project activities.
Louis Bull Tribe (LBT)	
General Comments	
No site-specific information has been provided but LBT	Species: Moose, deer, cougar, coyote, wolf and grizzly bear.
expressed concern about the loss of accessible Crown lands on which to practice Aboriginal and Treaty rights being a long-	Locations: LBT did not identify specific traditional use sites, including hunting and trapping, fishing, plant gathering, or habitation, camping, cultural, spiritual, ceremonial sites, within the PDA, LAA, or RAA.
term residual effect of the Project. LBT identified moose, deer, cougar, coyote, wolf and grizzly bear as species of cultural importance and noted they are harvested for sustenance, pelts and other uses.	Site Access: The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see the EIA, Volume 3A, Section 11.4.2 of the EIA).
LBT stated that community members have not hunted, trapped, gathered plants or travelled extensively in the Projec area due to the private ownership of most of the lands.	The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the
Sources:	designated LUA. Alberta Transportation invites LBT to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing
LBT TUS 2018 (CEAR #1228)	conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.
LBT 2018 (CEAR #49)	Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.
Letter from LBT to CEAA (June 18, 2018)	In addition to the measures proposed to mitigate potential effects on wildlife and biodiversity, and on vegetation and wetlands, as described above, Alberta Transportation will

operations, and Alberta Transportation will advise Indigenous groups on post-construction land access management.

• Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components, and discuss key

• Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and

implement the following measures to mitigate potential effects on harvesting:

traditional harvesting periods.



Table 8-1 Indigenous Statements on the Relative Importance of the PDA, LAA, and RAA to the Availability of and Access to Country Foods of Importance

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Indigenous Statements on country foods, including for medicinal and ceremonial purposes	Distribution of Country Foods of Importance (including for medicinal and ceremonial purposes) within the PDA, LAA, and RAA, Accessibility and Efforts to Reconcile Indigenous Concerns through Mitigations
Montana First Nation (MFN)	
General Comments	
MFN expressed concern regarding medicinal and ceremonial plants in the Project area but no site-specific information has	Locations: MFN did not identify specific traditional use sites, including hunting and trapping, fishing, plant gathering, or habitation, camping, cultural, spiritual, ceremonial sites, within the PDA, LAA, or RAA.
been provided.	Site Access: The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will

Source:

MFN Engagement meeting with Alberta Transportation (June 27, 2018) (cited in MFN SR1 SCRT Oct 2016-Sept 2019; Specific Concern #16)

be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites MFN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.

Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.

In addition to the measures proposed to mitigate potential effects on wildlife and biodiversity, and on vegetation and wetlands, as described above, Alberta Transportation will implement the following measures to mitigate potential effects on plant gathering:

- Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction.
- Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction access management.

Samson Cree Nation (SCN)

Fish and Fishing

SCN has and continues to exercise its fishing rights. As such, the | Fish potential destruction of fish and fish habitat is of particular concern to Samson Cree Nation.

SCN expressed concern that westslope cutthroat trout in the PDA was not considered.

Source:

SCN 2018 (CEAR #52)

(cited in SCN SR1 SCRT Oct 2016-Sept 2019; Specific Concern #11, 12)

Species: Westslope cutthroat trout.

Locations: The Elbow River is within the PDA. Pure strain westslope cutthroat trout do not exist within the PDA, LAA or RAA. See Alberta Transportation Response to Round 1, CEAA Package 3, IR3-30.

Site Access: Current use sites and areas located outside the PDA are not anticipated to be directly affected by the Project. The construction of the diversion channel will result in the loss of 1,854 m² of fish habitat on the bed and banks of Elbow River and 300 m² of fish habitat at the interception of the tributary ID1350. Potential habitat offset gains will be addressed as part of the Fisheries Act authorization process for the Project: a habitat offset plan will be developed and submitted for review and will take into consideration input from Indigenous groups, DFO and stakeholders. It will also align with local fish management objectives.

Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.

- Structures will be designed so that storm water runoff and wash water from the access roads, decks, side slopes, and approaches are directed into a retention pond or vegetated area to remove suspended solids, dissipate velocity, and prevent sediment and other deleterious substances from entering watercourses.
- Works in water will be timed with respect to the RAPs wherever possible. For Elbow River, the RAP is May 01 July 15 and September 16 April 15. Condition and use of RAPs will be provided within further Project permitting and authorization under the Fisheries Act. For planning purposes, the Elbow River RAP will be applied as an avoidance and mitigation measure.
- To allow for fish passage and construction of the structures within the Elbow River, the Elbow River will be temporarily diverted, and flows will be maintained downstream by the construction of a temporary bypass channel.
- Drainage areas within the reservoir will be graded to reduce stranding of fish during release of retained flood water from the reservoir.
- Boulders will be added to increase the bed roughness of the channel immediately downstream of the diversion structure, which will increase water depths and reduce
- Boulder v-weir structures will be constructed in the channel downstream of the gates to provide slower velocity and deeper resting zones.
- A monitoring program will be undertaken to identify if fish passage is impeded for migratory salmonids or other fish species, including bull or cutthroat trout.
- Maintenance, debris removal on the structure, and on the fish passage structures will occur to accommodate fish passage.
- Debris will be cleaned from the diversion structure gates after a flood recedes to allow unimpeded fish passage upstream over the structure.



Table 8-1 Indigenous Statements on the Relative Importance of the PDA, LAA, and RAA to the Availability of and Access to Country Foods of Importance

Indigenous Statements on country foods, including for medicinal and ceremonial purposes	Distribution of Country Foods of Importance (including for medicinal and ceremonial purposes) within the PDA, LAA, and RAA, Accessibility and Efforts to Reconcile Indigenous Concerns through Mitigations
	• Isolated pools will be identified, marked, and a determination by a Qualified Aquatic Environmental Specialist will be made as to whether there are stranded fish in the pool that require rescue and relocation to secure habitats in Elbow River. When the water has been fully drained, the unnamed creek will be surveyed to identify isolated pools where fish might be stranded.
	• Where debris removal from the structures is required, debris removal will be timed to avoid disruption to sensitive fish life stages (i.e., outside the RAP), unless the debris and its accumulation is immediately threatening to the integrity of the structure or relates to an emergency (i.e., risk of structure failure).
	During post-flood reservoir maintenance, areas that had isolated pools may be graded to prevent the isolation of fish in successive flood events.
	annual offset monitoring to assess condition of habitat offsetting measures and identify potential remediation measures:
	- Success of offsetting measures determined by criteria that determine if offsetting is functioning as intended and to identify contingencies if monitoring shows deficiencies.
	 Confirmation that offsetting components meet the design requirements.
	 Confirmation that the terms of the DFO Authorization are met.
	A post-construction report will be provided to DFO at the completion of construction that will outline the as-built condition of the offsetting measures. In addition to a photographic log, as-built engineer drawings, and construction monitoring, post-construction measurements will include:
	Location and measurements of the structures on the bed and banks.
	Location and quantity of the vegetation reclamation.
	Location and measurements of the Fish Passage Mitigation Structure.
	Fish habitat, abundance, distribution, and benthic invertebrate monitoring in previously sampled reaches (1-12).
	Location and measurements of required fisheries offsetting measures.
	<u>Fishing</u>
	Site Access: With the implementation of mitigation, the Project is unlikely to reduce the productivity or sustainability of a commercial, recreational or Aboriginal fishery as defined by the Fisheries Act. During dry operations, there will be no changes to flow in Elbow River, and therefore no alterations to the quality of fish habitat. Overall, the Project is not expected to limit the availability of traditional resources for current use in the RAA (see Volume 3A, Section 8.4.4 and Section 14.8.1).
	In addition, the Project will create access through the development of a permanent portage for Elbow River.
	The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites SCN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.
	Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.
	Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods. Alberta Transportation will avoid substantial interference with public navigation of Elbow River through the following design practices:
	As part of construction, a permanent portage will be developed around the in-stream water intake components.
	Signs directing traffic to detours will be installed during construction of road realignments and modifications.
	• Signs will be installed along the existing Elbow River channel. Multiple signs will be placed upstream and downstream of the water intake components on both banks of Elbow River. These signs will warn users on Elbow River that they are approaching in-stream water intake components and of the associated danger with this infrastructure and to direct them to a portage location.
	Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction access management.
	Alberta Transportation will create a portage to facilitate access to the river.
	To allow for fish passage and construction of the structures within the Elbow River, the Elbow River will be temporarily diverted, and flows will be maintained downstream by the construction of a temporary bypass channel.



Table 8-1 Indigenous Statements on the Relative Importance of the PDA, LAA, and RAA to the Availability of and Access to Country Foods of Importance

traditional harvesting periods.

Indigenous Statements on country foods, including for medicinal and ceremonial purposes	Distribution of Country Foods of Importance (including for medicinal and ceremonial purposes) within the PDA, LAA, and RAA, Accessibility and Efforts to Reconcile Indigenous Concerns through Mitigations
Wildlife and Hunting	
SCN has and continues to exercise its hunting rights. As such, the potential destruction of wildlife habitat is of particular concern to SCN. In addition, it is likely that SCN hunting rights will be impacted during the construction and operation of the Project. Source:	Locations: SCN did not identify hunting sites, within the PDA, LAA, or RAA. The site of signs of a bear foraging for tender dogwood roots was not disclosed by SCN, SCN did not identify specific hunting and trapping sites within the PDA, LAA, or RAA.
	Site Access: The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see Volume 3A, Section 11.4.2).
SCN 2018 (CEAR # 52) (June 25, 2018) (cited in SCN SR1 SCRT Oct 2016- Sept 2019; Specific Concern #2)	The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites SCN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.
	Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.
	In addition to the measures proposed to mitigate potential effects on wildlife and biodiversity, and on vegetation and wetlands, as described above, Alberta Transportation will implement the following measures to mitigate potential effects on hunting:
	Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods.
	Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction land access management.
Métis Nation of Alberta, Region 3	
General Comments	
Members of MNAR3 have harvested plants, caught fish, and hunted/trapped in the Project area.	Locations: MFN did not identify specific traditional use sites, including hunting and trapping, fishing, plant gathering, or habitation, camping, cultural, spiritual, ceremonial sites, within the PDA, LAA, or RAA.
MNAR3 expressed concern that the impacts to country foods from reservoir construction has the potential to limit access or have adverse effects on the ability of members to access country foods.	Site Access: The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Although there would be temporary displacement and disturbance during construction, a measurable change in the abundance of wildlife, fish or plants in the RAA is unlikely (see the EIA, Volume 3A, Section 11.4.2).
Source:	Current use sites and areas located outside the PDA are not anticipated to be directly affected by the Project.
MNAR3 2019. Letter to Alberta Transportation (March 21, 2019) (cited in MNAR3 SR1 SCRT Table Oct 2016-Sept 2019; Specific Concern #5)	The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation is available to meet with MNAR3 to discuss the LUA
	Mitigations: Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and areas.
	In addition to the measures proposed to mitigate potential effects on wildlife and biodiversity, and on vegetation and wetlands, as described above, Alberta Transportation will implement the following measures to mitigate potential effects on harvesting of country food:
	Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components, and discuss key

• Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and Project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction land access management.





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b) As described in section a), Alberta Transportation has reviewed feedback received to date regarding the relative importance of the PDA, LAA, and RAA to the availability of and access to country foods of importance. This has been gathered through various engagement and reporting processes including SOCs, engagement meetings, correspondence and TUS reports. This information has been compiled into s SCRTs.

Alberta Transportation has compiled, reviewed, synthesized, and analyzed this information. With respect to areas of disparity, Alberta Transportation acknowledges that differences in views on the Project's potential impacts on health, socio-economic conditions, and physical and cultural heritage as a result of changes to availability of or access to country foods remain between Indigenous groups and Alberta Transportation. Alberta Transportation also recognizes that potential effects on health, socio-economic conditions, and physical and cultural heritage as a result of changes to availability of or access to country foods can only be meaningfully evaluated by individuals and communities experiencing these effects in their cultural context.

Table 8-2 provides both general and specific comments and concerns expressed by Indigenous groups as they relate to the availability of and access to country foods and subsequent effects on current use, health, socio-economic conditions, and physical and cultural heritage. The general areas of disparity in views include:

- views by Indigenous groups that the country foods assessment methodology is not adequate
- views by Indigenous groups about the potential effects to the availability of and access to country foods of importance, including current use
- views by Indigenous groups on potential effects to the availability of and access to country foods and subsequent effects on health and socio-economic conditions, and physical and cultural heritage

Since filing of the EIA, some Indigenous groups have expressed concerns that Alberta Transportation has not made adequate efforts to obtain information about country foods relied upon by Indigenous groups, including the frequency of consumption. Alberta Transportation has synthesized and analyzed this information and conclude that given the overall mitigation program many of these concerns have been addressed. For example, with respect to efforts to obtain information about country foods, Alberta Transportation has engaged with five Treaty 7 First Nations, including Kainai First Nation, Piikani Nation, Siksika Nation, Stoney Nakoda Nations, and Tsuut'ina Nation since 2014 to understand how the Project potentially impacts rights, and traditional uses including offering and funding sites visits and TUS in addition to workshops and other meetings. Since 2016, Alberta Transportation has also been engaged with the additional eight Indigenous groups identified by CEAA for engagement on the Project. Through engagement activities, Alberta Transportation has provided multiple opportunities for Indigenous groups to provide information about country food consumption. More detail regarding Indigenous engagement activities with each



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Indigenous group engaged on the Project is provided in Alberta Transportation's response to Round 1 CEAA Package 2, IR2-01.

The EIA considered best available TLRU information, including information about the importance of country foods. Alberta Transportation acknowledges that only one final and one interim TUS report were received prior to filing the EIA in March 2018, which limited the ability to use Indigenous and community knowledge to scope the EIA and select VCs. As TUS have been received since the filing of the EIA, Alberta Transportation has reviewed and analyzed these in the context of the EIA and have confirmed that no new effects to country foods were identified that had not been considered in the EIA. Volume 3A, Section 14.3.2.1 concludes, given the scope and location of the Project, that effects will not result in a long-term threat to the persistence and viability of species harvested for country foods in the RAA.

Alberta Transportation is of the view that the Indigenous Engagement Program has provided numerous opportunities for Indigenous groups to participate in, contribute to and share concerns about the assessment of potential Project effects on country foods. Despite this, Alberta Transportation acknowledges that Indigenous groups may have ongoing concerns about the adequacy of country foods assessment.

With respect to disparities regarding the potential effects on the availability of and access to country foods of importance, Alberta Transportation has synthesized and analyzed this information and conclude that given the overall mitigation program many of the concerns related to access and availability have been addressed. For example, the Project is designed to facilitate natural flow patterns of Elbow River, while mitigating against extreme flood events that can negatively affect river function. Alberta Transportation's overall flood protection measures help reduce the impacts of extreme flood events and, consequently, should help maintain the ability to harvest country foods.

Overall, the Project is not expected to limit the availability of or access to country foods in the RAA (see the EIA, Volume 3A, Section 8.4.4 and Section 14.8.1). The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see Volume 3A, Section 11.4.2 of the EIA).

The construction of the diversion channel will result in the loss of 1,854 m² of fish habitat on the bed and banks of Elbow River and 300 m² of fish habitat at the interception of the tributary ID1350. Potential habitat offset gains will be addressed as part of the *Fisheries Act* authorization process for the Project: a habitat offset plan will be developed and submitted for review and will take into consideration input from Indigenous groups, DFO and stakeholders. It will also align with local fish management objectives. With the implementation of mitigation, the Project is unlikely to reduce the productivity or



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sustainability of a commercial, recreational or Aboriginal fishery as defined by the *Fisheries* Act. During dry operations, there will be no changes to flow in Elbow River, and therefore no alterations to the quality of fish habitat. Overall, the Project is not expected to limit the availability of traditional resources for current use in the RAA (see Volume 3A, Section 8.4.4 and Section 14.8.1).

Traditionally used plant species within the PDA will be directly affected due to vegetation removal and grading associated with construction, affecting 168 ha associated with permanent Project infrastructure and approximately 566 ha of temporary workspace. Although individual plants will be removed from the PDA, none of the traditionally used species identified will be lost in the LAA, nor will vegetation communities supporting traditionally used plants be lost from the PDA (see Volume 3A, Section 10.4). At the end of construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded to meet AEP reclamation requirements. Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important. Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction.

Furthermore, the construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites First Nations and stakeholders to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.

Despite the assessment conclusion that the Project is not expected to limit the availability of or access to country foods in the RAA, Alberta Transportation acknowledges that Indigenous groups may have ongoing concerns about potential effects on country foods.

An assessment of the effects on public health, including country foods was provided in the EIA (Volume 3A, Section 15.3.2) and concluded that effects to Indigenous health were considered to be negligible. With consideration of additional information provided by Indigenous groups regarding country foods (provided in Table 8-1 and 8-2) no additional effects pathways were identified related to Indigenous heath and country foods and effects are still considered to be negligible.



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Information provided by Indigenous groups since filing of the EIA has not identified the PDA as an area where country foods are considered to be a substantial economic benefit to the community. As indicated previously, the LUA provides the potential for increased access in the PDA relative to existing conditions (i.e., private land) which would result in a positive change to the ability to exercise Section 35 rights.

Alberta Transportation is committed to Indigenous participation in the Project, including training, employment, and contracting opportunities. To this end, Alberta Transportation is preparing a draft IPP with the goal to create training, employment, monitoring, and contracting opportunities with interested Indigenous groups potentially affected by the Project. Alberta Transportation aims to obtain Indigenous comment and feedback on the draft IPP, the final draft of which will identify how that feedback was incorporated.

Physical and cultural heritage are addressed in Section 13 of the EIA and in Alberta Transportation's response to Round 1 CEAA Package 2, IR2-10. Alberta Transportation has reviewed information provided by Indigenous groups and has not identified a pathway for effects on the availability of and access to country foods that would lead to subsequent effects on physical and cultural heritage.

Alberta Transportation acknowledges that Indigenous groups may have ongoing concerns about potential effects of country foods on the availability of and access to country foods and the subsequent effects on health, socio-economic conditions, and physical and cultural heritage.

Going forward, additional efforts to reconcile areas of disparity may occur, generally, through the provision of Project information, the finalizing principles for future land use, the incorporation of feedback that results in changes to Project planning or through commitment to further exploring an issue, concern or recommendation. For example, as of September 2019 Alberta Transportation has provided a written response for each TUS received, apart from Piikani Nation and Métis Nation of Alberta, Region 3, which will receive written responses to their TUS in December 2019. Alberta Transportation has met with or will offer to meet with each Indigenous group that has submitted a TUS to receive their comment and feedback. The written responses that Alberta Transportation has provided to Tsuut'ina Nation, Kainai First Nation, Louis Bull Tribe, and Ermineskin Cree Nation have been included in CEAA Conformity IR2-01 Appendix 1-1. Alberta Transportation emphasizes that its engagement with Indigenous groups is ongoing. As such, Alberta Transportation's response to Round 1 CEAA, Package 2, IR2-01 Appendix 1-1 also describes both Alberta Transportation's efforts to date and planned commitments to reconcile areas of disparity between the views and conclusions of Indigenous groups and Alberta Transportation regarding the Project's potential effects on Indigenous health and country foods.

Alberta Transportation is committed to working with Indigenous groups to try to seek mutually acceptable solutions to the issues, concerns or recommendations identified and those that remain unresolved will be tracked through Alberta Transportation's ongoing engagement.



Table 8-2 Indigenous Group Views on the Project's Potential Effects on Indigenous Health and Country Foods

Views related to Potential Effects on Indigenous Health and Country Foods	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
General Comments from Indigenous Groups Regarding Potentic	al Disparities related to the	Project's Potential Effects on Indigenous Health and Country Foods	
Kainai First Nation/Blood Tribe (KFN)			
KFN has expressed concern that Alberta Transportation has not made adequate efforts to obtain information about the following: an assessment of country foods relied upon by KFN; and potential health and socioeconomic effects of the Project on KFN. KFN stated that the country foods assessment of the EIS ignores the fact that KFN harvests country food on private lands and does not examine traditional use impacts properly on private property. • Traditional use impacts properly on private property.	1411 2010 (02) 41 11 17	Alberta Transportation has been engaged with KFN since 2014 to understand how the Project potentially impacts rights, and traditional uses including offering and funding site visits and TUS studies in addition to workshops and other meetings. The EIA submitted in March 2018 considered best available TLRU information, including information about the importance of country foods. Volume 3A, Section 14.3.2.1 concludes given the scope and location of the Project, that effects there will not result in a long-term threat to the persistence and viability of species harvested for country foods in the RAA. Alberta Transportation is of the view that the Indigenous Engagement Program has provided numerous opportunities for Indigenous groups to participate in, contribute to and share concerns about the assessment of potential Project effects on country foods. Despite this, Alberta Transportation acknowledges that Indigenous groups may have ongoing concerns about the adequacy of country foods assessment. More detail regarding Indigenous engagement activities with KFN is provided in Alberta Transportation's response to Round 1 CEAA Package 2, IR2-01.	Alberta Transportation has provided multiple opportunities for KFN to provide information about country food consumption. Alberta Transportation provided drafts of the updated TLRU Effects Assessment sections of the EIA (Volumes 3A and 3B), which were provided February 5, 2018, for KFN review and input. Alberta Transportation offered a TLRU workshop in January 2018 with KFN to obtain input and feedback on the draft TLRU Effects Assessments, including KFN's perspectives on assessment methodology, proposed mitigation, Project-Specific Concerns and how the Project may affect the exercise of Section 35 rights. Alberta Transportation is awaiting KFN to identify a suitable date to meet. Alberta Transportation funded a TUS for the Project. KFN Elders and knowledge holders participated in 14 days of site visits facilitated by Alberta Transportation. Results of the site visits were reported in the interim KCO & SCO TUS study submitted to Alberta Transportation on March 13, 2017. The results of the interim TUS were considered in the EIA. However, permission to use the spatial information from the interim TUS has not been received from KFN by Alberta Transportation; therefore, the information regarding sites and areas has been generalized for use in the EIA and exact locations, including those in the PDA, are not provided. A final TUS was submitted to Alberta Transportation on June 25, 2018. KFN provided the locations of some TLRU areas and Alberta Transportation considered the locations and potential effects to these areas as a result of the Project. Alberta Transportation provided a written response to KFN addressing the concerns and issues raised in the TUS and met with KFN on October 17, 2019 to discuss the response. Alberta Transportation sent a letter dated January 28, 2019 that requested that KFN provide its views and perspectives on its Aboriginal and Treaty rights, cultural and experiential values, and country foods. The letter listed four specific topics that Alberta Transportation was requesting input on to



Table 8-2 Indigenous Group Views on the Project's Potential Effects on Indigenous Health and Country Foods

Views related to Potential Effects on Indigenous Health and Country Foods	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
 KFN has expressed concern regarding the loss of access to approximately 638 ha of high-quality natural prairie grassland, mixed wood and coniferous forests, and wetlands that are suitable for medicinal and food plant gathering. KFN indicated that the ecological setting of the Project area is conducive to the growth of a wide variety of trees, shrubs and grasses that are used for subsistence among other purposes. KFN expressed concern about the loss of traditionally used plants. 'We have identified many medicinal plants and food that grow here [that] we ate and still eat All that we have seen today will be destroyed and some of it will be underwater when the dam project is completed.' 	Letter from KFN to DEMA (June 25, 2018) KFN TUS 2018 (CEAR # 47) (cited in KFN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #32)	The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Traditionally used plant species within the PDA will be directly affected due to vegetation removal and grading associated with construction, affecting 168 ha associated with permanent Project infrastructure and approximately 566 ha of temporary workspace. Although individual plants will be removed from the PDA, none of the traditionally used species identified will be lost in the LAA, nor will vegetation communities supporting traditionally used plants be lost from the PDA (see the EIA, Volume 3A, Section 10.4). The Project is expected to result in restricted access to areas within the PDA. Fencing of infrastructure would restrict KFN's access to traditional resources or current use sites or areas for a small portion of Elbow River. However, the Project will also create access, through the development of a permanent portage for Elbow River. Current use sites and areas located outside the PDA are not anticipated to be directly affected by the Project. An assessment of the effects on public health, including country foods was provided in the EIA (Volume 3A, Section 15.3.2) and concluded that effects to Indigenous health were considered to be negligible. With consideration of additional information provided by Indigenous groups regarding country foods, no additional effects pathways were identified related to lendigenous heath and country foods and effects are still considered to be negligible.	Alberta Transportation acknowledges that KFN accesses private lands within the Project area for traditional use activities with permission from the landowners. Alberta Transportation's analysis of information brought forward by KFN and the detailed mitigation measures proposed to address potential effects on traditional resources, areas and activities were communicated to KFN on August 9, 2019 in Alberta Transportation's response to the KFN TLRU report (see CEAA Conformity IR2-01, Appendix 1-1). Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction. At the end of construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded to meet AEP reclamation requirements. Alterations will be made to the Alberta Transportation custom native seed mix consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important. The draft IPP was provided to KFN on November 12, 2019. Opportunities for KFN to participate in harvesting plants pre-construction and revegetation post-construction was discussed during the November 21, 2019 meeting. Alberta Transportation commits to offering to hold workshops with KFN to discuss further mitigation measures. The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites KFN to participate in the engagement process for the LUA. As such, the po



Table 8-2 Indigenous Group Views on the Project's Potential Effects on Indigenous Health and Country Foods

Views related to Potential Effects on Indigenous Health and Country Foods	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
 KFN stated that hunting big game is 'a pillar of the KFN traditional food provisioning system' KFN hunters feed dozens of community members on a regular basis from their hunting, food processing, and sharing practices. The Elbow River valley is habitat for many species of game that KFN members hunt for subsistence and ceremonial purposes. Should the Project be approved, and Conservation Area A be made accessible, KFN members indicated they intend to use the area to exercise their rights to hunt. 	• KFN TUS 2018 (CEAR #47)	Since filing the EIA, Alberta Transportation has evolved the land use planning for the Project and is no longer contemplating establishing Areas A, B, and C. The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites First Nations and stakeholders to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights. The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see Volume 3A, Section 11.4.2 of the EIA). Portions of the hunting areas identified by KFN that are located within the designated construction footprint will be directly affected by construction activities and fencing of infrastructure will restrict access to certain areas of the Project. Volume 3A, Section 14.3.2.1 acknowledges that Indigenous groups access private lands in the Project Area with the permission of the landowners. The EIA submitted in March 2018 considered best availab	Alberta Transportation acknowledges that KFN accesses private lands within the Project area for traditional use activities with permission from the landowners. Alberta Transportation funded a TUS for the Project. KFN Elders and knowledge holders participated in 14 days of site visits facilitated by Alberta Transportation. Results of the site visits were reported in the KFN TUS study submitted to Alberta Transportation on March 13, 2017. The results of the interim TUS were considered in the ElA. However, permission to use the spatial information from the interim TUS has not been received from KFN by Alberta Transportation; therefore, the information regarding sites and areas has been generalized for use in the ElA and exact locations, including those in the PDA, are not provided. A final TUS was submitted to Alberta Transportation on June 25, 2018. KFN provided the locations of some TLRU areas and Alberta Transportation considered the locations and potential effects to these areas as a result of the Project. Alberta Transportation provided a written response to KFN addressing the concerns and issues raised in the TUS and met with KFN on October 17, 2019 to discuss the response. Alberta Transportation's analysis of information brought forward by KFN and the detailed mitigation measures proposed to address potential effects on traditional resources, areas and activities were communicated to KFN on August 9, 2019 in Alberta Transportation's response to the KFN TLRU report (see CEAA Conformity IR2-01, Appendix 1-1). The primary use of all lands within the PDA is for flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation by letter dated October 22, 2019 introduced the new approach to land use. Under cover dated November 15, 2019, Alberta Transportation provided the latest land use principles and more detail on the LUA engag



Table 8-2 Indigenous Group Views on the Project's Potential Effects on Indigenous Health and Country Foods

Views related to Potential Effects on Indigenous Health and Country Foods	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps				
Piikani Nation (PN)							
 PN noted that Alberta Transportation should review the information in EIA Tables 14-3 and 14-5 at a workshop so that PN use of resources is accurately captured. With many camps along Elbow River and other waterways, it is likely that a variety of food and medicinal plants were historically harvested from these areas. PN indicated the presence of traditional herbs and 	 PN 2018 (CEAR #48) (June 2018) (cited in PN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #6) PN TUS 2017 	Traditionally used plant species within the PDA will be directly affected due to vegetation removal and grading associated with construction, affecting 168 ha associated with permanent Project infrastructure and approximately 566 ha of temporary workspace. Although individual plants will be removed from the PDA, none of the traditionally used species identified will be lost in the LAA, nor will vegetation communities supporting traditionally used plants be lost from the PDA (see the EIA, Volume 3A, Section 10.4).	Alberta Transportation acknowledges PN's views that there are culturally important plants within the PDA. Alberta Transportation funded a TUS for the Project. A final TUS report was submitted to Alberta Transportation on February 22, 2017. To date, Alberta Transportation is analyzing the information brought forward by PN in the TUS report and identifying proposed mitigation measures to address potential effects on traditional resources, areas, and activities. Alberta Transportation will communicate the results of this analysis to PN.				
 medicinal plants within the area of the flood basin. PN has raised concerns with general alteration of the 		Alberta Transportation has been engaged with PN since 2014 to understand how the Project potentially impacts rights, and traditional uses	Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction.				
land within the flood basin, which provides habitat for a variety of vegetation and wildlife species – if one species is altered that the whole ecosystem might be		including offering and funding site visits and TUS studies in addition to workshops and other meetings.	At the end of construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded to meet AEP reclamation requirements.				
affected. Alberta Transportation should: discuss the availability of vegetation, fish and wildlife species for food, traditional medicinal and cultural purposes in the LAA and RAA in the Conservation and Reclamation		The EIA submitted in March 2018 considered best available TLRU information, including information about the importance of country foods Volume 3A, Section 14.3.2.1 concludes given the scope and location of the Project, that effects there will not result in a long-term threat to the	Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important.				
plan; develop a monitoring plan with PN to assess Project effects on hunting, trapping, fishing, plant		persistence and viability of species harvested for country foods in the RAA. Alberta Transportation is of the view that the Indigenous Engagement	The draft IPP was provided to PN on November 15, 2019 which includes opportunities for revegetation.				
harvesting, and cultural use following Project development; develop Project-specific triggers and		Program has provided numerous opportunities for Indigenous groups to participate in, contribute to and share concerns about the assessment of potential Project effects on country foods. Despite this, Alberta	Alberta Transportation commits to offering to hold workshops with PN to discuss further mitigation measures.				
limits with PN for the Project's mitigation, management, and monitoring plans that reflect TEK and ecological and cultural values; and consider supporting PN's cultural retention strategies, including plans to establish community -based monitoring of key cultural species and practices.		Transportation acknowledges that Indigenous groups may have ongoing concerns about the adequacy of country foods assessment.	The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites PN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.				
							Alberta Transportation by letter dated October 22, 2019 introduced the new approach to land use. Under cover dated November 15, 2019, Alberta Transportation provided the latest land use principles and more detail on the LUA engagement process and offered to meet with PN to discuss next steps.
					In December 2019, Alberta Transportation provided written responses to the PN Technical Review dated June 2018, which included this concerns as Question 63. Alberta Transportation has offered to meet with PN regarding the written responses.		



Table 8-2 Indigenous Group Views on the Project's Potential Effects on Indigenous Health and Country Foods

Views related to Potential Effects on Indigenous Health and Country Foods	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
iksika Nation (SN)			
SN identified medicinal and ceremonial plants on both sides of Elbow River in proposed construction areas.	KCO and SCO TUS Research Study Joint Interim Report, 2017 (pg. 4) (cited in SN SR1 SCRT Aug 2014- Aug 2019; Specific Concern #14)	Traditionally used plant species within the PDA will be directly affected due to vegetation removal and grading associated with construction, affecting 168 ha associated with permanent Project infrastructure and approximately 566 ha of temporary workspace. Although individual plants will be removed from the PDA, none of the traditionally used species identified will be lost in the LAA, nor will vegetation communities supporting traditionally used plants be lost from the PDA (see the EIA, Volume 3A, Section 10.4). An assessment of the effects on public health, including country foods was provided in the EIA (Volume 3A, Section 15.3.2) and concluded that effects to Indigenous health were considered to be negligible. With consideration of additional information provided by Indigenous groups regarding country foods, no additional effects pathways were identified related to Indigenous heath and country foods and effects are still considered to be negligible. Alberta Transportation has reviewed information provided by Indigenous groups and has not identified a pathway for effects on the availability of and access to country foods that would lead to subsequent effects on physical and cultural heritage. However, physical and cultural heritage are addressed in Section 13 of the EIA and in Alberta Transportation's response to Round 1 CEAA Package 2, IR2-10.	Alberta Transportation acknowledges SN's view that there are culturally important plants in the PDA. A final TUS has not yet been submitted to Alberta Transportation by SN. Once this information is received, Alberta Transportation will confirm the risks to these sites; and to propose possible mitigation measures for these sites. On March 23, 2018, Alberta Transportation sent detailed responses to Specific Concerns raised to date by providing a copy of Table 7-5 SR1 Project Specific Concerns and Responses - Siksika Nation from the March 2018 ElA. Vegetation will be cleared from the Project development area during construction. However, effects of the Project are not anticipated to result in the loss of traditionally used species in the LAA. Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonical plants prior to construction. At the end of construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded to meet AEP reclamation requirements. Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important On April 26, 2018, Alberta Transportation met with SN to review their Specific Concerns and the responses and proposed mitigation measures in Table 7 SR1 Project Specific Concerns and Responses - Siksika Nation. Alberta Transportation commits to offering to hold workshops with SN to discuss further mitigation measures. The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditiona



Table 8-2 Indigenous Group Views on the Project's Potential Effects on Indigenous Health and Country Foods

Views related to Potential Effects on Indigenous Health and			
Country Foods Stoney Nakoda Nations (SNN)	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps Alberta Transportation is committed to Indigenous participation in the Project, including training, employment, and contracting opportunities. To this end, Alberta Transportation is preparing a draft IPP with the goal to create training, employment, monitoring, and contracting opportunities with interested Indigenous groups potentially affected by the Project, including SN. Alberta Transportation aims to obtain Indigenous comment and feedback on the draft IPP, the final draft of which will identify how that feedback was incorporated. The draft IPP was provided to SN on November 15, 2019 which includes opportunities for revegetation.
SNN expressed concerns that the Project will have an environmental effect on the water and wetlands that birds, fish, wildlife, and vegetation rely on, which will result in effects on SNN hunting, trapping, fishing and plant gathering in the Project area.	SNN Letter to CEAA (June 8, 2016) (cited in SNN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #4) Specific Concern #4)	The Project is designed to facilitate natural flow patterns of Elbow River, while mitigating against extreme flood events that can negatively affect river function. Alberta Transportation's overall flood protection measures help reduce the impacts of extreme flood events and, consequently, should help maintain the ability to harvest country foods. Overall, the Project is not expected to limit the availability of or access to country foods in the RAA (see the ElA, Volume 3A, Section 8.4.4 and Section 14.8.1). The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see the ElA, Volume 3A, Section 11.4.2). Impacts to wildlife are expected to be minimum and temporary. With the implementation of mitigation, the Project is unlikely to reduce the productivity or sustainability of a commercial, recreational or Aboriginal fishery as defined by the Fisheries Act. During dry operations, there will be no changes to flow in Elbow River, and therefore no alterations to the quality of fish habitat. Overall, the Project is not expected to limit the availability of traditional resources for current use in the RAA (see Volume 3A, Section 8.4.4 and Section 14.8.1). Current use sites and areas located outside the PDA are not anticipated to be directly affected by the Project. The construction of the diversion channel will result in the loss of 1,854 m² of fish habitat on the bed and banks of Elbow River and 300 m² of fish habitat at the interception of the tributary ID1350. Potential habitat offset gains will be addressed as part of the Fisheries Act authorization proces	Alberta Transportation acknowledges that SNN accesses private lands within the Project area for traditional use activities with permission from the landowners. Alberta Transportation committed to cross reference the sites in the SNN's TUS Report to confirm the risks to these sites; and propose possible mitigation measures for these sites. Alberta Transportation is awaiting the receipt of the SNN TUS report. In a letter dated June 18, 2019, Alberta Transportation indicated they had created a draft post-construction land use document for the Project that provides draft principles of future land use for the PDA. Alberta Transportation by letter dated October 22, 2019 introduced the new approach to land use. Under cover dated November 15, 2019, Alberta Transportation provided the latest land use principles and more detail on the LUA engagement process and offered to meet with SNN to discuss next steps. Alberta Transportation has met with SNN on November 19, 2019 and further discussed the LUA. The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites SNN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.



Table 8-2 Indigenous Group Views on the Project's Potential Effects on Indigenous Health and Country Foods

Views related to Potential Effects on Indigenous Health and Country Foods	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
		Traditionally used plant species will be directly affected due to vegetation removal and grading associated with construction, affecting 168 ha associated with permanent Project infrastructure and approximately 566 ha of temporary workspace. Although individual plants will be removed from the PDA, none of the traditionally used species identified will be lost in the LAA, nor will vegetation communities supporting traditionally used plants be lost from the PDA (see the EIA, Volume 3A, Section 10.4). Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction. Native trees and shrubs should re-establish over time. The Project will also create access to Elbow River, through the development of a permanent portage for Elbow River. Current use sites and areas located outside the PDA are not anticipated to	
		be directly affected by the Project.	
Tsuut'ina Nation (TN)	T		
 TN reported the following: "The proponent states that while TN provided information about medicinal plant harvesting in the Project area and fishing in Elbow River, information "regarding frequency of consumption of country foods" was not provided. Impacts to these uses do not depend on a specific frequency of use. Serious adverse impacts are possible regardless of how often these rights, which are often seasonal in nature, can be exercised. As such, the proponent's assessment is incomplete." TN expressed concern that the EIS stated: "opportunities for harvesting country foods are not expected to be extensive" and considers the assessment incomplete. 	• TN 2018 (CEAR #50)	Alberta Transportation has been engaged with TN since 2014 to understand how the Project potentially impacts rights, and traditional uses including offering and funding site visits and TUS studies. The EIA submitted in March 2018 considered best available TLRU information, including information about the importance of country foods. Volume 3A, Section 14.3.2.1 concludes given the scope and location of the Project, that effects there will not result in a long-term threat to the persistence and viability of species harvested for country foods in the RAA. Alberta Transportation is of the view that the Indigenous Engagement Program has provided numerous opportunities for Indigenous groups to participate in, contribute to and share concerns about the assessment of potential Project effects on country foods. Despite this, Alberta Transportation acknowledges that Indigenous groups may have ongoing concerns about the adequacy of country foods assessment. More detail regarding Indigenous engagement activities with TN is provided on Alberta Transportation's response to Round 1 CEAA Package 2, IR2-01.	In December 2019, Alberta Transportation provided written responses to the TN Technical Review dated June 2018, which included these concerns as Question 3-6 Alberta Transportation has offered to meet with TN regarding the written responses. Alberta Transportation acknowledges that TN accesses private lands within the Project area for traditional use activities with permission from the landowners. Alberta Transportation funded a TUS for the Project. TN Elders and knowledge holders participated in 22 days of site visits facilitated by Alberta Transportation. A final TUS was submitted to Alberta Transportation April 2018). Alberta Transportation has provided a written response to TN addressing the concerns and issues raised in the TUS and met with TN in December 2018 to discuss the response. Alberta Transportation's analysis of information brought forward by TN and the detailed mitigation measures proposed to address potential effects on traditional resources, areas and activities were communicated to TN on November 23, 2018 in Alberta Transportation's response to the TLU report (see CEAA Conformity IR2-01, Appendix 1-1). Mitigation measures identified in the response to Round 1 CEAA IR2-01 will be implemented to reduce potential adverse effects of the Project on current use sites and areas. Alberta Transportation commits to offering to hold workshops with TN to discuss mitigation measures. Alberta Transportation provided drafts of the updated TLRU Effects Assessment sections of the FIA (Valumes 3A and 3B) which were provided.
			Assessment sections of the EIA (Volumes 3A and 3B), which were provided February 5, 2018, for TN review and input. Alberta Transportation offered a TLRU workshop with TN to obtain input and feedback on the draft TLRU Effects Assessments, including TN's perspectives on assessment methodology, proposed mitigation, Project-Specific Concerns and how the Project may affect the exercise of Section 35 rights. Alberta Transportation met with TN to discuss in December 2018. TN Elders and knowledge holder participated in 22 days of site visits facilitated by Alberta Transportation. Results of the site visits were reported in the TN TUS study submitted to Alberta.



Table 8-2 Indigenous Group Views on the Project's Potential Effects on Indigenous Health and Country Foods

Views related to Potential Effects on Indigenous Health and Country Foods	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
			Transportation on April 3, 2018. Alberta Transportation has provided a written response to TN addressing the concerns and issues raised in the TUS and met with TN in December 2018 to discuss the response. Alberta Transportation sent a letter dated January 28, 2019 that requested the TN provide its views and perspectives on its Aboriginal and Treaty rights, cultural and experiential values, and country foods. The letter listed four specific topics that Alberta Transportation was requesting input on to help answer CEAA IRs. TN provided a response in February 2018.
 TN indicated that hunting, fishing, gathering, camping, and ceremonial practices occur in the Project area, and these activities depend on resources available there. Activities outside of the Project area depend on these resources as well. TN expressed concern that standing waters in the Project area may contaminate wildlife, fish and plants and affect TN members' cultural and nutritional food security. TN stated "Our citizens continue to depend on the lands and waters in our traditional territory, including the Project area, to support traditional activities. These include hunting, fishing, and harvesting of various species of medicinal plants". 	• TN TUS 2018	The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see the EIA, Volume 3A, Section 11.4.2). The Project is expected to result in restricted access to areas within the PDA. Fencing of infrastructure would restrict access to traditional resources or current use sites or areas for a small portion of Elbow River. However, the Project will also create access, through the development of a permanent portage for Elbow River. Although individual plants will be removed from the PDA, none of the traditionally used species identified will be lost in the LAA, nor will vegetation communities supporting traditionally used plants be lost from the PDA (see the EIA, Volume 3A, Section 10.4). Current use sites and areas located outside the PDA are not anticipated to be directly affected by the Project. An assessment of the effects on public health, including country foods was provided in the EIA (Volume 3A, Section 15.3.2) and concluded that effects to Indigenous health were considered to be negligible. With consideration of additional information provided by Indigenous groups regarding country foods, no additional effects pathways were identified related to Indigenous heath and country foods and effects are still considered to be negligible.	Alberta Transportation acknowledges that TN accesses private lands within the Project area for traditional use activities with permission from the landowners. Alberta Transportation's analysis of information brought forward by TN and the detailed mitigation measures proposed to address potential effects on traditional resources, areas and activities were communicated to TN on November 23, 2018 in Alberta Transportation's response to the TLU report (see CEAA Conformity IR2-01, Appendix 1-1). Mitigation measures identified in the response to Round 1 CEAA IR2-01 will be implemented to reduce potential adverse effects of the Project on current use sites and areas. Alberta Transportation commits to offering to hold workshops with TN to discuss mitigation measures. The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites TN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights. Alberta Transportation by letter dated October 22, 2019 introduced the new approach to land use. Under cover dated November 15, 2019, Alberta Transportation provided the latest land use principles and more detail on the LUA engagement process and offered to meet with TN to discuss next steps.



Table 8-2 Indigenous Group Views on the Project's Potential Effects on Indigenous Health and Country Foods

Views related to Potential Effects on Indigenous Health and Country Foods	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
TN explained that the Project area contains important habitat for elk as well as the predators that feed on elk. TN reported that harvested food, including elk, is shared with others and contributes to community health and wellbeing.	• TN TUS 2018 (The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction.	Alberta Transportation acknowledges TN's view that there are culturally important resources in the PDA. Alberta Transportation's analysis of information brought forward by TN and the detailed mitigation measures proposed to address potential effects on traditional resources, areas and activities were communicated to TN on November 23, 2018 in Alberta
TN explained that in the past, at the age of approximately 10, boys and girls began to be taught different traditional activities by their parents, aunts and uncles, or other older members of the community. Youth continue to be taught by other members of the community. Taught activities include but are not limited to hunting, fishing, trapping, performing or participating in rituals, riding horses, tanning, sewing, beading, and other domestic activities.		Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see the EIA, Volume 3A, Section 11.4.2). The Project is expected to result in restricted access to areas within the PDA. Fencing of infrastructure would restrict access to traditional resources or current use sites or areas for a small portion of Elbow River. However, the Project will also create access, through the development of a permanent portage for Elbow River. Current use sites and areas located outside the PDA are not anticipated to be directly affected by the Project.	Transportation's response to the TN TLRU report (see CEAA Conformity IR2-01, Appendix 1-1). Mitigation measures identified in Alberta Transportation's response to Round 1 CEAA Package 2, IR2-01 will be implemented to reduce potential adverse effects of the Project on current use sites and areas. Alberta Transportation commits to offering to hold workshops with TN to discuss mitigation measures. The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites First Nations and stakeholders to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights. Alberta Transportation by letter dated October 22, 2019 introduced the new approach to land use. Under cover dated November 15, 2019, Alberta Transportation provided the latest land use principles and more detail on the LUA engagement process and offered to meet with TN to discuss next steps. Alberta Transportation is committed to Indigenous participation in the Project, including training, employment, and contracting opportunities. To this end, Alberta Transportation is preparing a draft IPP with the goal to create training, employment, monitoring, and contracting opportunities with interested Indigenous groups potentially affected by the Project, including TN. Alberta Transportation aims to obtain Indigenous comment and feedback on the draft IPP, the final dra



Table 8-2 Indigenous Group Views on the Project's Potential Effects on Indigenous Health and Country Foods

Views related to Potential Effects on Indigenous Health and Country Foods	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
TN explained that the medicinal plants are traditionally found in the areas adjacent to Elbow River, because "medicine grows along the river".	• TN TUS 2018	Traditionally used plant species within the PDA will be directly affected due to vegetation removal and grading associated with construction, affecting 168 ha associated with permanent Project infrastructure and approximately 566 ha of temporary workspace. Although individual plants will be removed from the PDA, none of the traditionally used species identified will be lost in the LAA, nor will vegetation communities supporting traditionally used plants be lost from the PDA (see the EIA, Volume 3A, Section 10.4). An assessment of the effects on public health, including country foods was provided in the EIA (Volume 3A, Section 15.3.2) and concluded that effects to Indigenous health were considered to be negligible. With consideration of additional information provided by Indigenous groups regarding country foods, no additional effects pathways were identified related to Indigenous heath and country foods and effects are still considered to be negligible.	Alberta Transportation acknowledges TN's view there are culturally important plants in the PDA. Alberta Transportation's analysis of information brought forward by TN and the detailed mitigation measures proposed to address potential effects on traditional resources, areas and activities were communicated to TN on November 23, 2018 in Alberta Transportation's response to the TUS report (see CEAA Conformity IR2-01, Appendix 1-1). Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction. At the end of construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded to meet AEP reclamation requirements. Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important. The draft IPP was provided to TN on November 15, 2019 which includes opportunities for revegetation post-construction. Alberta Transportation commits to offering to hold workshops with TN to discuss further mitigation measures. The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites TN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 ri



Table 8-2 Indigenous Group Views on the Project's Potential Effects on Indigenous Health and Country Foods

Views related to Potential Effects on Indigenous Health and Country Foods	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
Ermineskin Cree Nation (ECN)			
 ECN stated that from review of the TLU, it is evident that ECN access to country foods is much more extensive than the EIS indicates. The effect on country foods must be updated for ECN. ECN has stated that Alberta Transportation has not made adequate efforts to obtain information about an assessment of country foods relied upon by ECN; and potential health and socio-economic effects of the Project on ECN. 	ECN 2018 (CEAR #46) ECN 2018 #46) (cited in ECN SR1 SCRT Oct 2016-Mar 2019 (Specific Concern #2)) ECN Letter to CEAA (April 2018)	Alberta Transportation has been engaged with ECN since 2016 to understand how the Project potentially impacts rights, and traditional uses including offering and funding site visits and TUS studies in addition to workshops and other meetings. The EIA submitted in March 2018 considered best available TLRU information, including information about the importance of country foods. Volume 3A, Section 14.3.2.1 concludes given the scope and location of the Project, that effects there will not result in a long-term threat to the persistence and viability of species harvested for country foods in the RAA. Alberta Transportation is of the view that the Indigenous Engagement Program has provided numerous opportunities for Indigenous groups to participate in, contribute to and share concerns about the assessment of potential Project effects on country foods. Despite this, Alberta Transportation acknowledges that Indigenous groups may have ongoing concerns about the adequacy of country foods assessment. More detail regarding Indigenous engagement activities with ECN is provided on Alberta Transportation's response to Round 1 CEAA Package 2, IR2-01.	Alberta Transportation has provided multiple opportunities for ECN to provide information about country food consumption. Alberta Transportation provided drafts of the updated TLRU Effects Assessment sections of the EIA (Volumes 3A and 38), which were provided February 5, 2018, for ECN review and input. Alberta Transportation offered a TLRU workshop in January 2018 with ECN to obtain input and feedback on the draft TLRU Effects Assessments, including ECN's perspectives on assessment methodology, proposed mitigation, Project-Specific Concerns and how the Project may affect the exercise of Section 35 rights. Alberta Transportation is awaiting ECN to identify a suitable date to meet. Alberta Transportation approved funding for a TUS for the Project. ECN Elders and knowledge holders participated in 1 day of site visits facilitated by Alberta Transportation. Results of the site visits were reported in the ECN TUS report submitted to Alberta Transportation on [June 25, 2018]. Alberta Transportation provided a written response to ECN addressing the concerns and issues raised in the TUS and met with ECN on September 16, 2019 to discuss the response. Alberta Transportation sent a letter dated January 28, 2019 that requested the ECN provide its views and perspectives on its Aboriginal and Treaty rights, cultural and experiential values, and country foods. The letter listed four specific topics that Alberta Transportation was requesting input on to help answer CEAA IRs. ECN has not provided a response. The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the sofety of anyone with access or land users will be allowed to occur within the engagement process for the LUA. As such, the poten



Table 8-2 Indigenous Group Views on the Project's Potential Effects on Indigenous Health and Country Foods

Country Foods	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
			Alberta Transportation is committed to Indigenous participation in the Project, including training, employment, and contracting opportunities. To this end, Alberta Transportation is preparing a draft IPP with the goal to create training, employment, monitoring, and contracting opportunities with interested Indigenous groups potentially affected by the Project, including ECN. Alberta Transportation aims to obtain Indigenous comment and feedback on the draft IPP, the final draft of which will identify how that feedback was incorporated. The IPP was provided to ECN November 12, 2019 and discussed during the November 18, 2019 meeting.
			In December 2019, Alberta Transportation provided written responses to the ECN Technical Review dated June 2018, which included these concerns as Questions 21 and 38. Alberta Transportation will offer to meet with ECN regarding the written responses.
ECN has stated that wild meat and traditional foods are an essential part of ECN members' diet. ECN noted that animals eat medicinal plants which means the meat also contains medicinal properties. ECN considers wild meat to be healthier than store-bought meat. ECN reported that harvested food, including moose and deer, is shared with community members, particularly Elders who are no longer able to hunt for themselves. Traditional use activities provide an opportunity for ECN members to connect with the land and pass on these practices to younger generations. Youth are taught by members of the community, engaging in activities including but not limited to hunting, fishing, plant gathering, and performing or participating in rituals. Traditional use activities connect ECN members to the land, help to foster a sense of identity and place, and teach younger generations the traditional values and spiritual beliefs of their Elders. Traditional use activities also support the role and status of Elders within the community. ECN stated that traditional use 'represents an axis around which cultural and spirituality, identity, families, and communities are reproduced'.	ECN TUS 2018 (CEAR #46)	The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see the EIA, Volume 3A, Section 11.4.2). The Project will not introduce chemicals into the environment that could bioaccumulate or bioconcentrate in edible tissues. Although Project activities during construction will emit airborne chemical of potential concern (COPC), the effect to country food quality is predicted to be negligible, since COPCs from air emissions do not bioaccumulate or bio magnify in biological tissues. Dust generated by earthworks during construction is essentially inert earthen material and would have a similar chemical composition as the surrounding soil in the construction area. There are no substantial dust generating activities during dry operations. Therefore, effects on human health through the consumption of country foods is expected to be negligible. The Project is expected to result in restricted access to areas within the PDA. Fencing of infrastructure would restrict access to traditional resources or current use sites or areas for a small portion of Elbow River. However, the Project will also create access, through the development of a permanent portage for Elbow River.	Alberta Transportation acknowledges that ECN accesses private lands within the Project area for traditional use activities with permission from the landowners. Alberta Transportation's analysis of information brought forward by ECN and the detailed mitigation measures proposed to address potential effects on traditional resources, areas and activities were communicated to ECN on August 8, 2019 in Alberta Transportation's response to the ECN TLRU report (see CEAA Conformity IR2-01, Appendix 1-1). Mitigation measures identified in the response to Round 1 CEAA Package 2, IR2-01 will be implemented to reduce potential adverse effects of the Project on current use sites and areas. Alberta Transportation commits to offering to hold workshops with ECN to discuss mitigation measures. Alberta Transportation is committed to Indigenous participation in the Project, including training, employment, and contracting opportunities. To this end, Alberta Transportation is preparing a draft IPP with the goal to create training, employment, monitoring, and contracting opportunities with interested Indigenous groups potentially affected by the Project, including ECN. Alberta Transportation aims to obtain Indigenous comment and feedback on the draft IPP, the final draft of which will identify how that feedback was incorporated. The IPP was provided to ECN November 12, 2019 and discussed during the November 18, 2019 meeting.



Table 8-2 Indigenous Group Views on the Project's Potential Effects on Indigenous Health and Country Foods

Views related to Potential Effects on Indigenous Health and Country Foods	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
Louis Bull Tribe (LBT)			
LBT stated "The ability to obtain these [country] foods through traditional methods of gathering, hunting and processing are important to the retention of culture, as each of these steps involves ceremony, culturally relevant harvesting techniques and sharing of stories connected to these activities".	• LBT 2019 (response to CEAA)	The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see the EIA, Volume 3A, Section 11.4.2). Fencing of infrastructure would restrict access to traditional resources or current use sites or areas for a small portion of Elbow River. However, the Project will also create access, through the development of a permanent portage for Elbow River. Although individual plants will be removed from the PDA, none of the traditionally used species identified will be lost in the LAA, nor will vegetation communities supporting traditionally used plants be lost from the PDA (see the EIA, Volume 3A, Section 10.4). Current use sites and areas located outside the PDA are not anticipated to be directly affected by the Project.	Alberta Transportation acknowledges LBT's view that there are culturally important resources in the Project area. Mitigation measures identified in the response to Round 1 CEAA Package 2, IR2-01 will be implemented to reduce potential adverse effects of the Project on current use sites and areas. Alberta Transportation commits to offering to hold workshops with LBT to discuss mitigation measures. The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites LBT to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights. Alberta Transportation by letter dated October 22, 2019 introduced the new approach to land use. Under cover dated November 13, 2019, Alberta Transportation provided the latest land use principles and more detail on the LUA engagement process. Alberta Transportation has met with LBT on November 14, 2019 and further discussed the LUA. Alberta Transportation is committed to Indigenous participation in the Project, including training, employment, and contracting opportunities. To this end, Alberta Transportation is preparing a draft IPP with the goal to create training, employment, monitoring, and contracting opportunities with interested Indigenous groups potentially affected by the Project, including LBT. Alberta Transportation aims to obtain Indigenous comment and feedback on the draft



Table 8-2 Indigenous Group Views on the Project's Potential Effects on Indigenous Health and Country Foods

Views related to Potential Effects on Indigenous Health and Country Foods	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps						
Métis Nation of Alberta, Region 3 (MNAR3)	Métis Nation of Alberta, Region 3 (MNAR3)								
MNAR3 members fish, hunt, and harvest plants in the Project area. MNAR3 expressed concern that effects on country foods as a result of the Project "has the potential to limit the access or have adverse effects on the ability of members of the MNAR3 to access country foods that form an important part of expressing, maintaining, and passing on cultural values."	MNAR3 TUS 2019 (p. 19) MNAR3 Letter to Alberta Transportation (March 21, 2019) (cited in MNAR 3 SR1 SCRT Oct 2016-Sept 2019; Specific Concern #5)	The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see the EIA, Volume 3A, Section 11.4.2). Fencing of infrastructure would restrict access to traditional resources or current use sites or areas for a small portion of Elbow River. However, the Project will also create access, through the development of a permanent portage for Elbow River. Although individual plants will be removed from the PDA, none of the traditionally used species identified will be lost in the LAA, nor will vegetation communities supporting traditionally used plants be lost from the PDA (see the EIA, Volume 3A, Section 10.4). Current use sites and areas located outside the PDA are not anticipated to be directly affected by the Project.	Alberta Transportation acknowledges statement that MNAR3 accesses private lands within the Project area for traditional use activities with permission from the landowners. Mitigation measures identified in the response to Round 1 CEAA Package 2, IR2-01 will be implemented to reduce potential adverse effects of the Project on current use sites and areas. Alberta Transportation commits to offering to hold workshops with MNAR3 to discuss mitigation measures. The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses would include access for other activities in the LUA. Alberta Transportation is available to meet with MNAR3 to discuss the LUA. Alberta Transportation is committed to Indigenous participation in the Project, including training, employment, and contracting opportunities. To this end, Alberta Transportation is preparing a draft IPP with the goal to create training, employment, monitoring, and contracting opportunities with interested Indigenous groups potentially affected by the Project. Alberta Transportation aims to obtain Indigenous comment and feedback on the draft IPP, the final draft of which will identify how that feedback was incorporated. The draft IPP was provided to MNAR3 on November 15, 2019.						



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REFERENCES

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December 2019

Conformity IR2-09

Topic: Project Area Land Use and Access

Sources:

EIS Guidelines Part 2, Section 6.1.9; 6.3.4

Volume 1, Section 1.3.2.1; 1.3.2.2

Louis Bull Tribe - EIS Review Submission, June 18, 2018 (CEAR # 49)

Piikani Nation – Technical Review of EIS, June 15, 2018 (CEAR #48)

Louis Bull Tribe - EIS Review Submission, June 18, 2018 (CEAR # 49)

Tsuut'ina First Nation, Ermineskin Cree Nation, and Kainai First Nation – Technical Review of the EIS - Annexes – Combined (CEAR # 46, 47, 50)

Ermineskin Cree Nation and Blood Tribe – Springbank EIS Technical Comments (CEAR # 46, 47)

CEAA Information Requests Related to the Environmental Impact Statement Round 1 Part 2, IR2-09

Alberta Transportation Responses to IR Round 1, SR1 CEAA IR Package 2, June 14, 2019

Context and Rationale

In CEAA Information Requests Related to the Environmental Impact Statement Round 1 Part 2, IR2-09, the Agency required the proponent to provide information on access to lands and waters related to Indigenous people's current use of lands for traditional purposes, physical and cultural heritage, health and socio-economic conditions, and exercise of Aboriginal and treaty rights.

Alberta Transportation's response to IR2-09 references Appendix IR1-2, which identified draft principles of future land use within the PDA. The draft principles identify that the primary use of all lands within the PDA, including the identified land use area, is flood mitigation. The draft principles list the following under secondary uses: "In general, First Nations' traditional activities, including the exercise of treaty rights such as hunting, will be allowed." The wording of this principle is too vague to support a meaningful determination of potential effects to Indigenous peoples or potential impacts to rights.



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Information Requests:

- a) Provide an updated Draft Principles for Future Land Use of the Proposed Springbank Off-Stream Reservoir that identifies the conditions under which Indigenous land use will be permitted and any measures or commitments by Alberta Transportation, and/or Alberta Environment and Parks, to promote, enhance, or ensure Indigenous land use.
 - Define the parameters and criteria for determining the level of access (e.g. timing, purposes, management) to the land use area.
 - Identify the land-management tools available to the Government of Alberta under currently relevant legislation.
- b) Clarify whether the secondary use principle regarding traditional activities applies only to First Nations or also to Métis people.

Response

- a) An updated draft Principles for Future Land Use of the Proposed Springbank Off-Stream Reservoir that identifies the conditions under which Indigenous land use will be permitted and any measures or commitments by Alberta Transportation, and/or AEP, to promote, enhance, or ensure Indigenous land use is presented in Appendix 9-1. The land-management tools available to the GoA under currently relevant legislation are presented in Appendix 9-2.
- b) Secondary uses of the LUA will be determined after engagement with First Nations and stakeholders. Secondary use of the LUA by First Nations for the exercise of treaty rights and traditional uses may be considered a priority.
 - Métis communities may hold aboriginal rights provided that they meet the criteria set out by the Supreme Court of Canada in R. v. Powley. To date, there are no Métis communities in southern Alberta that have established aboriginal rights in accordance with R. v. Powley. Future secondary use of the LUA may also include non-motorized recreational access by the public, including Métis individuals. This may include licensed harvesting activities and other activities which may be considered traditional in nature.



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Conformity IR2-10

<u>Topic:</u> Physical and Cultural Heritage

Sources:

EIS Guidelines Part 2, Section 5; 6.1.9; 6.3.4

EIS Volume 3A, Section 13 and 14

EIS Volume 3B, Section 13 and 14

CEAA Information Requests Related to the Environmental Impact Statement Round 1 Part 2, IR2-10

Alberta Transportation Responses to IR Round 1, SR1 CEAA IR Package 2, June 14, 2019

Context and Rationale

In CEAA Information Requests Related to the Environmental Impact Statement Round 1 Part 2, IR2-09, the Agency required the proponent to provide additional information and a revised assessment of effects on physical and cultural heritage and on any structure, site, or thing that is of historical, archaeological, paleontological, or architectural significance. The requirement for a revised effects assessment is based on discrepancies between the effects considered under CEAA 2012 and the historical resources considered and protected under the Alberta Historical Resources Act. The cover letter to the information requests and the EIS Guidelines further direct the proponent to present points of disagreement between the views of Alberta Transportation and Indigenous groups, along with a description of efforts undertaken to reconcile these differences and a rationale for conclusions.

Alberta Transportation's response to IR2-10 provides raw data in the form of excerpts from Indigenous groups' submissions, correspondence, and meeting notes regarding physical and cultural heritage and sites of importance and proposed mitigation measures (Tables IR10-1 and IR1-2). Alberta Transportation's response includes Appendix IR1-1. Specific Concerns and Response Tables included in this appendix list concerns raised by Indigenous groups with respect to physical and cultural heritage and sites of importance that are unresolved.

The mitigation measures identified by Alberta Transportation in its response reference the *Historical Resources Act* and other Alberta Culture and Tourism policies and procedures with respect to historical resources. No discussion is presented to clarify the effects to physical or cultural heritage or to sites of importance identified by Indigenous groups that fall within the scope of what is protected by these measures relative to what is considered under CEAA 2012. It remains unclear which mitigation measures would be applied to which potential effects.



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Information Requests:

- a) For each of the concerns raised by Indigenous groups regarding potential effects to physical and cultural heritage and/or to sites of importance, as considered under CEAA 2012, identify the applicability of standard mitigation likely to be required by Alberta Cultural and Tourism, the Historical Resource Impact Assessment, and existing provincial legislation and policy. Include a discussion of all possible gaps related to effects considered under CEAA 2012 that are beyond the scope of provincial legislation and policy, and any commitments to mitigation measures specific to these effects.
- b) Identify and discuss areas of disparity between Indigenous groups' and Alberta Transportation's views on potential effects to physical and cultural heritage and to sites of importance, efforts made to reconcile the disparities, and rationale for conclusions on matters for which disparity in views remains.

Response

a) Alberta Transportation has reviewed feedback received to date regarding the potential effects to physical and cultural heritage and/or to sites of importance, as considered under CEAA 2012, including SoCs, s SCRTs (provided in CEAA Conformity IR2-01, Appendix 1-2), and TUS reports received. The TUS conducted by Indigenous groups provide most of this information. Throughout early 2019, Alberta Transportation reviewed and analysed the results of the TUS reports received. This analysis of TUS reports received from Kanai First Nation, Ermineskin Cree Nation, Louis Bull Tribe, Métis Nation of Alberta, Region 3, Piikani Nation and Tsuut'ina Nation, is provided in Alberta Transportation's response to Round 1 CEAA Package 2, IR 2-01, Appendix IR1-1. Information regarding the potential effects to physical and cultural heritage and/or to sites of importance, as considered under CEAA 2012 was not received from Samson Cree Nation, Ktunaxa Nation Council, or Métis Nation of British Columbia.

Excerpts specific to the analysis of potential effects to physical and cultural heritage and/or to sites of importance, as considered under CEAA 2012, are provided below in Table 10-1, which consolidates feedback received to date related to the Project's potential effects on physical and cultural heritage.

Under provincial legislation, any specific concern raised by Indigenous groups relative to physical and cultural heritage sites of importance must be addressed if the site of concern is within the Project footprint and will experience a Project-related impact. This includes archaeological sites, paleontological sites and traditional land use sites. Each site-specific concern reported to Alberta Transportation by Indigenous groups must be individually assessed as part of additional HRIAs and the results of those assessments reported to ACMWS including requests for consultation. In turn, ACMWS will evaluate the results of the assessment and determine the appropriate mitigative response. Standard mitigation, such as site photography, documentation, mapping and mitigative excavations may be required. In the



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case of more significant resources, ACMWS may require Indigenous monitoring programs or site avoidance through Project redesign. Other mitigations that may be required by ACMWS include additional consultation with Indigenous groups to solicit their opinions on appropriate mitigation. In consultation with Indigenous groups, ACMWS may require Alberta Transportation to: relocate significant cultural resources outside of the development footprint; to sponsor specific ceremonies prior to disturbance; to allow for collection of traditional resources; to construct commemorative cairns or interpretive panels; or to include Indigenous participation in any of the mitigative activities. Given the commitment by Alberta Transportation to follow all mitigative requirements issued under the HRA, and to continue site-specific consultation, the effects considered under CEAA 2012 are within the scope of provincial legislation and policy to address.

b) Alberta Transportation has requested further information on physical and cultural heritage sites of importance identified through TUS with participating Indigenous groups. Some Indigenous groups have imposed restrictions on Alberta Transportation's use of information from the TUS. Alberta Transportation has not received permission to use the spatial information from the Siksika Nation and Kainai First Nation joint interim TUS. Tsuut'ina has not permitted Alberta Transportation to identify the specific locations of TUS sites including cultural sites. If Tsuut'ina provides permission to disclose GPS coordinates, these sites will be reported to ACMWS, who will independently assess the sites and designate the appropriate mitigation commensurate with the defined heritage value of the site, as determined by scientific evaluation and Indigenous consultation. ACMWS will determine the appropriate mitigative response for any sites where disparities in viewpoint remain after ongoing consultation, as required under provincial legislation.

Specific Indigenous groups' views on potential effects to physical and cultural heritage and to sites of importance and Alberta Transportation's responses are provided below in Table 10-1. Areas of disparity between Indigenous groups' views and Alberta Transportation can generally be characterized as follows:

- The only acceptable form of mitigation for effects on sites of archaeological, historical, spiritual, ceremonial and cultural importance is avoidance.
- ACMWS' requirements for the protection of historic resources are not adequate.
- There is disagreement between conventional archaeological assessment and the
 observations of Indigenous group members about evidence of cultural and historic sites.
 There is a desire to have knowledge or language holders confirm the authenticity of the
 sites.
- The natural creek channel should not be used as the outflow channel due to the potential presence of traditional use and cultural sites in the valley.



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Efforts to reconcile areas of disparity may occur, generally, through the provision of Project information, the incorporation of feedback that results in changes to Project planning or through commitment to further exploring an issue, concern or recommendation. For example, Alberta Transportation has provided TUS mitigation tables in Alberta Transportation's response to the Conformity IR 2-01, Appendix 1-1 to each participating Indigenous group that has submitted a TUS, and intends to offer to meet with each Indigenous group to review and discuss its responses. Alberta Transportation's engagement with Indigenous groups is ongoing. As such, Table 10-1 also describes both Alberta Transportation's efforts to date and planned commitments to reconcile areas of disparity between the views and conclusions of Indigenous groups and Alberta Transportation regarding the Project's potential effects on physical and cultural heritage, as identified.

Alberta Transportation is committed to ongoing engagement with Indigenous groups to try to resolve any disparity in views that may remain with respect to potential effects to physical and cultural heritage and to sites of importance.

Alberta Transportation is committed to working with Indigenous groups to try to seek mutually acceptable solutions to the issues, concerns or recommendations identified and those that remain unresolved will be tracked through Alberta Transportation's ongoing engagement.





Table 10-1 Indigenous Group Views on the Project's Potential Effects on Physical and Cultural Heritage and/or to Sites of Importance, as Considered Under CEAA 2012 and Alberta Transportation's Responses

Views related to Potential Effects on Physical and Cultural Heritage	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
ainai First Nation/Blood Tribe (KFN)			
The KFN Elders and Technicians on inspection of Property #21 along the "unnamed creek" identified what they believed to be tipi rings on the north side of the unnamed creek. KFN expressed concern that the tipi rings are potentially located adjacent to the SR1 reservoir outfall along an unnamed creek into the Elbow River. The KFN Elders and consultation technicians re-inspected the areas on SR1 properties #4, #21, and #24. The area of most interest was near the dry reservoir in locations that they identified as a wintering ground with many tipi rings. The KFN are concerned the evidence of these wintering grounds and tipi rings will be lost if this area is excavated for the SR1 outfall to drain the dry reservoir after a flood event. Due to likelihood that there are Blackfoot traditional use and cultural sites throughout the creek valley, it is suggested that the natural creek channel should not be used as an outflow channel. In the TUS report for the Project, SN and KFN further specified that Blackfoot traditional camps are located near the main body of the reservoir (i.e., the creek valley, the flats north of the berm) and include multiple tipi rings, a buffalo rubbing stone, fire-broken rock, and a Blackfoot spearhead (biface). KFN identified a site along the Old Blackfoot Trail (also called the Old North-South Trail in the EIA); a ceremonial site on the location of a traditional Blackfoot camp that contains tipi rings, stone markings and potential human remains.		This area within Property #21 along the unnamed creek was visited by a registered archaeologist after the concerns regarding tipi rings were raised; no tipi rings were identified; the field is eroded close to glacial till and many natural cobble outcrops were noted in this area. The results of this archaeological field investigation have been reported to ACMWS. No tipi rings, medicine wheels or burial sites have been identified within the PDA to date. No archaeological sites of high heritage value as defined under the HRA have been identified in the unnamed creek valley. Alberta Transportation intends to meet the requirements set out by applicable provincial legislation, including standard mitigation requirements as appropriate. None of the sites or artifacts which have been found within the PDA can be ascribed to a single ethnohistoric group based on their archaeological interpretation. The biface that was found is a generic style used by many groups in the northern Plains and is not uniquely associated with the Blackfoot. The KFN concern about potential tipi rings, medicine wheels, burial sites and cultural sites will be reported to ACMWS in the next stage of the HRIA process.	The KFN delivered a Joint Interim TUS Report on March 13, 2017 that was co-authored with the SN. Alberta Transportation responded in a letter dated May 10, 2017. The TUS report was used to inform the TLRU sections of the EIA (Volumes 3A and 3B). On March 23, 2018, Alberta Transportation sent detailed responses to Specific Concerns raised to date by providing a copy of Table 7-7 SR1 Project Specific Concerns and Responses - Kainai First Nation from the March 2018 EIA. At the meeting held on August 7, 2018, Alberta Transportation committed to cross reference the sites in the KFN's June 2018 TUS and those identified in the HRIA. Alberta Transportation has also committed to overlay the GPS coordinates with the PDA to determine sites at risk. Alberta Transportation provided a written response to KFN's TLRU report on August 9, 2019 addressing the concerns and issues raised in the TLRU report and met with KFN on October 17, 2019 to discuss the response. KFN indicated they will be providing written comments on Alberta Transportation's response. Alberta Transportation is awaiting the GPS coordinates from KFN. Historical resources were discussed at the meeting held on October 17, 2019. Alberta Transportation noted they were legally bound to work within the legislation, and requested KFN's input on mitigation measures for sites that may be destroyed. ACMWS will evaluate the reported presence of tipi rings, traditional use and cultural sites and the disagreement between conventional archaeological assessment and KFN to determine whether a supplemental HRIA or additional field visits by ACMWS is required. If ACMWS determines that tipi rings or cultural sites are present, standard mitigation will be applied, including photography, mapping, documentation and mitigation will be applied, including photography, mapping, documentation and indigenous monitoring during construction. As required undersection 31 of the HRA, should an unexpected find of a significant historical resource occur during construction, ACMWS will be n



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• KFN TUS 2018, p.81 (CEAR#47)	This area was revisited by a registered archaeologist and no unusual rocks or ochre sources were identified. The cobbles in this area are similar to those both upstream and downstream of the PDA. KFN's observation of surface minerals and rocks from	Alberta Transportation provided a written response to KFN's TLRU report on August 9, 2019 addressing the concerns and issues raised in the TLRU report and met with KFN on October 17, 2019 to discuss the response. KFN indicated they will be providing written comments on Alberta Transportation's response.			
	KFN's observation of surface minerals and rocks from	· · · · · · · · · · · · · · · · · · ·			
	the Elbow Riverbanks that are conducive to baking, grinding and mixing with oils to make traditional paints will be reported to ACMWS in the next stage of the HRIA process.	ACMWS will evaluate the reported presence of surface minerals and rocks from the banks of the Elbow River that are conducive to baking, grinding and mixing with oils to make traditional paints and the disagreement between conventional archaeological assessment and KFN to determine whether a supplemental HRIA or additional field visits by ACMWS is required.			
		If ACMWS determines these features are present, standard mitigation will be applied, including photography, mapping, documentation and mitigative excavation, to preserve the knowledge of the site.			
		Depending on its significance, other mitigation may include additional consultation, ceremonies sponsored by Alberta Transportation, Indigenous participation in the assessment and mitigation program and Indigenous monitoring during construction.			
 KFN TUS 2018, pp. 28, 29, 34, 52 (CEAR#47) Letter from KFN to Alberta 	No tipi ring sites or effigies have been documented within the PDA, campsites have been assessed by a qualified archaeologist and one precontact	On March 23, 2018, Alberta Transportation sent detailed responses to Specific Concerns raised to date by providing a copy of Table 7-7 SR1 Project Specific Concerns and Responses - Kainai First Nation from the March 2018 EIA.			
Transportation (cited in KFN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #6, 8, &9)	Alberta Transportation committed to cross reference the sites in the KFN's TLRU Report and those identified	At the meeting held on August 7, 2018, Alberta Transportation committed to cross reference the sites in the KFN's June 2018 TUS and those identified in the HRI). Alberta Transportation has also committed to overlay the GPS coordinates with the PDA to determine sites at risk.			
 Site visits on June 27 – July 1, 2016 KCO & SCO Interim TUS 2017 (cited in KFN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #8 & 10, 12) 	June 27 – July propose possible mitigation measures for these sites. Alberta Transportation has committed to overlay the GPS coordinates with the PDA to determine sites at risk. Alberta Transportation is awaiting the GPS	Alberta Transportation provided a written response to KFN's TLRU report on August 9, 2019 addressing the concerns and issues raised in the TLRU report and met with KFN on October 17, 2019 to discuss the response. KFN indicated they will be providing written comments on Alberta Transportation's response.			
	Aug 2014-Aug 2019; Specific Concern #8 & 10, 12) Fire broken rocks and artifacts have within the PDA; the other features not been identified within the PDA of the HRIA, standard site mitigation be adequate for the site types in the total moderate heritage value as de HRA. The assessment to date has a sites of very high heritage value witherefore, standard mitigations, within the PDA; the other features not been identified within the PDA of the HRIA, standard site mitigations and the possible to avoid all to moderate heritage value as de HRA. The assessment to date has a sites of very high heritage value witherefore, standard mitigations, within the PDA; the other features not been identified within the PDA of the HRIA, standard site mitigations.	Specific Concern #8 & 10, 12) Fire broken rocks and artifacts have been found within the PDA; the other features of interest have	Specific Concern #8 & 10, 12) Aug 2014-Aug 2019; Specific Concern #8 & 10, 12) Fire broken rocks and artifacts have been found within the PDA; the other features of interest have requested KEN's input on mit	Historical resources were discussed at the meeting held on October 17, 2019. Alberta Transportation noted they were legally bound to work within the legislation, and requested KFN's input on mitigation measures for sites that may be destroyed.	
		of the HRIA, standard site mitigation is considered to be adequate for the site types in the PDA. It may not be possible to avoid all cultural sites of low to moderate heritage value as defined under the	For the one precontact campsite of heritage value that was identified, standard mitigation will be applied including photography, mapping, documentation and mitigative excavation, to preserve the knowledge of the site. Other mitigation may include additional consultation, Indigenous participation in the mitigation program and Indigenous monitoring during construction.		
		si tt	sites of therefo	sites of very high heritage value within the PDA therefore, standard mitigations, which may include	As required under provincial legislation, should an unexpected find of a significant historical resource occur during construction, ACMWS will be notified and will determine the appropriate mitigation.
				Should any human remains be found during construction, all construction will immediately cease in the area, the site will be secured and all applicable provincial will be followed. If the remains are determined to be of Aboriginal origin the Provincial Government will engage Indigenous groups according to GoA protocol and guidelines developed in consultation with Indigenous groups.	
	 34, 52 (CEAR#47) Letter from KFN to Alberta Transportation (cited in KFN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #6, 8, &9) Site visits on June 27 – July 1, 2016 KCO & SCO Interim TUS 2017 (cited in KFN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #8 & 10, 	 KFN TUS 2018, pp. 28, 29, 34, 52 (CEAR#47) Letter from KFN to Alberta Transportation (cited in KFN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #6, 8, &9) Site visits on June 27 – July 1, 2016 KCO & SCO Interim TUS 2017 (cited in KFN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #8 & 10, 12) Pospecific Concern #8 & 10, 12) Who tipi ring sites or effigies have been documented within the PDA, campsites have been assessed by a qualified archaeologist and one precontact campsite of heritage value has been identified. Alberta Transportation committed to cross reference the sites in the KFN's TLRU Report and those identified in the HRIA; to confirm the risks to these sites; and propose possible mitigation measures for these sites at risk. Alberta Transportation has committed to overlay the GPS coordinates with the PDA to determine sites at risk. Alberta Transportation is awaiting the GPS coordinates from KFN. Fire broken rocks and artifacts have been found within the PDA; the other features of interest have not been identified within the PDA. It may not be possible to avoid all cultural sites of low to moderate heritage value as defined under the HRA. The assessment to date has not identified any sites of very high heritage value within the PDA 			



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KFN has identified the absence of maps depicting location of sites of potential historical, archaeological, or cultural interest to KFN's current use of the lands as a gap in the TLRU effects assessment. KFN recommends that avoidance or	• KFN TUS 2018, p. 44 (CEAR #47)	KFN submitted their TUS to Alberta Transportation in June 2018, after the filing of the EIA in March 2018; the sites identified in the KFN TUS were unavailable for consideration in the EIA.	Alberta Transportation provided a written response to KFN's TLRU report on August 9, 2019 addressing the concerns and issues raised in the TLRU report and met with KFN on October 17, 2019 to discuss the response. KFN indicated they will be providing written comments on Alberta Transportation's response.
redesign measures be developed to ensure KFN cultural properties, ceremonial sites, and identified traditional camping areas and associated material features remain intact and accessible.		Alberta Transportation committed to cross reference the sites in the KFN's TLRU Report and those identified in the HRIA to confirm the risks to these sites and propose possible mitigation measures for these sites. Alberta Transportation has committed to overlay the GPS coordinates with the PDA to determine sites at risk. Alberta Transportation is awaiting the GPS coordinates from KFN.	Standard mitigation for sites affected by the Project includes photography, mapping, documentation and mitigative excavation, to preserve the knowledge of the site. Depending upon significance, other mitigation may include additional consultation, Indigenous participation in the assessment and mitigation program and Indigenous monitoring during construction.
 KFN remain concerned about cultural sites and features, and how these sites will be protected and/or mitigated. In KFN's view, Alberta Transportation's response of following all the requirements for the protection of historic resources as determined by ACMWS is not adequate. KFN requested archaeological information gathered during the SR1 site investigations be shared with the KFN. Lack of sharing archaeological data for SR1 is a concern. KFN requested an HRIA and archaeological information from Alberta Transportation. 	 Meeting with KFN and Alberta Transportation (August 7, 2018) (cited in KFN SR1 SCRT Aug 2014-Aug 2019; First Nation/Métis Settlement Response #14) Meetings with KFN, PN, SN and Alberta Transportation (cited in KFN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #7, & 14) KCO & SCO Interim TUS 2017 (cited in KFN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #15) 	In protecting cultural sites and features, Alberta Transportation is bound by the HRA. The HRA was designed to ensure protection and avoidance of highly significant archaeological sites, and mitigation of less significant sites that cannot be avoided. No highly significant sites have been identified in the PDA to date, that would mandate avoidance. The sites discovered represent sites where mitigation, through documentation and collection of artifacts, is considered by ACMWS to be an appropriate response. Under the HRA, Alberta Transportation is not allowed to provide or share archaeological information. Requests for this information must be extended from the Nation to ACMWS, who then provides the archaeological information directly to the Nation. This protocol and contact information has been provided to KFN and Alberta Transportation will continue to work with KFN to facilitate requests for information to ACMWS.	At the meeting held on January 18, 2017, Alberta Transportation indicated that the impacts to historical resources is under ACMWS' jurisdiction. Should ACMWS approve the request for the information, Alberta Transportation could then share it. On March 23, 2018, Alberta Transportation sent detailed responses to Specific Concerns raised to date by providing a copy of Table 7-7 SR1 Project Specific Concerns and Responses - Kainai First Nation from the March 2018 EIA. Alberta Transportation acknowledges that KFN does not view protection of historical resources as required by provincial legislation to be adequate. However, Alberta Transportation is obliged to follow provincial law and ACMWS directives in identifying and mitigating historical resources under the HRA. Historical resources were discussed at the meeting held on October 17, 2019. Alberta Transportation noted they were legally bound to work within the legislation, and requested KFN's input on mitigation measures for sites that may be destroyed. Alberta Transportation will maintain access to identified current use sites (located outside the designated construction and Project site limits) during construction and operations, and Alberta Transportation is currently working with Indigenous groups on a post-construction principles for future land use. Alberta Transportation is bound by the HRA and is unable to comply with KFN's request regarding information gathered during SR1 site investigations. Alberta Transportation has provided the ACMWS contact to KFN.



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Views related to Potential Effects on Physical and Cultural Heritage	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps													
Sites or areas of ceremonial, spiritual, cultural, educational or historical value of interest to KFN include: KFN ceremonial site at winter camp along the Blackfoot	Letter from KFN to Alberta Transportation (cited in KFN SR1 SCRT Aug 2014-Aug	No sites of high significance, such as burial sites, effigies, medicine wheels, or tipi rings have been identified in the PDA to date.	On March 23, 2018, Alberta Transportation sent detailed responses to Specific Concerns raised to date by providing a copy of Table 7-7 SR1 Project Specific Concerns and Responses - Kainai First Nation from the March 2018 EIA.													
Trail. - Traditional Blackfoot Winter Camps in shaded valleys near water, such as one within the PDA east of the Our	2019; Specific Concern #6, 8, & 9) • Site visits facilitated by	Six campsites have been identified within the PDA, most of these sites are small and have been heavily disturbed by cultivation or erosion.	Alberta Transportation provided funding to KFN for a TUS, and the final TUS was received on June 5, 2018. Alberta Transportation facilitated site 14 days of visits to Project site with Elders and knowledge holders.													
 Lady of Peace Mission Site. Blackfoot winter camp and sites of historic, cultural and spiritual interest near proposed reservoir outlet on "Unnamed Creek" known herein as Val Vista Creek. this 	Alberta Transportation on June 27 – July 1, & July 11- 14, 2016 (cited in KFN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #7 & 9) • Meetings with KFN, PN, SN and Alberta Transportation (cited in KFN SR1 SCRT Aug	One undisturbed precontact campsite identified in the treed uplands adjacent to the Elbow River is considered to have heritage value and ACMWS is requiring standard mitigation, to include	At the meeting held on August 7, 2018, Alberta Transportation committed to cross reference the sites in the KFN's June 2018 TUS and those identified in the HRIA. Alberta Transportation has also committed to overlay the GPS coordinates with the PDA to determine sites at risk. Alberta Transportation is awaiting the GPS coordinates from KFN.													
historic Blackfoot occupancy site features tipi rings, stone scatters, fireplaces, arrowheads and a potential medicine wheel and likely additional features such as effigies, pottery, bones and potential human remains.		Meetings with KFN, PN, SN and Alberta Transportation (cited in KFN SR1 SCRT Aug	Meetings with KFN, PN, SN and Alberta Transportation (cited in KFN SR1 SCRT Aug	Meetings with KFN, PN, SN and Alberta Transportation (cited in KFN SR1 SCRT Aug	Meetings with KFN, PN, SN and Alberta Transportation (cited in KFN SR1 SCRT Aug	 Meetings with KFN, PN, SN and Alberta Transportation (cited in KFN SR1 SCRT Aug 	Meetings with KFN, PN, SN and Alberta Transportation	 Meetings with KFN, PN, SN and Alberta Transportation (cited in KFN SR1 SCRT Aug 	 Meetings with KFN, PN, SN and Alberta Transportation (cited in KFN SR1 SCRT Aug 	 Meetings with KFN, PN, SN and Alberta Transportation (cited in KFN SR1 SCRT Aug 	 Meetings with KFN, PN, SN and Alberta Transportation (cited in KFN SR1 SCRT Aug 	 Meetings with KFN, PN, SN and Alberta Transportation (cited in KFN SR1 SCRT Aug 	 Meetings with KFN, PN, SN and Alberta Transportation (cited in KFN SR1 SCRT Aug 	 Meetings with KFN, PN, SN and Alberta Transportation (cited in KFN SR1 SCRT Aug 	 Meetings with KFN, PN, SN and Alberta Transportation (cited in KFN SR1 SCRT Aug 	Meetings with KFN, PN, SN and Alberta Transportation (cited in KFN SR1 SCRT Aug
KFN expressed concerns about how construction might impact former campsites, which include tipi rings and other cultural artifacts from Blackfoot history.	Concern #7, & 14) KCO & SCO Interim TUS 2017 (cited in KFN SR1 SCRT Aug 2014-	The results of Alberta Transportation's Historical Resources Assessment have been reported to AC. Current use sites and greas located outside the PDA	Historical resources were discussed at the meeting held on October 17, 2019. Alberta Transportation noted they were legally bound to work within the legislation, and requested KFN's input on mitigation measures for sites that may be destroyed.													
The combination of ceremonial importance and the presence of material evidence of KFN ancestral occupancy, coupled with the oral historical account of Blood Chiefs using this area, make it uniquely significant as a site of current traditional use with archaeological value.	Aug 2019; Specific	Concern #8 & 10) • KFN TUS 2018, pp. 51, 78	Concern #8 & 10) • KFN TUS 2018, pp. 51, 78	Concern #8 & 10) • KFN TUS 2018, pp. 51, 78	Concern #8 & 10) • KFN TUS 2018, pp. 51, 78	Concern #8 & 10) • KFN TUS 2018, pp. 51, 78	Concern #8 & 10) • KFN TUS 2018, pp. 51, 78	0) Project.	ACMWS will evaluate the reported presence of tipi rings and other features observed by KFN and the disagreement between conventional archaeological assessment and KFN to determine whether a supplemental HRIA or additional field visits by ACMWS is required.							
KFN stated a desire to further study Blackfoot Traditional Camp Site in creek valley. A joint archaeological and TUS should be undertaken of the creek valley to identify possible			If ACMWS determines that these features are present, standard mitigation will be applied, including photography, mapping, documentation and mitigative excavation, to preserve the knowledge of the site.													
burial sites.			Depending on ACMWS' evaluation of the site's significance, other mitigation may include additional engagement, Indigenous participation in the assessment and mitigation program and Indigenous monitoring during construction.													
			Should any human remains be found during construction, all construction will immediately cease in the area, the site will be secured and all applicable provincial regulations will be followed.													
			If the remains are determined to be of Aboriginal origin the Provincial Government will engage Indigenous groups according to GoA protocol and guidelines developed in consultation with Indigenous groups.													



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	Views related to Potential Effects on Physical and Cultural Heritage		Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps	
•	KFN reported that a traditional Blackfoot camp associated with a historic trail and travel way was identified and photographed at and around Lat = 51.0186° Lon = -114.4767°.	•	KFN TUS 2018, p. 74 (CEAR #47)	No archaeological remains were identified in this specific area during the HRIA. This area was revisited by a registered archaeologist to assess the presence of reported tipi rings; no tipi rings were identified.	Alberta Transportation provided a written response to KFN's TLRU report on August 9, 2019 addressing the concerns and issues raised in the TLRU report and met with KFN on October 17, 2019 to discuss the response. KFN indicated they will be providing written comments on Alberta Transportation's response.	
					ACMWS will evaluate the reported presence a traditional Blackfoot camp at this location and the disagreement between conventional archaeological assessment and KFN to determine whether a supplemental HRIA or additional field visits by ACMWS is required.	
					If ACMWS determines these features are present, standard mitigation will be applied, including photography, mapping, documentation and mitigative excavation, to preserve the knowledge of the site.	
					Depending upon its significance, other mitigation may include additional consultation, Indigenous participation in the assessment and mitigation program and Indigenous monitoring during construction.	
•	Sites or areas of ceremonial, spiritual, cultural, educational or historical value of interest to KFN include: – Blackfoot Trail (North-South Trail) along the Elbow River.	•	KFN TUS 2018, pp. 51, 74, 85, 97 (CEAR #47)	No remnants of the Old North Trail (North-South Trail) have been identified within the PDA. Although trails were once present in the PDA, the	Alberta Transportation provided a written response to KFN's TLRU report on August 9, 2019 addressing the concerns and issues raised in the TLRU report and met with KFN on October 17, 2019 to discuss the response. KFN indicated they will be providing written comments on Alberta Transportation's response.	
•	KFN stated that Alberta Transportation has not recognized the significance of the "Old North-South Trail." This is not only an access route into the Project area, but it is in itself a site of cultural, spiritual and historic importance and is likely to			trails very difficult; no intact	high degree of cultivation makes mapping of these trails very difficult; no intact trails of precontact age have been identified within the PDA to date. No ceremonial sites or tipi rings were identified in this	ACMWS will evaluate the reported presence of the North-South Trail and the disagreement between conventional archaeological assessment and KFN to determine whether a supplemental HRIA or additional field visits by ACMWS is required.
	have archaeological and heritage resources associated with it. KFN stated that the North-South Trail intersects with the			area during the HRIA or subsequent revisit of the area by a registered archaeologist.	If ACMWS determines historical trails are present, standard mitigation will be applied, including photography, mapping, documentation and mitigative excavation, to preserve the knowledge of the site.	
	traditional camping and ceremonial areas discussed above. The trail and the ceremonial and historic occupancy places together comprise a historic occupancy and travel complex.				Depending upon its significance, other mitigation may include additional consultation, Indigenous participation in the assessment and mitigation program and Indigenous monitoring during construction.	
•	Design avoidance or preservation measures to ensure the integrity of the portions of the traditional trails NWMP and North-South Trails or conduct additional archaeological field visits in the company of BT/K Elders to further and more comprehensively identify sites of interest for preservation.					
•	The Our Lady of Peace Mission is significant to KFN, but not only for its intrinsic or symbolic value, but rather because its presence indicates the historic location of Blackfoot people in the Elbow River valley and in the PDA.	•	KFN TUS 2018, p. 34 (CEAR #47)	The Our Lady of Peace Mission is outside the PDA and will not be impacted by the development.	Alberta Transportation acknowledges the importance of Our Lady of Peace Mission to KFN. However, since the Project is not expected to impact the site, Alberta Transportation does not consider this an area of discrepancy that remains to be resolved.	



Table 10-1 Indigenous Group Views on the Project's Potential Effects on Physical and Cultural Heritage and/or to Sites of Importance, as Considered Under CEAA 2012 and Alberta Transportation's Responses

Views related to Potential Effects on Physical and Cultural Heritage	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
 Archaeological findings associated with the Blackfoot come from what archaeologists refer to as the Old Women's phase of archaeological time- about 850 AD to the 1700 AD (Peck, 2011, 3). Artifacts tied to the Blackfoot from this 	• KFN TUS 2018, p.51 (CEAR #47)	No effigies, Blackfoot pottery, iniskims, Blackfoot arrowheads or medicine wheels have been identified within the PDA.	Alberta Transportation provided a written response to KFN's TLRU report on August 9, 2019 addressing the concerns and issues raised in the TLRU report and met with KFN on October 17, 2019 to discuss the response. KFN indicated they will be providing written comments on Alberta Transportation's response.
period include heterogeneous forms of pottery, projectiles and other artifacts indicative of mobile hunting bands in what are now Southern Alberta, western Saskatchewan and			As required under provincial legislation, should an unexpected find of a significant historical resource occur during construction, ACMWS will be notified and will determine the appropriate mitigation.
Northern Montana (Peck, 2011, 10; 3). Features tied to the Blackfoot include stone effigies, Iniskim – Buffalo Rocks, arrowheads, pottery and Medicine Wheels.			Alberta Transportation will minimize disturbance to cultural and spiritual sites and subsurface impacts to the extent possible, and will develop a protocol for recovery, collection, and reporting on artifacts found in consultation with Indigenous groups, which could include flagging, fencing, or providing signage of sites to prevent disturbance during construction.
			Should any human remains be found during construction, all construction will immediately cease in the area, the site will be secured and all applicable provincial regulations will be followed.
			If the remains are determined to be of Aboriginal origin the Provincial Government will engage Indigenous groups according to GoA protocol and guidelines developed in consultation with Indigenous groups.
Piikani Nation (PN)		,	
The PN Consultation Technicians and Elders while walking property #21, and #24, on both sides of an unnamed creek near the proposed outlet of the reservoir the PN	 Site visits facilitated by Alberta Transportation on August 8, 16, 30 & 31, 2016 	This area within Property #21 along the unnamed creek was visited by a registered archaeologist after the concerns regarding tipi rings were raised; no tipi	On March 23, 2018, Alberta Transportation sent detailed responses to Specific Concerns raised to date by providing a copy of Table 7-6 SR1 Project Specific Concerns and Responses - Piikani Nation from the March 2018 EIA:
Consultation team found what they believed to be evidence of tipi rings. The PN Elders and Consultation technicians while walking	(cited in PN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #10)	g 2019; Specific n #10) glacial till and many natural cobble outcrops were noted in this area. The results of this archaeological field investigation have been reported to ACMWS. No tipi rings, medicine wheels or burial sites have been identified within the PDA to date. The PN concern about potential tipi rings, medicine wheels, burial sites and cultural sites have been	At the meetings held on September 18-19, 2018, Alberta Transportation discussed creating a map with PN identified sites so specific risks and mitigation could be discussed at future meeting.
SR1 properties #4 and #86 on Mary Robinson's property inspected two possible tipi ring locations, an old camp site and the old North South Trail that runs through the Robinson	• PN TUS 2017, p. 9 & 10		At the meeting held on December 17, 2018, Alberta Transportation provided a map showing PN identified sites in relation to the Project components.
property. The PN Elders and Consultation technicians re-inspected the areas on SR1 property #4. Concerns were expressed that			Alberta Transportation provided a written response to PN's TUS report in December 2019 addressing the concerns and issues raised in the TUS and will offer meet to discuss the response.
there were possible tipi rings identified at this location.		reported to ACMWS.	ACMWS will evaluate the reported presence of tipi rings, traditional use and cultural sites and the disagreement between conventional archaeological assessment and PN to determine whether a supplemental HRIA or additional field visits by ACMWS is required. If ACMWS determines that tipi rings or cultural sites are present, standard mitigation will be applied, including photography, mapping, documentation and mitigative excavation, to preserve the knowledge of the site.
			Depending on its significance, other mitigation may include additional consultation, Indigenous participation in the assessment and mitigation program and Indigenous monitoring during construction.
			As required under provincial legislation, should an unexpected find of a significant historical resource occur during construction, ACMWS will be notified and will determine the appropriate mitigation.



Table 10-1 Indigenous Group Views on the Project's Potential Effects on Physical and Cultural Heritage and/or to Sites of Importance, as Considered Under CEAA 2012 and Alberta Transportation's Responses

Views related to Potential Effects on Physical and Cultural Heritage	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
			Should any human remains be found during construction, all construction will immediately cease in the area, the site will be secured and all applicable provincial regulations will be followed. If the remains are determined to be of Aboriginal origin the GoA will engage Indigenous groups according to GoA protocol and guidelines developed in consultation with Indigenous groups.
PN expressed concerns that there were wintering campgrounds on the east and west side of the unnamed creek which could be destroyed if this area were	Site visit facilitated by Alberta Transportation on August 16, 2016 (cited in)	No sites of high significance, such as burial sites, effigies, medicine wheels, or tipi rings have been identified in the PDA to date.	On March 23, 2018, Alberta Transportation sent detailed responses to Specific Concerns raised to date by providing a copy of Table 7-6 SR1 Project Specific Concerns and Responses - Piikani Nation from the March 2018 EIA:
excavated for the outlet channel which could have a serious impact on Blackfoot cultural items that might exist in these areas.	PN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #10)	Six campsites have been identified within the PDA, most of these sites are small and have been heavily disturbed by cultivation or erosion.	At the meetings held on September 18-19, 2018, Alberta Transportation discussed creating a map with PN identified sites so specific risks and mitigation could be discussed at future meeting.
		One undisturbed precontact campsite identified in the treed uplands adjacent to the Elbow River is	At the meeting held on December 17, 2018, Alberta Transportation provided a map showing PN identified sites in relation to the Project components.
		considered to have heritage value and ACMWS is requiring standard mitigation, to include photography, mapping and archaeological excavation of this site. The results of Alberta Transportation's HRA have been reported to ACMWS. Current use sites and areas located outside the PDA are not anticipated to be directly affected by the Project.	ACMWS will evaluate the concerns about possible presence of wintering campgrounds as expressed by PN and the disagreement between conventional archaeological assessment and PN to determine whether a supplemental HRIA or additional field visits by ACMWS is required.
			If ACMWS determines that these features are present, standard mitigation will be applied, including photography, mapping, documentation and mitigative excavation, to preserve the knowledge of the site.
			Depending upon its significance, other mitigation may include additional consultation, Indigenous participation in the assessment and mitigation program and Indigenous monitoring during construction.
			Alberta Transportation will minimize disturbance to cultural and spiritual sites and subsurface impacts to the extent possible, and will develop a protocol for recovery, collection, and reporting on sites found in consultation with Indigenous groups, which could include flagging, fencing, or providing signage of sites to prevent disturbance during construction.
The PN Consultation team expressed an interest in having monitors in place during the construction so that they could observe the work being undertaken and to protect Blackfoot artifacts.	Site visit facilitated by Alberta Transportation on August 30, 2016 (cited in PN SR1 SCRT Aug 2014-Aug 2019, Specific Concern #10)	Alberta Transportation is committed to Indigenous participation in the Project, including training, employment, and contracting opportunities. To this end, Alberta Transportation is preparing a draft IPP with the goal to create training, employment, monitoring, and contracting opportunities with interested Indigenous groups potentially affected by the Project, including PN. Alberta Transportation aims to obtain Indigenous comment and feedback on	At the meeting held on December 17, 2018, Alberta Transportation stated their willingness to discuss monitoring programs, and that this was a discussion they were also having with AEP (the eventual owner and operator of the Project). PN was provided the draft IPP on November 15, 2019. Alberta Transportation has requested written comments and a meeting to discuss the document. ACMWS may require Indigenous monitoring programs or site avoidance through Project redesign. Other mitigations that may be required by ACMWS include additional consultation with Indigenous groups to solicit their opinions on appropriate mitigation. In
		to obtain Indigenous comment and feedback on the draft IPP, the final draft of which will identify how that feedback was incorporated. Alberta Transportation will comply with all mitigative requirements issued under the HRA.	consultation with Indigenous groups, ACMWS may require Alberta Transportation to relocate significant cultural resources outside of the development footprint, to sponsor specific ceremonies prior to disturbance, to allow for collection of traditional resources, to construct commemorative cairns or interpretive panels, or to have Indigenous participation in any of the mitigative activities.



Table 10-1 Indigenous Group Views on the Project's Potential Effects on Physical and Cultural Heritage and/or to Sites of Importance, as Considered Under CEAA 2012 and Alberta Transportation's Responses

	Views related to Potential Effects on Physical and Cultural Heritage		Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps										
•	The proponents of the Project need to revise the language regarding mitigation and consider participation of Siksikaitsitapii (Keepers of our Language) in the official	•	PN TUS 2017, p.23 (cited in PN SR1 SCRT Aug 2014-Aug 2019; Specific Concern	Mitigation is mandated by ACMWS under the HRA. Alberta Transportation is unable to modify mitigation requirements.	On March 23, 2018, Alberta Transportation sent detailed responses to Specific Concerns raised to date by providing a copy of Table 7-6 SR1 Project Specific Concerns and Responses - Piikani Nation from the March 2018 EIA.										
	assessment by the experts utilized to confirm the authenticity of the historic and archeological sites discovered. Existence of many archaeological sites within the SR1 area.		#55)	Alberta Transportation is committed to Indigenous economic participation in the Project including through potential training and contracting	Alberta Transportation provided a written response to PN's TUS report in December 2019 addressing the concerns and issues raised in the TUS and will offer to meet to discuss the response.										
		opportunities. As such, Alberta Transportation is preparing an IPP for the Project. The goal of this IPP to create training and contracting opportunities wi interested Indigenous groups potentially affected to the Project, including PN. These opportunities may include monitoring.	preparing an IPP for the Project. The goal of this IPP is to create training and contracting opportunities with interested Indigenous groups potentially affected by the Project, including PN. These opportunities may include monitoring. Alberta Transportation will comply with all mitigative	ACMWS may require Indigenous monitoring programs or site avoidance through Project redesign. Other mitigations that may be required by ACMWS include additional consultation with Indigenous groups to solicit their opinions on appropriate mitigation. In consultation with Indigenous groups, ACMWS may require Alberta Transportation to relocate significant cultural resources outside of the development footprint, to sponsor specific ceremonies prior to disturbance, to allow for collection of traditional resources, to construct commemorative cairns or interpretive panels, or to have Indigenous											
				requirements issued under the HRA.	participation in any of the mitigative activities.										
•	During site visits by PN, a landowner indicated the remains of 2 Tipi Rings at a site south of their house, an old camp site and an opening going into the cottonwoods east of the	at a site south of their house, an old camp site agging into the cottonwoods east of the ank of an old trail used pre and post contact eold Stoney Trail (Old North South Trail). The hearth stones and tipi rings at a unique site away from main camp showing the life of the elocated at a distance for a reason (possible voman's lodge). The hearth stones and tipi rings at a unique site away from main camp showing the life of the elocated at a distance for a reason (possible voman's lodge). The hearth stones and tipi rings at a unique site away from main camp showing the life of the elocated at a distance for a reason (possible voman's lodge). The hearth stones and tipi rings at a unique site away from main camp showing the life of the elocated at a distance for a reason (possible voman's lodge). The hearth stones and tipi rings at a unique site are small and have been identified. Six campsites have been identified within the PDA, most of these sites are small and have been heavidisturbed by cultivation or erosion. The order to date, Campsites have been evaluated by registered archaeologist and one precontact campsite of heritage value has been identified. Six campsites have been identified. Six campsites have been identified within the PDA, is campsites have been archaeologist and one precontact campsite of heritage value has been identified. Six campsites have been identified within the PDA. Given the results of the left have been identified. Six campsites have been identified. Six campsites have been identified within the PDA. Given that such a latent have been identified. Six campsites have been identified within the P	• PN TUS 2017, p.10 & 11	• PN TUS 2017, p.10 & 11	PDA	PDA to date. Campsites have been evaluated by a	At the meetings held on September 18-19, 2018, Alberta Transportation discussed creating a map with PN identified sites so specific risks and mitigation could be discussed at future meeting.								
	Elbow River bank of an old trail used pre and post contact they called the old Stoney Trail (Old North South Trail).		campsite of heritage value has been identified.	At the meeting held on December 17, 2018, Alberta Transportation provided a map showing PN identified sites in relation to the Project components.											
•	PN identified fire hearth stones and tipi rings at a unique site located west away from main camp showing the life of the			most of these sites are small and have been heavily disturbed by cultivation or erosion. One undisturbed precontact campsite identified in	Alberta Transportation provided a written response to PN's TUS report in December 2019 addressing the concerns and issues raised in the TUS and will offer to meet to discuss the										
	people. Lodge located at a distance for a reason (possible Kipiitōyiss old woman's lodge).				response.										
	Riplito y is ord Wolffelt of Todago y.		considered to have heritage value and ACMWS is requiring standard mitigation, to include photography, mapping and archaeological	ACMWS will evaluate the reported presence of tipi rings, campsites and the Old North Trail (North-South Trail) and the disagreement between conventional archaeological assessment and PN to determine whether a supplemental HRIA or additional field visits by ACMWS is required.											
			Fire broken rocks and artifacts have been found within the PDA. Given the results of the HRIA,	If ACMWS determines historical trails are present, standard mitigation will be applied, including photography, mapping, documentation and mitigative excavation, to preserve the knowledge of the site.											
				standard site mitigation is considered to be adequate for the site types in the PDA.	Depending upon its significance, other mitigation may include additional consultation,										
				No remnants of the Old North Trail (Old North South Trail) have been identified within the PDA. Indigenous participation in the asse monitoring during construction.	Indigenous participation in the assessment and mitigation program and Indigenous monitoring during construction.										
					hi tr								high trails	Although trails were once present in the PDA, the high degree of cultivation makes mapping of these trails very difficult; no intact trails of precontact age have been identified within the PDA to date.	
				PN's comments about the tipi rings, campsites and the North-South trail have been reported to ACMWS.											



Table 10-1 Indigenous Group Views on the Project's Potential Effects on Physical and Cultural Heritage and/or to Sites of Importance, as Considered Under CEAA 2012 and Alberta Transportation's Responses

	Views related to Potential Effects on Physical and Cultural Heritage		Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
Si	iksika Nation (SN)	•			
•	SN Elders and Consultation technicians re-inspected the areas on SR1 properties #21 and #24. SN are concerned the evidence of wintering grounds and tipi rings will be lost if this area is excavated for the SR1 outfall to drain the dry reservoir after a flood event. The SN Elders and Consultation technicians inspected the areas on SR1 properties #6 and #9. Concerns were expressed that the excavations for the diversion channels could have a serious impact on Blackfoot cultural items that might exist in these areas. Concerns emphasizing the need to protect artifacts and sites such as old camp sites, tipi rings, and other rock markers.	•	Site visits facilitated by Alberta Transportation on August 9 & 10, 2016 (cited in SN SR1 SCRT Aug 2014- Aug 2019; Specific Concern #5) Meeting with KFN, PN, SN and Alberta Transportation, (September 15, 2016) (cited in SN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #5)	This area within Property #21 along the unnamed creek was visited by a registered archaeologist after the concerns regarding tipi rings were raised; no tipi rings were identified; the field is eroded close to glacial till and many natural cobble outcrops were noted in this area. The results of this archaeological field investigation have been reported to ACMWS. No tipi rings, medicine wheels or burials have been identified within the PDA to date. No archaeological sites of high heritage value have been identified in the unnamed creek valley. Alberta Transportation is of the position that standard mitigation as required by ACMWS is appropriate. The SN concern about potential tipi rings medicine wheels, burials and cultural sites have been reported to ACMWS.	On March 23, 2018, Alberta Transportation sent detailed responses to Specific Concerns raised to date by providing a copy of Table 7-5 SR1 Project Specific Concerns and Responses - Siksika Nation from the March 2018 EIA. On April 26, 2018, Alberta Transportation met with SN to review their specific concerns and the responses and proposed mitigation measures in Table 7-5 SR1 Project Specific Concerns and Responses - Siksika Nation. ACMWS will evaluate the reported presence of tipi rings, traditional use and cultural sites and the disagreement between conventional archaeological assessment and SN to determine whether a supplemental HRIA or additional field visits by ACMWS is required. If ACMWS determines that tipi rings or cultural sites are present, standard mitigation will be applied, including photography, mapping, documentation and mitigative excavation, to preserve the knowledge of the site. Depending upon its significance, other mitigation may include additional consultation, Indigenous participation in the assessment and mitigation program and Indigenous monitoring during construction. As required under provincial legislation, should an unexpected find of a significant historical resource occur during construction, ACMWS will be notified and will determine the appropriate mitigation. Should any human remains be found during construction, all construction will immediately cease in the area, the site will be secured and all applicable provincial regulations. If the remains are determined to be of Aboriginal origin the Provincial Government will engage Indigenous groups according to GoA protocol and guidelines developed in consultation with Indigenous groups.
•	SN were still concerned about tipi rings and historical trails being destroyed. They requested more information on what will be impacted by construction. They were also concerned about burials in the area, as people may have been buried in tipis or in trees. Some of the tipi rings may represent burials. SN suggested the flow at the outlet area can be controlled to reduce potential effects on the campsites located there.	•	Meeting between SN and Alberta Transportation, (April 26, 2018) (cited in SN SR1 SCRT Aug 2014- Aug 2019; FN/Métis Settlement Response #5, & 8)	No sites of high significance, such as burial sites, effigies, medicine wheels, or tipi rings have been made in the PDA to date. No highly significant sites have been identified in the PDA to date, that would mandate avoidance. The sites discovered represent sites where mitigation, through documentation and collection of artifacts, is considered by ACMWS to be an adequate response. It is not possible to avoid all cultural sites, only those of very high heritage value as defined by the HRA. The assessment did not identify any sites of very high heritage value within the PDA therefore, standard mitigations, including additional consultation is considered appropriate. Current use sites and areas located outside the PDA are not anticipated to be directly affected by the Project.	On March 23, 2018, Alberta Transportation sent detailed responses to Specific Concerns raised to date by providing a copy of Table 7-5 SR1 Project Specific Concerns and Responses - Siksika Nation from the March 2018 EIA. On April 26, 2018, Alberta Transportation met with SN to review their Specific Concerns and the responses and proposed mitigation measures in Table 7-5 SR1 Project Specific Concerns and Responses - Siksika Nation. Should any human remains be found during construction, all construction will immediately cease in the area, the site will be secured and all applicable provincial regulations will be followed. If the remains are determined to be of Aboriginal origin the Provincial Government will engage Indigenous groups according to GoA protocol and guidelines developed in consultation with Indigenous groups.



Table 10-1 Indigenous Group Views on the Project's Potential Effects on Physical and Cultural Heritage and/or to Sites of Importance, as Considered Under CEAA 2012 and Alberta Transportation's Responses

Views related to Potential Effects on Physical and Cultural Heritage	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
Stoney Nakoda Nations (SNN)			
SNN will reach out to a landowner to access their land in order view some sites; SNN's preference is to perform a ceremony pre-construction on or near their land as well, as there are tipi rings and sites present on the property.	Meeting between SNN and Alberta Transportation (June 4, 2018) (cited in SNN SR1 SCRT Aug 2014-Aug 2019; FN/Métis Settlement Response #6)	No tipi ring sites or effigies have been documented within the PDA to date, campsites have been evaluated by a registered archaeologist and one precontact campsite of heritage value has been identified. Fire broken rocks and artifacts have been found within the PDA; the other features of interest have not been identified within the PDA. Given the results of the HRIA, standard site mitigation is considered to be adequate for the site types in the PDA. It is not possible to avoid all cultural sites, only those of very high heritage value as defined by the HRA. The assessment did not identify any sites of very high heritage value within the PDA therefore, standard mitigations, including additional consultation is considered appropriate. Alberta Transportation will support ceremonies with respect to sites of importance to SNN.	On March 23, 2018, Alberta Transportation sent detailed responses to Specific Concerns raised to date by providing a copy of Table 7-4 SR1 Project Specific Concerns and Responses - Stoney Nakoda Nations from the March 2018 EIA. At the request of Indigenous groups, Alberta Transportation will participate in ceremonies (if invited) prior to the start of construction, including making offerings. At the meeting held on June 4, 2018, Alberta Transportation stated that if SNN required funding for a ceremony to submit a budget to Alberta Transportation. As required under provincial legislation, should an unexpected find of a significant historical resource occur during construction, ACMWS will be notified and will determine the appropriate mitigation.
Tsuut'ina Nation (TN)			
The TN practiced tree burials with a cairn to mark the spot. TN do not want these cairns disturbed. A ceremony may be needed to properly respect those TN people who were part of the tree burials, but which sites cannot all be identified today.	Meeting between TN and Alberta Transportation (August 31, 2017); (cited in TN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #15)	No cairns have been identified in the PDA to date. No tree burials have been identified since these sites do not preserve over time. Alberta Transportation will support a ceremony to respect the potential locations of former tree burials in the riparian zone which have not preserved.	On March 23, 2018, Alberta Transportation sent detailed responses to Specific Concerns raised to date by providing a copy of Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation from the March 2018 EIA. Funding for a ceremony and feast was provided by Alberta Transportation in January 2018. This ceremony was undertaken by TN in spring 2018. At the meeting held on October 11, 2018, historical resources and possible mitigation measures, including following ACMWS' requirements, monitoring opportunities, using TUS report information, and the potential for more excavation per ACMWS' direction, were discussed. On November 23, 2018, Alberta Transportation provided its report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table. In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA for cultural sites and historical resources, including minimizing disturbance and following ACMWS guidelines. If cairns are identified in the PDA any time prior to or during construction, they will be reported to ACMWS investigated as required under the HRA. Should any human remains be found during construction, all construction will immediately cease in the area, the site will be secured and all applicable provincial regulations will be followed. If the remains are determined to be of Aboriginal origin the Provincial Government will engage Indigenous groups according to GoA protocol and guidelines developed in consultation with Indigenous groups.



Table 10-1 Indigenous Group Views on the Project's Potential Effects on Physical and Cultural Heritage and/or to Sites of Importance, as Considered Under CEAA 2012 and Alberta Transportation's Responses

	Views related to Potential Effects on Physical and Cultural Heritage		Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps	
•	TN is concerned about the potential for the Project to adversely affect the physical and cultural heritage resources in TN territory.	N S	etter from TN to CEAA on May 30, 2016 (cited in TN SR1 SCRT Aug 2014- Aug	No sites of high significance under the HRA, such as burial sites, tipi rings, effigies, or medicine wheels, have been identified in the PDA to date.	On March 23, 2018, Alberta Transportation sent detailed responses to Specific Concerns raised to date by providing a copy of Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation from the March 2018 EIA.	
	TN is concerned about burial sites that would be destroyed should the reservoir be filled.	1	2019; Specific Concern #1, 17, & 18) Letter from TN to Minister of	Six campsites have been identified within the PDA, most of these sites are small and have been heavily disturbed by cultivation or erosion.	At the meeting held on October 11, 2018, historical resources and possible mitigation measures, including following ACMWS' requirements, monitoring opportunities, using TUS report information, and the potential for more excavation per ACMWS' direction, were	
•	TN is concerned about impacts to important cultural sites within the Project Area (tipi rings, fire pits, etc.).	Ir	nfrastructure and	One undisturbed precontact campsite identified in	discussed.	
•	Concerned about impacts to grave sites on the dam outflow and intake/start of diversion channel as well as throughout undisturbed riparian areas. Feel strongly that grave sites need to be protected.	2 A S	Transportation on (May 18, 2017) (cited in TN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #17, 18)	the treed uplands adjacent to the Elbow River is considered to have heritage value and ACMWS is requiring standard mitigation, to include photography, mapping and archaeological	On November 23, 2018, Alberta Transportation provided its report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table. In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA for cultural sites and historical resources, including minimizing disturbance and	
•	RECOMMENDATION: Do not disturb cultural and burial sites, or archaeological sites.		'N TUS 2018, p. 61, 64	excavation of this site. The results of Alberta Transportation's HRIA have	following ACMWS guidelines. At the meeting held on August 29, 2019, Alberta Transportation offered to work with and	
•	TN undertook a site visit and identified tipi rings, a possible medicine wheel, possible campsites, and possible bison jumps (exact locations unclear).			been reported to ACMWS. Current use sites and areas located outside the PDA are not anticipated to be directly affected by the	fund TN to learn more about the sites and features within the SR1 area that are important to TN. Alberta Transportation will maintain access to identified current use sites (located	
•	TN field crews reported numerous traditional use locations bearing evidence of cultural and archaeological significance within the Project area, including more than 100			Project. Fire broken rocks and artifacts have been found within the PDA; given the results of the HRIA,	outside the designated construction and Project site limits) during construction and operations, and Alberta Transportation is currently working with Indigenous groups on post-construction principles for future land use.	
	teepee rings (in some cases 20-25 rings in a single grouping), as well as fire pits, trails, and more. Field crews also reported possible gravesites and headstones within the Project area.		standard site mitigation is considered to be adequate for the site types in the PDA. It is not possible to avoid all cultural sites, only those of very high heritage value as defined by the HRA. The assessment did not identify any sites of very high heritage value within the PDA therefore, standard	If ACMWS determines that tipi rings or cultural sites are present, standard mitigation will be applied, including photography, mapping, documentation and mitigative excavation, to preserve the knowledge of the site.		
•	TN members are concerned about impacts to important cultural sites within the Project area. Field crews reported traditional use sites bearing evidence of cultural and archaeological significance within the Project area,				of vei The a herita	of very high heritage value as defined by the HRA. The assessment did not identify any sites of very high heritage value within the PDA therefore, standard
•	including teepee rings, fire pits, etc. TN express concern that there would be extensive damage			mitigations, including additional consultation is considered appropriate	As required under provincial legislation, should an unexpected find of a significant historical resource occur during construction, ACMWS will be notified and will determine	
	to important cultural sites (including gravesites) on the dam outflow and intake/start of diversion channel, as well as the undisturbed riparian areas which contain numerous sites. The TN feel strongly that grave sites need to be protected.			propose possible mitigation measures for these sites. Alberta Transportation has committed to overlay the	the appropriate mitigation. Should any human remains be found during construction, all construction will immediately cease in the area, the site will be secured and all applicable provincial regulations will be followed. If the remains are determined to be of Aboriginal origin the Provincial Government will engage Indigenous groups according to GoA protocol and guidelines developed in consultation with Indigenous groups	



Table 10-1 Indigenous Group Views on the Project's Potential Effects on Physical and Cultural Heritage and/or to Sites of Importance, as Considered Under CEAA 2012 and Alberta Transportation's Responses

	Views related to Potential Effects on Physical and Cultural Heritage	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
•	TN have concerns that their artifacts are not protected.	Meeting with TN and Alberta Transportation (cited in TN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #20) Meeting between TN, and Alberta Transportation (September 21, 2018) (cited in TN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #20)	In protecting cultural sites and features, Alberta Transportation is bound by the HRA. The HRA was designed to ensure protection and avoidance of highly significant archaeological sites, and mitigation of less significant sites that cannot be avoided. No highly significant sites have been identified in the PDA to date, that would mandate avoidance. The sites discovered represent sites where mitigation, through documentation and collection of artifacts, is considered by ACMWS to be an adequate response.	After the meeting held on October 28, 2016, Alberta Transportation obtained the information for the Treaty 7 contact at ACMWS that TN could contact directly to request archaeological information. The contact information was included in the draft meeting notes sent December 12, 2016. On March 23, 2018, Alberta Transportation sent detailed responses to Specific Concerns raised to date by providing a copy of Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation from the March 2018 EIA. At the meeting held on October 11, 2018, historical resources and possible mitigation measures, including following ACMWS' requirements, monitoring opportunities, using TUS report information, and the potential for more excavation per ACMWS' direction, were discussed. On November 23, 2018, Alberta Transportation provided its report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table. In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA for cultural sites and historical resources, including minimizing disturbance and following ACMWS guidelines. Alberta Transportation acknowledges that TN does not view protection of historical resources as required by ACMWS as adequate. However, Alberta Transportation is obliged to follow provincial law and ACMWS directives in identifying and mitigating historical resources under the HRA. Alberta Transportation will maintain access to identified current use sites (located outside the designated construction and Project site limits) during construction and
				operations, and Alberta Transportation is currently working with Indigenous groups on post-construction principles for future land use.
•	TN continued to practice their most important religious ceremony, the annual Sun Dance, until 1889, "at the crossing of the Elbow River on the northeast corner of the reserve". The grandson of another early homesteader details his father's recollections of the TN holding Sun Dance ceremonies in the Springbank area, "at a crossing of the Elbow known as the Weasel Head".	• TN TUS 2018 p. 12, 18, 48, 63	The sites referenced by TN are outside the PDA and will not be affected by the Project.	On November 23, 2018, Alberta Transportation provided its report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table. In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA for cultural sites and historical resources, including minimizing disturbance and following ACMWS guidelines. Given that the areas mentioned are not anticipated to be affected by the Project, Alberta Transportation is of the opinion that no disparity in views remain to be
•	TN reference a spot where the Indians used to gather for various celebrations and pow wows. It was not unusual for up to 100 teepees and 50 to 200 horses to be present at this site" (Foothills Historical Society 1976,212).			reconciled.
•	The TN TUS quotes "Land in general holds sacred value and meaning for the TN, and as Churchill (2000,521) observes, this includes all reserve lands. Churchill (2000) records multiple places on the TN reserve of particular importance because of their deep connections to the Nation's traditional land use and religious ceremonies.			
•	TN Elders also describe a longstanding cultural connection to rivers, and to the Elbow River in particular.			



Table 10-1 Indigenous Group Views on the Project's Potential Effects on Physical and Cultural Heritage and/or to Sites of Importance, as Considered Under CEAA 2012 and Alberta Transportation's Responses

Views related to Potential Effects on Physical and Cultural Heritage	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
Ermineskin Cree Nation (ECN)			
 ECN field visits identified a possible burial site in the southeastern extreme of the PDA. ECN identified potential tipi rings, campground, and burial sites located within the Project area. ECN would like to work with ACMWS to determine if these sites are in fact tipi rings/burials. Potential impact on sites of potential historical and spiritual significance to ECN. ECN Site visits to two small, southeastern and southwestern portions of the PDA identified sites of historical and spiritual significance, including a historical camping area and potential teepee ring. ECN expressed concern about the potential impact of the Project on sites of potential historical and spiritual significance, particularly in the southeastern and southwestern portions of the PDA. ECN was advised by a landowner that there was an Indigenous burial site in the area, but claims the markings were washed away in the 2013 flood. 	• ECN TUS 2018, p. 19, 23, 27,33, 392018 (CEAR #46)	No sites of high significance, such as burial sites, tipi rings, effigies, or medicine wheels, have been made in the PDA to date. Six campsites have been identified within the PDA, most of these sites are small and have been heavily disturbed by cultivation or erosion. One undisturbed precontact campsite identified in the treed uplands adjacent to the Elbow River is considered to have heritage value and ACMWS is requiring standard mitigation, to include photography, mapping and archaeological excavation of this site. The results of Alberta Transportation's HRIA have been reported to ACMWS. Current use sites and areas located outside the PDA are not anticipated to be directly affected by the Project. Fire broken rocks and artifacts have been found within the PDA. Given the results of the HRIA, standard site mitigation is considered to be adequate for the site types in the PDA. It is not possible to avoid all cultural sites, only those of very high heritage value as defined by the HRA. The assessment did not identify any sites of very high heritage value within the PDA therefore, standard mitigations, including additional consultation is considered appropriate.	Alberta Transportation provided a written response to ECN's TUS report on August 8, 2019 addressing the concerns and issues raised in the TUS report and met with ECN on September 16, 2019 to discuss the response. ECN indicated they will be providing written comments on Alberta Transportation's response. Alberta Transportation will maintain access to identified current use sites (located outside the designated construction and Project site limits) during construction and operations, and Alberta Transportation is currently working with Indigenous groups on a post-construction principles for future land use. If ACMWS determines that tipi rings or cultural sites are present, standard mitigation will be applied, including photography, mapping, documentation and mitigative excavation, to preserve the knowledge of the site. Depending upon its significance, other mitigation may include additional consultation, Indigenous participation in the assessment and mitigation program and Indigenous monitoring during construction. As required under provincial legislation, should an unexpected find of a significant historical resource occur during construction, ACMWS will be notified and will determine the appropriate mitigation. Should any human remains be found during construction, all construction will immediately cease in the area, the site will be secured and all applicable provincial regulations will be followed. If the remains are determined to be of Aboriginal origin the Provincial Government will engage Indigenous groups according to GoA protocol and guidelines developed in consultation with Indigenous groups.
Risks and impacts to cultural heritage sites is not clear, and mitigation measures do not provide substantive information.	ECN 2018 (CEAR#46) (cited in ECN SR1 SCRT Oct 2016-Sept 2019; Specific Concern #5)	In protecting cultural sites and features, Alberta Transportation is bound by the HRA. The Alberta HRA was designed to ensure protection and avoidance of highly significant archaeological sites, and mitigation of less significant sites that cannot be avoided. No highly significant sites have been identified in the PDA to date, that would mandate avoidance. The sites discovered represent sites where mitigation, through documentation and collection of artifacts, is considered by ACMWS to be an adequate response.	In December 2019, Alberta Transportation provided written responses to the ECN Technical Review dated June 2018, which included these concerns as Question 34. Alberta Transportation will offer to meet with ECN regarding the written responses. Alberta Transportation acknowledges that ECN has concerns about mitigation measures for cultural heritage. However, Alberta Transportation is obliged to follow provincial law and ACMWS directives in identifying and mitigating historical resources under the HRA. Alberta Transportation will maintain access to identified current use sites (located outside the designated construction and Project site limits) during construction and operations, and Alberta Transportation is currently working with Indigenous groups on a post-construction principles for future land use.



Table 10-1 Indigenous Group Views on the Project's Potential Effects on Physical and Cultural Heritage and/or to Sites of Importance, as Considered Under CEAA 2012 and Alberta Transportation's Responses

Views related to Potential Effects on Physical and Cultural Heritage	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
Foothills Ojibway Society (FOS)			
Concern regarding a location near Camp Kiwanis where members of the FOS historically visited to perform sweats and other activities.	Meetings between FOS and Alberta Transportation, (May 7, 2018 and October 28, 2019) (cited in FOS SR1 SCRT Oct 2016-Sept 2019 Specific Concern #1)	If the specific location can be provided and it is inside the PDA, Alberta Transportation will report it to ACMWS as required by provincial legislation. ACMWS will evaluate the reported presence to determine whether a supplemental HRIA or	At the meeting held on May 7, 2018, Alberta Transportation indicated that the area referred to was flooded in 2013. Alberta Transportation also indicated they were open to the FOS doing a site visit, subject to landowner access, if they would like to submit a budget. In an email on September 30, 2019, Alberta Transportation followed up to ask if FOS Society would like to do a site visit or tour of the SR1 Project.
		additional field visits by ACMWS is required.	During a meeting held on October 28, 2019, Alberta Transportation provided FOS with maps so FOS could compare the Project location with their database of sites.
			If ACMWS determines there are features present, standard mitigation will be applied, including photography, mapping, documentation and mitigative excavation, to preserve the knowledge of the site.
			Depending upon its significance, other mitigation may include additional engagement, Indigenous participation in the assessment and mitigation program and Indigenous monitoring during construction.
			Alberta Transportation will maintain access to identified current use sites (located outside the designated construction and Project site limits) during construction and operations, and Alberta Transportation is currently working with Indigenous groups on a post-construction principles for future land use.
			Alberta Transportation has offered to facilitate site visits and a requested ceremony by FOS in the spring of 2020.
Louis Bull Tribe (LBT)	,		
LBT requests an opportunity to conduct a site visit during and post construction to ensure that prescribed mitigation measures are applied, and that no culturally significant sites	 LBT TUS 2018, p. 9 (CEAR#1228) (cited in LBT SR1 SCRT Oct 2016 – Sept 	Alberta Transportation will provide LBT the opportunity for two site visits, one during construction and one post-construction to observe application of	Alberta Transportation provided a written response to LBT's TLU report on August 8, 2019 addressing the concerns and issues raised in the TLU and met with LBT on November 14, 2019 to discuss the response.
are adversely impacted.	2019; Specific Concern #9)	prescribed mitigation measures and provide feedback. Alberta Transportation will comply with all mitigative requirements issued under the HRA.	ACMWS may require Alberta Transportation to relocate significant cultural resources outside of the development footprint, to sponsor specific ceremonies prior to disturbance, to allow for collection of traditional resources, to construct commemorative cairns or interpretive panels, or to have Indigenous participation in any of the mitigative activities.
Montana First Nation (MFN)			
MFN is concerned about permanent loss of historical resources. Alberta Transportation should commit to providing a workshop to interested MFN members on the	MFN 2018 (CEAR#51) (cited in MFN SCRT Oct 2016 – Sept 2019; Specific	No sites of high significance, such as effigies, medicine wheels, burial sites, pottery or tipi rings have been made in the PDA to date.	In December 2019, Alberta Transportation provided written responses to the MFN Technical Review, June 2018, which included this concern as Question 17. Alberta Transportation has offered to meet with MFN regarding the written responses.
sites identified and seek their perspective on site significance, site interpretation, and appropriate mitigation.	Concern #6)	No highly significant sites have been identified in the PDA to date, that would mandate avoidance.	Alberta Transportation commits to holding a workshop with interested MFN members to hear their perspective on site significance, site interpretation, and appropriate
		The sites discovered represent sites where mitigation, through documentation and collection of artifacts, is considered by ACMWS to be an adequate response. It is not possible to avoid all cultural sites, only those of very high heritage value as defined by the HRA.	mitigation. Alberta Transportation will maintain access to identified current use sites (located outside the designated construction and Project site limits) during construction and operations, and Alberta Transportation is currently working with Indigenous groups on a post-construction principles for future land use.



Table 10-1 Indigenous Group Views on the Project's Potential Effects on Physical and Cultural Heritage and/or to Sites of Importance, as Considered Under CEAA 2012 and Alberta Transportation's Responses

Views related to Potential Effects on Physical and Cultural Heritage	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
			Should any human remains be found during construction, all construction will immediately cease in the area, the site will be secured and all applicable provincial regulations will be followed.
		considered appropriate. Current use sites and areas located outside the PDA are not anticipated to be directly affected by the	If the remains are determined to be of Aboriginal origin the Provincial Government will engage Indigenous groups according to GoA protocol and guidelines developed in consultation with Indigenous groups.
		Project. Alberta Transportation will comply with all mitigative requirements issued under the HRA.	ACMWS may require Indigenous monitoring programs or site avoidance through Project redesign. Other mitigations that may be required by ACMWS include additional consultation with Indigenous groups to solicit their opinions on appropriate mitigation. In consultation with Indigenous groups, ACMWS may require Alberta Transportation to relocate significant cultural resources outside of the development footprint, to sponsor specific ceremonies prior to disturbance, to allow for collection of traditional resources, to construct commemorative cairns or interpretive panels, or to have Indigenous participation in any of the mitigative activities.
Métis Nation of Alberta, Region 3 (MNAR3)			
 MNAR3 expressed concerns that the SR1 Project would disrupt potential homesteads, cart trails, historic use areas, and/or buried Métis sites. Concerns about artifacts, cart trails, and other cultural sites being identified and then reburied and not identified as Métis. Métis historical ways of life were diverse, using areas around fur trade forts, permanent settlements in some locations, farms, temporary villages related to buffalo hunting, cart and foot trails, and campsites related to hunting and canoe travel. Areas around waterbodies, including rivers, streams, and lakes, were used in many of the diverse Métis ways of life and should be considered high potential for archaeological material. Additional research must be done to identify areas of high potential for Métis archaeological heritage throughout the SR1 Project area. This should include field research, archival research, in person interviews, and review of previous archaeological reports relating to Métis research in Alberta. There are areas in the Project's proximity that have potential Métis historic resources. These historic resources most likely would relate to camp sites, wintering villages, the Our Lady of Peace Mission site, and trails/ rivers through the region along which Métis would have moved goods and people between the foothills/Rocky Mountain House, Calgary, and 	 Letter from MNAR3 to Alberta Transportation, (August 2017) MNAR3 TLRU Workshop on February 2018 (cited in MNAR3 SR1 SCRT Oct 2016- Sept 2019; Specific Concern #3) MNAR3 TUS 2019; pg. 9,10, 14, 15, 20 	No highly significant sites have been identified in the PDA to date, that would mandate avoidance. The sites discovered represent sites where mitigation, through documentation and collection of artifacts, is considered by ACMWS to be an adequate response. It is not possible to avoid all cultural sites, only those of very high heritage value as defined by the HRA. The assessment did not identify any sites of very high heritage value within the PDA therefore, standard mitigations, including additional consultation is considered appropriate. Although trails were once present in the PDA, the high degree of cultivation makes mapping of these trails very difficult; no intact trails of precontact age have been identified within the PDA to date. Current use sites and areas located outside the PDA are not anticipated to be directly affected by the Project. The HRIA included consideration of historic artifacts and their origin; no specific Métis sites were identified.	Alberta Transportation received the MNAR3 TUS report in August 2019. Alberta Transportation confirmed receipt of this report and indicated a written response will be drafted that will provide mitigation measures and responses to MNAR3's concerns and recommendations. Following completion of the response, Alberta Transportation would like to meet to discuss. Alberta Transportation will maintain access to identified current use sites (located outside the designated construction and Project site limits) during construction and operations, and Alberta Transportation is currently working with Indigenous groups on a post-construction principle for future land use. Should any human remains be found during construction, all construction will immediately cease in the area, the site will be secured and all applicable provincial regulations will be followed. If the remains are determined to be of Aboriginal origin the Provincial Government will engage Indigenous groups according to GoA protocol and guidelines developed in consultation with Indigenous groups.



Table 10-1 Indigenous Group Views on the Project's Potential Effects on Physical and Cultural Heritage and/or to Sites of Importance, as Considered Under CEAA 2012 and Alberta Transportation's Responses

	Views related to Potential Effects on Physical and Cultural Heritage	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
•	Significant deficiencies were uncovered in the HRIA wherein Métis archaeological heritage is not considered at all in the Project area. The singular mention of Métis in the entire 362-page document is limited to a note about Alexis Cardinal accompanying the first Catholic missionaries to the region. Results of the HRIA indicated 11 historic sites located in the PDA. In the discussion of these sites, it is noted that there is "a long history of Euro-Canadian settlement of the Project area". EgPo-71 is noted as a cabin of approximately 6 m x 4 m, containing ceramics, bricks glass, metal, and faunal remains. The authors suggest this could have been a location of the Jumping Pound School or a building related to Patrick Drummond, who began settling there in 1894. Site of EgPo-135 is of even more significant concern, since it was located along a seasonally wet floodplain. Based on this preliminary work, the site also strongly suggests a Métis presence, as the types of ceramics and nails are congruent with other Métis wintering sites; however, no consideration is given to this possibility in the report. Other sites of interest for further review as relating to Métis connections include the historic site of EgPo-144, since materials from the late 1800s, such as sheet cut nails and possible Bison bone, were observed.	• MNAR3 TUS 2019 p.14 &15	The HRIA included consideration of historic artifacts and their origin; no specific Métis sites were identified. Standard mitigation at the historic sites of concern in the Project area will include additional archival research to determine the cultural affiliation of the site occupants and site photography, mapping, documentation and archaeological excavation, as required by ACMWS. Mitigation is required at both EgPo-71 and EgPo-135, the additional archival research and mitigative excavation will provide more information on the history of the sites and their occupants. No further work will be required at EgPo-144 since this site will now be avoided due to adjustment of the PDA footprint.	Alberta Transportation received the MNAR3 TUS report in August 2019. Alberta Transportation confirmed receipt of this report and indicated a written response will be drafted that will provide mitigation measures and responses to MNAR3's concerns and recommendations. Following completion of the response, Alberta Transportation would like to meet to discuss. Alberta Transportation acknowledges that MNAR3 is concerned about the treatment of historical resources within the Project area. However, Alberta Transportation is obliged to follow provincial law and ACMWS directives in identifying and mitigating historical resources under the HRA.
•	The Our Lady of Peace Mission is a location of high significance to the Métis, as they were among the first Catholics in the region, and the main body of parishioners when the mission was founded. The original building was built by Alexis Cardinal, Métis, at this site in 1873.	• MNAR3 TUS 2019 pg. 15 &19	The Our Lady of Peace Mission Site is outside the PDA and will not be affected by the Project.	Alberta Transportation received the MNAR3 TUS report in August 2019. Alberta Transportation confirmed receipt of this report and indicated a written response will be drafted that will provide mitigation measures and responses to MNAR3's concerns and recommendations. Following completion of the response, Alberta Transportation would like to meet to discuss. Given that the areas mentioned are not anticipated to be affected by the Project, Alberta Transportation is of the opinion that no disparity in views remain to be reconciled.



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REFERENCES

Foothills Historical Society 1976. Chaps and Chinooks: A History of West Calgary, Vol. 1. Evelyn Buckley ed. Calgary.

Churchill, Elizabeth 2000. Tsuu T'ina: A History of a First Nations Community, 1890-1940. Submitted to the Faculty of Graduate Studies in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy. University of Calgary.

Conformity IR2-11

<u>Topic:</u> Wildlife – Culturally Important Species

Sources:

EIS Guidelines Part 2, Section 5; 6.1.8, 6.1.9; 6.2.3; 6.3.4

EIS Volume 3A, Section 11.5

EIS Volume 3B, Section 11.4

Tsuut'ina First Nation, Ermineskin Cree Nation, and Kainai First Nation – Technical Review of the EIS - Annexes – Combined (CEAR # 46, 47, 50)

Samson Cree Nation – Springbank Off-Stream Reservoir Project Written Submission – June 25, 2018 (CEAR # 52)

CEAA Information Requests Related to the Environmental Impact Statement Round 1 Part 2, IR2-11

Alberta Transportation Responses to IR Round 1, SR1 CEAA IR Package 2, June 14, 2019

Context and Rationale

In CEAA Information Requests Related to the Environmental Impact Statement Round 1 Part 2, IR2-11, the Agency required the proponent to list the species identified by Indigenous groups as species of importance and subsequently provide an updated effects assessment and significance determination for each of these species. Additionally, the Agency required Alberta Transportation to update the effects assessment and significance determination for the wildlife and biodiversity VC as necessary. As noted in the information request, the EIS Guidelines require the proponent to identify changes to key habitat for culturally important species and assess the effects of changes to the environment on Indigenous peoples. The cover letter to the information requests and the EIS Guidelines further direct the proponent to present points of disagreement



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between the views of Alberta Transportation and Indigenous groups, along with a description of efforts undertaken to reconcile these differences and a rationale for conclusions.

In Alberta Transportation's response to IR2-11, Alberta Transportation indicates that the assessment of individual wildlife species of cultural importance does not change the determination of significance or conclusions discussed in the wildlife and biodiversity section of the EIS. However, there is no rationale provided as to how this is the case.

It is necessary to understand how the updated effects assessments for each species of cultural importance was incorporated in the assessment of overall potential effects to the wildlife and biodiversity VC. As noted in the information request, in assessing the broad effects of the Project on wildlife and biodiversity, the EIS does not allow for a meaningful understanding of potential effects to individual species of importance to Indigenous peoples, and related effects of changes to the species on Indigenous peoples.

Additional detail is required to understand and support the assessment of effects to Indigenous peoples.

Information Requests:

- a) Provide a significance determination for each species of cultural importance.
- b) Explain how the effects assessment for each species of cultural importance was incorporated into the effects assessment and significance determination for the wildlife and biodiversity VC. Should significance determination to the broader wildlife and biodiversity VC not change, provide a robust rationale for why.
- c) Identify and discuss areas of disparity between the views of Indigenous groups and Alberta Transportation on potential effects to species of cultural importance, efforts made to reconcile the disparities, and rationale for conclusions on matters for which disparity in views remains.

Response

a) A significance determination for each wildlife species of cultural importance is provided in Table 11-1. The significance determination is based on the characterization of Project residual effects, which were provided in response to the Alberta Transportation's response to Round 1 CEAA Package 2, IR2-11, Table 11-1 for construction and dry operations and Table 11-2 for flood and post flood. How the effects assessment was incorporated into the assessment for species of cultural importance is provided in the response to part b).b



Table 11-1 Summary of Significance Determinations for Species of Cultural Importance to Indigenous Groups during Construction, Dry Operations, Flood and Post-Flood

	Project Phase					
Wildlife Species	Construction	Dry Operations	Flood	Post-Flood		
Harlequin duck	NS	NS	NS	NS		
Canada goose	NS	NS	NS	NS		
Trumpeter swan	NS	NS	NS	NS		
American coot	NS	NS	NS	NS		
Gray partridge	NS	NS	NS	NS		
Ring-necked pheasant	NS	NS	NS	NS		
Ruffed grouse	NS	NS	NS	NS		
Spruce grouse	NS	NS	NS	NS		
Sharp-tailed grouse	NS	NS	NS	NS		
Osprey	NS	NS	NS	NS		
Bald eagle	NS	NS	NS	NS		
Barred owl	NS	NS	NS	NS		
Northern pygmy owl	NS	NS	NS	NS		
Great grey owl	NS	NS	NS	NS		
Sprague's pipit	NS	NS	NS	NS		
Snowshoe hare	NS	NS	NS	NS		
White-tailed jackrabbit	NS	NS	NS	NS		
Coyote	NS	NS	NS	NS		
Grey wolf	NS	NS	NS	NS		
Red fox	NS	NS	NS	NS		
Canada lynx	NS	NS	NS	NS		
Bobcat	NS	NS	NS	NS		
Cougar	NS	NS	NS	NS		
Grizzly bear	NS	NS	NS	NS		
Black bear	NS	NS	NS	NS		
American badger	NS	NS	NS	NS		
Striped skunk	NS	NS	NS	NS		
Marten	NS	NS	NS	NS		
Short-tailed weasel	NS	NS	NS	NS		
Long-tailed weasel	NS	NS	NS	NS		
American mink	NS	NS	NS	NS		



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Table 11-1 Summary of Significance Determinations for Species of Cultural Importance to Indigenous Groups during Construction, Dry Operations, Flood and Post-Flood

		Project Phase					
Wildlife Species	Construction	Dry Operations	Flood	Post-Flood			
Moose	NS	NS	NS	NS			
Elk	NS	NS	NS	NS			
Mule deer	NS	NS	NS	NS			
White-tailed deer	NS	NS	NS	NS			
Beaver	NS	NS	NS	NS			
Muskrat	NS	NS	NS	NS			
Porcupine	NS	NS	NS	NS			
Red squirrel	NS	NS	NS	NS			
Richardson's ground squirrel	NS	NS	NS	NS			
NOTE:				•			
NS = Not significant							

b) The effects assessment for each species of cultural importance considers the same potential Project effects, effects pathways and measurable parameters as the broader wildlife and biodiversity VC (see the EIA, Volume 3A, Table 11-3 and Volume 3B, Table 11-2). Specifically, the potential Project effects on change in habitat, movement and mortality risk for species of cultural importance are assessed using a habitat-based approach, which focused on the amount of habitat (ha) directly affected as per other wildlife species including species at risk (see response to the Alberta Transportation's response to Round 1 CEAA Package 2, IR2-11, Table IR11-1). In addition, the potential effects of the Project on wildlife health for species of cultural importance during flood and post-flood operations are assessed qualitatively as they are for the broader wildlife VC (see Alberta Transportation's response to Round 1 CEAA Package 2, IR2-11, Table IR11-2).

The significance determination for each species of cultural importance is predicted using the same definition of significance as the broader wildlife VC, which defines a significant adverse residual environmental effect as one that, following the application of avoidance and mitigation measures, threatens the long-term persistence of a wildlife species in the wildlife RAA or is contrary to or inconsistent with the goals, objectives or activities of recovery strategies, action plans and management plans (see the EIA, Volume 3A, Section 11.1.7).

The significance determination and conclusions related to Project residual effects on species of cultural importance are the same as the broader wildlife VC (i.e., the Project will not threaten the long-term persistence or viability of wildlife species of cultural importance in the RAA). This is largely due to many species of cultural importance being relatively abundant in



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the RAA and are known to thrive or tolerate a variety of habitat conditions including altered landscapes (i.e., generalist species) such as coyote (Gehrt et al. 2009) and Canada goose (Smith et al. 1999; Environment Canada 2010). Although some wildlife species of cultural importance are relatively more sensitive to human disturbance, such as grizzly bear (Nielsen et al. 2006), the Project is not predicted to have a significant residual adverse effect on grizzly bear based on the changes in habitat, movement and mortality risk (i.e., with the application of mitigation, the Project is not predicted to threaten the long-term persistence or viability of grizzly bear or other species of cultural importance that might be relatively more sensitive to human disturbance because of its range and presence in the LAA [see Volume 3A, Section 11.7 and Volume 3B, Section 11.6]).

c) With respect to areas of disparity, Alberta Transportation agrees with the concerns raised by Indigenous groups that the Project has the potential to affect wildlife species of cultural importance. As stated above, with the application of mitigation, the Project will not threaten the long-term persistence or viability of wildlife species of cultural importance. While Alberta Transportation considers this a reasonable and meaningful response to the concerns of Indigenous groups regarding potential effects on wildlife species of cultural importance, Alberta Transportation acknowledges areas of disparity may remain. Efforts to reconcile such disparities have been made through ongoing consultation and engagement initiatives, including through the provision of Project information, the incorporation of feedback that results in changes to Project planning or through commitment to further exploring an issue, concern or recommendation. For example, Alberta Transportation has been meeting with the Indigenous groups throughout the regulatory process to discuss wildlife concerns. Table 11-2 describes Alberta Transportation's efforts to date and planned commitments to reconcile areas of disparity between the views and conclusions of Indigenous groups and Alberta Transportation regarding the potential effects of the Project on wildlife.

Alberta Transportation is committed to working with Indigenous groups to try to seek mutually acceptable solutions to the issues, concerns or recommendations identified by Indigenous groups and those that remain unresolved will be determined and tracked through Alberta Transportation's ongoing Indigenous Engagement Program for the Project.





Table 11-2 Indigenous Group Views Related to Potential Project Effects on Wildlife of Cultural Importance and Alberta Transportation's Responses

Views related to Potential Effects on Wildlife and Biodiversity	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
Kainai First Nation/Blood Tribe (KFN)	300100	Albeita Italispolialion's response	Elions to Consult/Eligage/Reconcile and Next Steps
 Potential for Project to influence elk movement patterns. Justify the 250 metre and 500 metre road buffers for elk. Justify why a 15 kilometre buffer of the Project area was chosen for the RAA for wildlife. 	KFN 2018 (CEAR#47) (cited in KFN SR1 SCRT Aug 2014-Aug 2019; Specific Concern#20)	The potential effects of the Project on elk movement, and a rationale for the 15 km RAA boundary are discussed in the ElA (see Volume 3A, Section 11.4.3.3 and Section 11.1 respectively). Habitat suitability model assumptions related to road buffers for elk are discussed in Volume 4, Appendix H). Alberta Transportation provided a detailed rationale and further clarification related to the RAA boundary in response to Round 1 CEAA Package 2, IR2-12. Alberta Transportation also provided a detailed rationale and clarification related to the habitat suitability model assumptions for elk (i.e., 250 m and 500 m road buffers) in response to Round 1 CEAA Package 2, IR2-13 as well as response to CEAA Conformity Package 2, IR2-13.	In December 2019, Alberta Transportation provided written responses to the KFN Technical Review dated June 2018, which included these concerns as Wildlife Questions, 3, 4 and 6. Alberta Transportation will offer to meet with KFN regarding the written responses. Alberta Transportation will be monitoring wildlife habitat use and movement within the LAA as part of the WMM) to address the concerned raised, which will help verify predictions of potential Project effects on wildlife movement and assess effectiveness of mitigation measures. In addition, Alberta Transportation will develop the WMMP with input from Indigenous groups. Alberta Transportation has proposed mitigation to facilitate wildlife movement in the LAA, including Project design considerations of the Highway 22 bridge over the diversion channel (underpass) as well as removal of barb-wire fencing, which will be replaced by wildlife-friendly fencing. As part of the IPP, Alberta Transportation is committed to KFN participation in the Project including training, employment, monitoring (e.g., wildlife), and contracting opportunities.
 Explain why elevation and aspect was not included in the grizzly bear habitat suitability model. Explain why a 500 metre buffer of industrial developments was used in the grizzly bear habitat suitability model. 	KFN 2018 (CEAR#47) (cited in KFN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #22)	Alberta Transportation provided a detailed rationale and clarification related to habitat suitability model assumptions (e.g., elevation, aspect) for grizzly bear in response to Round 1 CEAA Package 2, IR2-18, as well as CEAA Conformity IR2-13 (500 m buffer and industrial development).	In December 2019, Alberta Transportation provided written responses to the KFN Technical Review dated June 2018, which included these concerns as Wildlife Questions 4 and 8. Alberta Transportation will offer to meet with KFN regarding the written responses.
 Concerned that the conclusion of significance is discussed at a high level for wildlife and is not done for each species. Definition of significance should include wildlife habitat and biodiversity. 	KFN 2018 (CEAR#47) (cited in KFN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #25)	Alberta Transportation provided an updated assessment for each species of cultural importance in part a) and b), this response. The significance definition defined in Volume 3A, Section 11.1.7 applies to the wildlife and biodiversity VC (i.e., a significant effect would include a change in wildlife habitat if that predicted change was considered to threaten the long-term persistence or viability of a wildlife species in the RAA).	In December 2019, Alberta Transportation provided written responses to the KFN Technical Review dated June 2018, which included these concerns as Wildlife Questions 11 and 17. Alberta Transportation will offer to meet with KFN regarding the written responses.
Ermineskin Cree Nation (ECN)			
 Concerns expressed for eagle nesting in the area, other wildlife such as elk, moose, deer and bears. Potential impacts of the Project on sensitive species of cultural importance, such as bald eagles. 	 Meeting between ECN and Alberta Transportation (June 27, 2017) ECNTUS 2018 (CEAR#46) (cited in ECN SR1 SCRT Oct 2016- Sept 2019; Specific Concern #6) 	As discussed in the EIA, several raptor stick and platform nests were observed in the LAA, including an active bald eagle stick nest along the Elbow River. This nest occurs in the construction area near the off-stream dam and unnamed stream. If an active nest or den is found during construction, it will be subject to a provincial or federal disturbance setback buffer and site-specific mitigation. Details of setback distances for species of management concern with potential to occur in the PDA are provided in the EIA Volume 3A, Section 11. The potential effects of the Project on species of cultural importance are discussed in the EIA. In addition, Alberta Transportation provided an updated assessment for each species of cultural importance in part a) and part b), this response.	On March 23, 2018, Alberta Transportation sent detailed responses to Specific Concerns raised to date by providing a copy of Table 7-8 from the March 2018 EIA. On June 26, 2018 Alberta Transportation met with ECN to review their Specific Concerns and the responses and proposed mitigation measures presented in the EIA. As discussed in the EIA (see Volume 3A, Section 11.4.2.2), Alberta Transportation has committed to pre-construction nest surveys to reduce potential Project effects on birds including bald eagles. The ECN TUS study was submitted to Alberta Transportation on June 25, 2018. Alberta Transportation provided a written response to ECN addressing the concerns and issues raised in the TUS on August 8, 2019. Alberta Transportation met with ECN on September 16, 2019 to discuss the information in the written response (see CEAA Conformity IR2-01, Appendix 1-1).



Table 11-2 Indigenous Group Views Related to Potential Project Effects on Wildlife of Cultural Importance and Alberta Transportation's Responses

Views related to Potential Effects on Wildlife and Biodiversity		Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
Concerns expressed to maintain the migratory patterns and	•	Meeting between ECN and Alberta	The potential effects of the Project on wildlife movement were assessed in the EIA (see Volume 3A Section 11 and Volume 3B, Section 11). Proposed mitigation to	On March 23, 2018, Alberta Transportation sent detailed responses to Specific Concerns raised to date by providing a copy of Table 7-8 from the March 2018 EIA.
game trails for wildlife. • Potential impacts of the Project		Transportation (June 27, 2017)	diversion channel with gentle side slopes (3H:1V), revegetation of the floodplain berm, installation of wildlife friendly fencing and design modifications to the Highway 22 bridge over the diversion channel to facilitate wildlife movement (i.e., underpass). In addition, Alberta Transportation has clarified proposed mitigation to facilitate wildlife movement in response to Round 1 CEAA Package 2, IR2-15 and CEAA Conformity Package 2, IR2-15.	On June 26, 2018 Alberta Transportation met with ECN to review their Specific Concerns and the responses and proposed mitigation measures in Table 7-8.
on wildlife migration routes and wildlife abundance and availability in the area.	•	ECN TUS (CEAR#46) 2018 (cited in ECN SR1 SCRT Oct 2016- Sept 2019; Specific Concern #7)		The ECN TUS study was submitted to Alberta Transportation on June 25, 2018. Alberta Transportation provided a written response to ECN addressing the concerns and issues raised in the TUS on August 8, 2019. Alberta Transportation met with ECN on September 16, 2019 to discuss the information in the written response (see CEAA Conformity IR2-01, Appendix 1-1).
		Wildlife habitat use, and movement will be monitored at select locations as part of the WMMP, which will help verify predictions of potential Project effects and assess effectiveness of mitigation measures.		
			As part of the IPP, Alberta Transportation is committed to ECN participation in the Project including training, employment, monitoring (e.g., wildlife), and contracting opportunities.	
Concerns regarding assessment of wildlife, especially elk, upon which the ECN depend on for hunting.	(CEAR #46, 47) in ECN SR1 SCR	ECN and KFN 2018 (CEAR #46, 47) (cited in ECN SR1 SCRT Oct 2016- Sept 2019;	The potential effects of the Project on wildlife movement including elk were assessed in the EIA (see Volume 3A, Section 11.4.3 and Volume 3B, Section 11.3.3). In addition, Alberta Transportation has clarified proposed mitigation to facilitate wildlife movement in response to Round 1 CEAA Package 2, IR2-15 and CEAA	In December 2019, Alberta Transportation provided written responses to the ECN and KFN Technical Comments dated June 2018, which included this concern as Current use of lands - construction and dry operations number 9. Alberta Transportation will offer to meet with ECN regarding the written responses.
		Specific Concern #8)	Conformity Package 2, IR2-15.	Wildlife habitat use and movement will be monitored at select locations as part of the WMMP, which will help verify predictions of potential Project effects and assess effectiveness of mitigation measures.
				As part of the IPP, Alberta Transportation is committed to ECN participation in the Project including training, employment, monitoring (e.g., wildlife), and contracting opportunities.
Louis Bull Tribe (LBT)				
LBT noted concerns regarding local wildlife populations	•	LBT TUS 2018 (CEAR #1228) (cited in LBT	The potential effects of the Project on species of cultural importance were discussed in the EIA including proposed mitigation to reduce habitat loss. In	Alberta Transportation met with LBT on November 6, 2018 and noted that they would follow RAPs during construction.
cougars, coyotes, wolves, beaver, and muskrat) and habitat loss, and suggested	cougars, coyotes, wolves, beaver, and muskrat) and habitat loss, and suggested mitigation measures including adhering to the RAP, reduction of the Project footprint, and	SR1 SCRT Oct 2016- Sept 2019; Specific Concern #3)	of cultural importance in part a) and part b), this response. Un addition, Alberta Transportation has summarized proposed mitigation for RAPs for wildlife species at risk that overlap the construction phase in response to CEAA Conformity Package 2, IR 2-16.	LBT TUS study was submitted to Alberta Transportation on November 22, 2018. Alberta Transportation provided a written response to LBT on August 8, 2019 addressing the concerns and issues raised in the TUS. Alberta Transportation met with LBT on November 14, 2019 to discuss Alberta Transportation'' response document.
adhering to the RAP, reduction				Wildlife habitat use, and movement will be monitored at select locations as part of the WMMP, which will help verify predictions of potential Project effects and assess effectiveness of mitigation measures.
chemicals.				As part of the IPP, Alberta Transportation is committed to LBT participation in the Project including training, employment, monitoring (e.g., wildlife), and contracting opportunities.



Table 11-2 Indigenous Group Views Related to Potential Project Effects on Wildlife of Cultural Importance and Alberta Transportation's Responses

Views related to Potential Effects on Wildlife and Biodiversity	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
Montana First Nation (MFN)			
Please provide details on the sources of Project-specific information on species of traditional importance to the	MFN Technical Review, June 2018 (cited in MFN SR1 SCRT Oct 2016 - Sept	Alberta Transportation considered information obtained through the Indigenous Engagement Program for the Project, including TUS, and information gathered through a review of publicly available literature containing TLRU information for Indigenous groups engaged on the Project.	In December 2019, Alberta Transportation provided written responses to the MFN Technical Review dated June 2018, which included these concerns as Question 7. Alberta Transportation will offer to meet with MFN regarding the written responses.
MFN and how this information was considered in the selection of wildlife Key Indicators.	2019; Specific Concern #8)	Alberta Transportation has provided funding to MFN to complete a TUS; Alberta Transportation understands this TUS remains in progress.	
of whalle key malearors.		The potential effects of the Project on species of cultural importance and rationale used to select wildlife key indicators were discussed in the EIA. In addition, Alberta Transportation provided clarification regarding the rationale for the selection of wildlife key indicators in part b), this response.	
Was any Indigenous Knowledge used in the site selection and study design for the remote camera program? If so, please describe. If not, will Alberta Transportation commit to including Indigenous Knowledge in future study designs? Please describe how that input will be incorporated and implemented. Does remote camera data provide quantitative information on wildlife movement that could be used to support impact predictions? If so, please describe.	MFN 2018 (CEAR #51) (cited in MFN SR1 SCRT Oct 2016 - Sept 2019; Specific Concern #13)	Indigenous knowledge was not used in the site selection and study design for the baseline remote camera program, which were completed in 2016. MFN has received funding from Alberta Transportation for the completion of their TUS. As of October 2019, Alberta Transportation has not received the TUS and last inquired about the status of the TUS in a letter on October 21, 2019. Alberta Transportation clarified whether remote camera data can provide quantitative information on wildlife movement that could support impact predictions in response to MFN SoC 12 (MFN Technical Review, 2018). Specifically, the remote camera data will be used to verify impact predictions and determine effectiveness of mitigation focusing on wildlife habitat use, movement, and crossing success. Relative abundance (e.g., photographic rate) or occupancy will be used to compare baseline data with remote camera data collected during construction and post-construction phases. The program will determine whether large mammals use and cross permanent Project components, as well as use the diversion channel to travel under the Highway 22 bridge. Crossing success rates will be calculated, for each component, as the total number of occasions an individual animal (or group) walks over or through a component, divided by the total number of individuals that enter the	In December 2019, Alberta Transportation provided written responses to the MFN Technical Review dated June 2018, which included these concerns as Question 12. Alberta Transportation will offer to meet with MFN regarding the written responses. As stated in the draft WMMP, Alberta Transportation will provide opportunities for Indigenous participation related to the remote camera monitoring program. As part of the IPP, Alberta Transportation is committed to MFN participation in the Project including training, employment, monitoring (e.g., wildlife), and contracting opportunities.



Table 11-2 Indigenous Group Views Related to Potential Project Effects on Wildlife of Cultural Importance and Alberta Transportation's Responses

Views related to Potential Effects on Wildlife and Biodiversity	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
Métis Nation of Alberta, Region 3 (MNA	AR3)		
 Concerned about wildlife in the Project area. Expressed concern over the potential impacts to wildlife caused by the diversion of water from Elbow River and the construction of SR1. 	Meeting between MNAR 3 and Alberta Transportation May 8, 2017; Meeting with Métis Nation of Alberta, Region 3, Alberta Transportation and DEMA, June 28, 2017 (cited in MNAR3 SR1 SCRT Oct 2016- Sept 2019; Specific Concern #6)	Alberta Transportation at previous meetings indicated that potential effects on wildlife as a result of the Project, are described in the EIA and include a loss/change of habitat, disruption to movement, mortality risk and changes in biodiversity (see the EIA, Volume 3A, Section11 and Volume 3B, Section11). The EIA conclusions were as follows: With the application of mitigation and environmental protection measures, residual environmental effects on wildlife, including migratory birds, species at risk, biodiversity, and provisions to maintain ungulate movement which was recommended by Indigenous groups are predicted to be not significant.	On May 23, 2018, Alberta Transportation met with Métis Nation of Alberta Region 3 to review their Specific Concerns and the responses and proposed mitigation measures discussed in the EIA. At the meeting held on May 23, 2018, Alberta Transportation explained that areas where wildlife is vulnerable to predation, or "pinch points," are not anticipated through the infrastructure design. Wildlife habitat use, and movement will be monitored at select locations as part of the WMMP, which will help verify predictions of potential Project effects and assess effectiveness of mitigation measures. As part of the IPP, Alberta Transportation is committed to Métis participation in the Project including training, employment, monitoring (e.g., wildlife), and contracting opportunities. Alberta Transportation is committed to ongoing engagement with the Métis to try to resolve any disparity in views that may remain with respect to the issues raised here.
Piikani Nation (PN)			
Alberta Transportation should provide supporting information to demonstrate that successful ungulate crossings can be achieved with the proposed cover materials for rip-rap and revise the significance rating to reflect the predicted measurable change in the abundance and distribution of ungulates in the LAA. Requests information to demonstrate that ungulate crossing can be achieved with the proposed cover and rip-rap. Revise significance rating to reflect predicted change in abundance of ungulates in LAA.	PN 2018 (CEAR #48) (cited in PN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #16)	Alberta Transportation provided a discussion of ungulate crossing and riprap in the response to Round 1 CEAA Package 2, IR2-15. In addition, Alberta Transportation provided clarification of this concern including the request for a revision to the significance rating in response to PN Question 40. The response to PN Question 40 copied below for convenience: "The initial design for riprap in the diversion channel under the bridges of Range Road 242 and Highway 22 did not include additional fill material. However, through public engagement, stakeholders and Indigenous groups have shown concern for potential Project effects on wildlife movement; therefore, to help facilitate the movement of wildlife through the diversion channel under the bridges, the riprap in the diversion channel beneath the bridges will be filled with finer material on the bottom to create a more conducive substrate for wildlife to walk on (Clevenger 2011). Most crossable sections of the diversion channel will be soil that is vegetated with grasses. An updated effects assessment is not required because the assessment conclusion for effects on wildlife movement would not change based on the information available. However, there is some uncertainty related to wildlife movement and how various species might respond to the filled riprap. A monitoring program using remote cameras will be designed to identify whether permanent features of the Project, such as the diversion channel, act as a barrier to wildlife movement, especially for ungulates (see the EIA, Volume 3C, Section 2.10). A draft WMMP is provided in Alberta Transportation's response to Round 1 CEAA Package 1, IR1-09, Appendix IR9-1."	At the meetings held on September 18-19, 2018, Alberta Transportation described the mitigation for wildlife that is present in the EIA. This includes wildlife friendly fencing; vegetated and gentle slopes; observing RAPs and setbacks during construction; and camera monitoring programs. In December 2019, Alberta Transportation provided written responses to the PN Statement of Concern dated June 2018, which included this concern as Wildlife concern 5. Alberta Transportation will offer to meet with PN regarding the written responses. Wildlife habitat use, and movement will be monitored at select locations as part of the WMMP, which will help verify predictions of potential Project effects and assess effectiveness of mitigation measures. As part of the IPP, Alberta Transportation is committed to PN participation in the Project including training, employment, monitoring (e.g., wildlife), and contracting opportunities. Alberta Transportation is committed to ongoing consultation with the PN to try to resolve any disparity in views that may remain with respect to the issues raised here.
Alberta Transportation should provide a more detailed description of its wildlife monitoring program and provide capability for the PN to	PN 2018 (CEAR#48) 2018 (cited in PN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #60)	A draft WMMP is provided in response to Round 1 CEAA Package 1, IR1-09, Appendix IR9-1.	In December 2019, Alberta Transportation provided written responses to the PN Statement of Concern dated June 2018, which included this concern as Wildlife concern 6. Alberta Transportation will offer to meet with PN regarding the written responses. As discussed in the WMMP, Alberta Transportation will provide opportunities for Indigenous participation related to the remote camera monitoring program.



Table 11-2 Indigenous Group Views Related to Potential Project Effects on Wildlife of Cultural Importance and Alberta Transportation's Responses

Views related to Potential Effects on Wildlife and Biodiversity	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
participate in the monitoring program.			As part of the IPP, Alberta Transportation is committed to PN participation in the Project including training, employment, monitoring (e.g., wildlife), and contracting opportunities.
Tsuut'ina Nation (TN)			
 Explain why elevation and aspect was not included in the grizzly bear habitat suitability model. Explain why a 500 metre buffer of industrial developments was used in the grizzly bear habitat suitability model. 	TN 2018 CEAR#50) (cited in TN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #30)	Alberta Transportation provided a detailed rationale and clarification related to habitat suitability model assumptions for grizzly bear in response to Round 1 CEAA Package 2, IR2-18 (e.g., elevation, aspect), as well as CEAA Conformity, IR2-13 (500 m buffer and industrial development).	In December 2019, Alberta Transportation provided written responses to the TN Technical Review dated June 2018, which included these concerns as Questions 7 and 8. Alberta Transportation will offer to meet with TN regarding the written responses.
 Definition of significance should include wildlife habitat and biodiversity. Concern that the conclusion of significance is discussed at a high level for wildlife and is not done for each species. 	TN 2018 (CEAR#50) (cited in TN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #32)	The significance definition defined in Volume 3A, Section 11.1.7 applies to the wildlife and biodiversity VC (i.e., a significant effect would include a change in wildlife habitat if that predicted change was considered to threaten the long-term persistence or viability of a wildlife species in the RAA). Alberta Transportation provided an updated assessment for each species of cultural importance in response to Round 1 CEAA Package 2, IR2-11 and a significance determination for each species of cultural importance in part a) and part b), this response.	In December 2019, Alberta Transportation provided written responses to the TN Technical Review dated June 2018, which included these concerns as Questions 11 and 17. Alberta Transportation will offer to meet with TN regarding the written responses.
Summary of the wildlife and biodiversity cumulative effects needed.	TN 2018 (CEAR#50) (cited in TN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #33)	The cumulative effect on wildlife and biodiversity is assessed and discussed in the EIA, Volume 3C, Section 1 (see Section 1.27 and 1.38).	In December 2019, Alberta Transportation provided written responses to the TN Technical Review dated June 2018, which included these concerns as Question 18. Alberta Transportation will offer to meet with TN regarding the written responses.
Siksika Nation (SN)			
SN requested information on Species at Risk (Wildlife and Plants) gathered during the SR1 investigations.	Meeting with SN, KFN PN and Alberta Transportation, (September 15, 2016) (cited in SN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #9)	The potential effects of the Project on wildlife species at risk were discussed in the EIA, Volume 3A, and Volume 3B, Attachment A, Table A-1).	On March 23, 2018, Alberta Transportation sent detailed responses to Specific Concerns raised to date by providing a copy of Table 7-5 SR1 Project Specific Concerns and Responses - Siksika Nation from the March 2018 EIA.
			Alberta Transportation met with SN on April 26, 2018 to review their concerns and the responses. During the meeting, SN raised concerns regarding wildlife and vegetation.
			Alberta Transportation described some of the wildlife mitigation measures to SN at a meeting held on December 10, 2018
			In an October 22, 2019 letter to SN, Alberta Transportation inquired about SN's Traditional Use Study which would be one way for SN to provide additional information on these wildlife and vegetation concerns.



Table 11-2 Indigenous Group Views Related to Potential Project Effects on Wildlife of Cultural Importance and Alberta Transportation's Responses

Views related to Potential Effects on Wildlife and Biodiversity	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
Samson Cree Nation (SCN)			
SCN is concerned about potential Project effects on beavers, bald eagles, moose and deer and requests further assessment of these indicator species.	SCN 2018 (CEAR#52) (cited in SCN SR1 SCRT Oct 2016-Sept 2019; Specific Concern #5)	The potential effects of the Project on species of cultural importance and rationale used to select wildlife key indicators were discussed in the EIA. In addition, Alberta Transportation provided clarification regarding the rationale for the selection of wildlife key indicators in response to Round 1 CEAA Package 2, IR2-11. Alberta Transportation also provided an updated assessment for each species of cultural importance in response to Round 1 CEAA Package 2, IR2-11 and a significance determination for each species of cultural importance in part a) and part b), this response.	In November 2019, Alberta Transportation provided written responses to the SCN Technical Review dated June 2018, which included these concerns as Question 5. Alberta Transportation will offer to meet with SCN regarding the written responses.
 The methods used to complete the amphibian and yellow rail surveys for the Project do not follow the timing guidelines provided in the Sensitive Species Inventory Guidelines (SSIG; ESRD 2013) which could impact detection rates. In order to develop appropriate mitigation measures for species that may be impacted by the Project, SCN requests that the Agency direct Alberta to conduct additional surveys in the year of construction, and in accordance with SSIG. 	SCN 2018 (#52) (cited in SCN SR1 SCRT Oct 2016-Sept 2019; Specific Concern #7)	survey timing for amphibian and yellow rail surveys in response to Round 1 CEAA Package 2, IR2-14 and CEAA Conformity, IR2-14.	In November 2019, Alberta Transportation provided written responses to the SCN Technical Review dated June 2018, which included these concerns as Questions 7 and 8. Alberta Transportation will offer to meet with SCN regarding the written responses. As discussed in the EIA (Volume 3A, Section 11.4.2.2), Alberta Transportation has committed to pre-construction wildlife surveys to identify wildlife features (e.g., bird nests) that might require mitigation. Opportunities to participate in pre-construction surveys as well as monitoring (e.g., remote camera) will be discussed in further detail in the WMPP as it develops through consultation with regulators and Indigenous groups. As part of the IPP, Alberta Transportation is committed to SCN participation in the Project including training, employment, monitoring (e.g., wildlife), and contracting opportunities.
 SCN requests Alberta Transportation demonstrate how it plans on engaging with SCN so that community members can support or participate in pre-construction wildlife surveys. SCN requests that Alberta commit to implementing appropriate mitigation measures based on the results of pre-construction surveys. 			



Table 11-2 Indigenous Group Views Related to Potential Project Effects on Wildlife of Cultural Importance and Alberta Transportation's Responses

Views related to Potential Effects on Wildlife and Biodiversity	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
Stoney Nakoka Nations (SNN)			
SNN asked if the SR1 Project would include any wildlife crossings, and also inquired about fencing. Emphasized the importance of wildlife crossings and was concerned that if not properly managed could be a problem for the SR1 Project.	Meeting with SNN and Alberta Transportation on May 4, 2016; Meeting between SNN, Alberta Transportation and Stantec, February 22, 2019 (cited in SNN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #8)	Alberta Transportation responded to this concern by highlighting that the diversion channel and the earthen dam would be designed to allow the passage of wildlife along the Elbow River. Alberta Transportation responded that there will likely be some fencing on the Project. Alberta Transportation clarified on March 23, 2018 with the following response: Although the Project would result in additional anthropogenic features on the landscape that might hinder wildlife movement in the local assessment area, Alberta Transportation has made adjustments to accommodate wildlife movement such as revegetating the floodplain berm with materials conducive for ungulate movement. The Project residual effects on wildlife movement are unlikely to pose a long-term threat to the persistence or viability of a wildlife species, including species at risk (EIA, Volume 3A and 3B Section 11). Potential effects on wildlife movement were addressed in the EIA (see Volume 3A, Section 11.4.3 and Volume 3B, Section 11.3.3) as well as in response to Round 1 CEAA Package 2, IR2-15 and CEAA Conformity IR2-15.	 Alberta Transportation acknowledges the disparity between the SNN position and Alberta Transportation regarding the need for a wildlife overpass over Highway 22. Alberta Transportation has made efforts to reconcile this disparity through meetings to clarify potential effects of the Project on wildlife movement and to discuss mitigation measures, which are summarized below: At the meeting held on June 4, 2018, Stantec brought their wildlife biologist to answer questions. The wildlife biologist explained that they were revegetating the structure to make it easier for animals to walk across. Alberta Transportation also explained that the fencing would have smooth top and bottom wires to allow for wildlife going under and over the fence. At the meeting held on September 13, 2018, Alberta Transportation described that the underpasses that will be created by the diversion channel crossings of Highway 22 and Township Road 242 have not been designed as designated wildlife underpasses; but, the design has included measures to accommodate the passage of wildlife that would otherwise cross over Highway 22. The Highway 22 underpass will have 3:1 slopes and be 24 m wide at the bottom. Gaps in the riprap armour on the bottom of the channel will be filled and surfaced with gravel. At the meeting held on February 22, 2019, Alberta Transportation brought Stantec's wildlife biologist to present the mitigation measures in place for wildlife, including fencing, vegetating slopes, and a remote camera monitoring program that SNN can provide input on. They also showed a drawing of the bridge under Highway 22 and how it will be modified to facilitate wildlife movement. The February 22, 2019 meeting included a presentation to address SNN concerns related to wildlife movement. The presentation focused on proposed mitigation to facilitate wildlife movement. The presentation focused on proposed mitigation to facilitate wildlife alleviated some of SNN's concerns, but they would still prefer over



Table 11-2 Indigenous Group Views Related to Potential Project Effects on Wildlife of Cultural Importance and Alberta Transportation's Responses

Views related to Potential Effects on Wildlife and Biodiversity	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
	• Meeting with SNN, Alberta Transportation and CEAA, September 14, 2017; Meetings with SNN Alberta Transportation and Stantec, June 4, 2018 & February 22, 2019; (cited in SNN SR1 SCRT Aug 2014 – Aug 2019; Specific Concern #9)	Alberta Transportation's Response Alberta Transportation maintains there is no plan to build wildlife crossings on Highway 22 or across the diversion channels and other factors discussed in Round1 CEAA Package 2, IR2-15 and CEAA Conformity IR2-15.	 Efforts to Consult/Engage/Reconcile and Next Steps Alberta Transportation acknowledges the disparity between the SNN position and Alberta Transportation has made efforts to reconcile this disparity through meetings to clarify potential effects of the Project on wilcilife movement and to discuss mitigation measures, which are summarized below: At the meeting held on September 14, 2017, Alberta Transportation responded that there was no plan to build wilcilife crossings on Highway 22 or across the diversion channel. Alberta Transportation indicated that the diversion channel and dam were contoured to allow for wilcilife passage through the area following its construction. Highway 22 was being raised and that wilcilife could pass under the highway at the bridge locations along Highway 22 within the PDA. On March 23, 2018, Alberta Transportation sent detailed responses to Specific Concerns raised to date by providing a copy of Project Specific Concerns and Responses - Stoney Nakoda Nations from the EIA: There is no plan to build wildlife overpasses. The diversion channel and dam were contoured to allow for wildlife passage through the area during non-flood times. The channel will be directed under Highway 22 and Township Road 242. The area undemeath the bridges will contain rip rap however, the rip rap under the bridges will be filled with gravel potentially enabling animals to move under the bridges and avoid crossing the roads. With respect to Project design, the side slopes and bottom of the diversion channel passes through bedrock, the channel would remain as an exposed bedrock cut. Articulated concrete matting will be provided in select areas of the channel where pipelines cross. Riprap erosion protection will be provided at critical areas including at bridge crossings, around the emergency spillway and for a 1.4 km stretch in the outlet area. There are constraints limiting the feasibility of a wilcilife overpass across Highway 22 at the P
			 under the bridges and avoid crossing the roads. With respect to Project design, the side slopes and bottom of the diversion channel will be vegetated, with the following exceptions. Where the diversion channel passes



Table 11-2 Indigenous Group Views Related to Potential Project Effects on Wildlife of Cultural Importance and Alberta Transportation's Responses

Views related to Potential Effects on Wildlife and Biodiversity	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
			 A remote camera program will be designed in consultation with AEP, to identify whether the diversion channel acts as a barrier to wildlife movement during dry operations, especially for ungulates, and determine the effectiveness of mitigation implemented throughout the diversion channel.
			The remote camera program will also include monitoring along Elbow River to determine if wildlife use of the KWBZ has been affected by the construction and operation of the Project.
			 At the meeting held on June 4, 2018, Stantec brought their wildlife biologist to answer questions. The wildlife biologist explained that they were revegetating the structure to make it easier for animals to walk across. Transportation also explained that the fencing would have smooth top and bottom wires to allow for wildlife going under and over the fence.
			• At the meeting held on September 13, 2018, Alberta Transportation described that the underpasses that will be created by the diversion channel crossings of Highway 22 and Township Road 242 have not been designed as designated wildlife underpasses; but, the design has included measures to accommodate the passage of wildlife that would otherwise cross over Highway 22. The Highway 22 underpass will have 3:1 slope and be 24 m wide at the bottom. Gaps in the riprap armour on the bottom of the channel will be filled and surfaced with gravel.
			 At the meeting held on February 22, 2019, Alberta Transportation brought Stantec's wildlife biologist to present the mitigation measures in place for wildlife, including fencing, vegetating slopes, and a remote camera monitoring program that SNN can provide input on. They also showed a drawing of the bridge under Highway 22 and how it will be modified to promote wildlife movement.
			 At the meeting held on February 22, 2019, SNN indicated that Alberta Transportation's mitigation measures for wildlife alleviated some of SNN's concerns, but they would stil prefer overpasses.
			Alberta Transportation will be monitoring wildlife habitat use and movement within the LAA as part of the WMMP to address the concerned raised, which will help verify predictions of potential Project effects on wildlife movement and assess effectiveness of mitigation measures.





December 2019

REFERENCES

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Conformity IR2-13

Topic: Wildlife - Habitat Modelling

Sources:

EIS Guidelines Part 2, Section 6.1.8, 6.1.9; 6.2.3; 6.3.4

EIS Volume 3A, Section 11.2; 11.5; 11.6

EIS Volume 3B, Section 11.4; 11.5

EIS Volume 4, Appendix H, Attachment 11

Piikani Nation – Technical Review of EIS, June 15, 2018 (CEAR #48)

Tsuut'ina First Nation, Ermineskin Cree Nation, and Kainai First Nation – Technical Review of the EIS - Annexes – Combined (CEAR # 46, 47, 50)

CEAA Information Requests Related to the Environmental Impact Statement Round 1 Part 2, IR2-13

Alberta Transportation Responses to IR Round 1, SR1 CEAA IR Package 2, June 14, 2019



December 2019

Context and Rationale

In CEAA Information Requests Related to the Environmental Impact Statement Round 1 Part 2, IR2-13, the Agency requested Alberta Transportation provide additional detail and clarify various components of the habitat suitability modelling. As noted in the information request, the EIS Guidelines require the proponent to characterize and describe riparian habitats and wetlands, to identify ecosystems that are sensitive or vulnerable, and to identify changes to key habitat for culturally important species. The EIS Guidelines also require the proponent to assess the effects of changes to the environment on Indigenous peoples, including on current use and physical and cultural heritage.

In part d, the Agency required Alberta Transportation to provide a discussion of how limitations of the habitat suitability models affect prediction confidence for effects on wildlife and biodiversity, and how this affects the assessment of effects of changes to the environment on Indigenous peoples. Alberta Transportation's response to IR2-13 discusses limitations and prediction confidences, and indicates that the prediction confidence for wildlife and biodiversity is applicable to the availability of traditional resources, thus the prediction confidence for wildlife and biodiversity aligns with the moderate prediction confidence for Project residual effects on TLRU. However, the response does not discuss how the identified limitations and moderate confidence level for the suitability models could affect or contribute to the assessment of effects of changes to the environment on Indigenous peoples.

In part b, the Agency required Alberta Transportation to provide detail on the current knowledge and/or literature used to support the position that the suitability maps provide a reasonable assessment of potential project effects. Alberta Transportation's response to IR2-13 indicates that a variety of sources, including government species status and recovery documents, peer-reviewed journal articles, and graduate theses, were used to develop the habitat suitability models. However, the response does not address the need for information and rationale supporting the selection of sources used.

In part e, the Agency required Alberta Transportation to provide rationale, with additional information, to justify and explain the buffer distance applied in the elk and grizzly bear habitat suitability models. Alberta Transportation's response to IR2-13 part e is a repetition of information from the EIS. As referenced in the information request, Tsuut'ina, Ermineskin, and Kainai's submissions indicate that in the elk habitat suitability model a 250 m buffer distance for moderate volume roads and 500 m buffer for high traffic roads may be insufficient, and a rationale and supporting literature is not provided for the use of a 500 m buffer for industrial developments. Additionally, the submissions indicate that elevation and aspect were not included in the grizzly bear habitat suitability model and the rationale for buffering industrial developments by 500 m is not described. As noted in the information request, while pertinent studies are referenced, Indigenous groups have noted that there are numerous studies on elk behaviour which would provide a more robust discussion on suitable buffer distances, with a focus on local habitat, and studies in Alberta. Clear rationale, with additional literature cited, is needed to justify the buffer distances used in the elk and grizzly bear habitat suitability models.



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Information Requests:

- a) Assess how limitations to habitat suitability models affects the understanding of the impacts of changes to the environment on Indigenous peoples.
- b) Describe how current knowledge/literature used supports the habitat suitability models and provide clear rationale, with additional literature cited, to justify and explain the buffer distances applied in the elk and grizzly bear habitat suitability model.

Response

- a) As stated in Alberta Transportation's response to Round 1 CEAA Package 2, IR2-13, the limitations of the habitat suitability modelling are primarily related to external model validation using species occurrence data, which is often not of sufficient quantity or dispersion to meet the requirements of model validation. However, species presence was confirmed for some key indicators during the wildlife surveys, including olive-sided flycatcher, sora, grizzly bear and elk, which provided some value in validating models. This limitation (i.e., external model validation) does not affect the understanding of the effects of potential changes to the environment on Indigenous peoples because the habitat suitability models for elk and grizzly bear showed good correlation with habitat identified by the Tsuut'ina Nation (2018), Blood Tribe/Kainai First Nation (2018), Ermineskin Cree Nation (2018) and Piikani Nation (2016), particularly areas in the wildlife LAA that occur along Elbow River for grizzly bear and east and west of Highway 22 for elk.
- b) As stated in the EIA, Volume 4, Appendix H, Attachment 11A, Section 11A.2, the species accounts were developed to support the habitat suitability models using scientific literature and, where possible, regional information related to wildlife use in prairie and foothill ecosystems, including the eastern slopes of the Rocky Mountains. Overall, the information used to develop the habitat suitability models was selected because the peer-reviewed scientific literature or graduate research was considered to provide both reliable and regionally relevant information.

For elk, 14 of 21 (66.7%) references used to describe elk distribution and ecology were based on studies conducted in Alberta. In addition, five of eight (62.5%) scientific references that helped inform the model assumptions related to elk avoidance of roads were based on studies conducted in Alberta, including the eastern slopes of the Rocky Mountains in southwestern Alberta near Pincher Creek. Although Alberta Transportation believes these sources of information are sufficient to assess the potential effects of roads on elk in the wildlife LAA, additional literature is provided below to justify the distances used in the elk habitat suitability model.

There is other scientific literature that indicate elk avoid roads within or close to the distances used to develop the habitat suitability model (i.e., 250 m to 500 m), including Rost and Bailey (1979) who reported deer and elk avoid areas within 200 m of a road and Gagnon et al.



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(2007) who reported elk avoid highways within 100 m to 600 m, depending on traffic volumes. In that study, the mean probability of an elk occurring within 200 m of the highway was 40% but decreased to 20% at relatively higher traffic volumes (more than 500 vehicles/hour) (i.e., elk were more likely to be farther away [300 m to 600 m] from the highway when traffic volume was more than 500 vehicles/hour). In addition, although Ciuti et al. (2012) did not report elk displacement specifically, these authors reported elk occupying areas close to roads (e.g., less than 500 m) switch into a more-alert behavioral mode (increased vigilance) due to changes in traffic volume, which indirectly reduces habitat suitability. Moreover, Paton, D.G. (2012) who studied elk migration in southwestern Alberta, reported that elk stopover areas were on average 526 m and 678 m from a road during spring and fall migration, respectively. However, this study (as well as others) also reported a large degree of individual variability with distance from roads ranging from 0 m to 3,600 m (Paton D.G., 2012).

However, elk have been reported to avoid roads at greater distances than those used to develop the elk feeding habitat suitability models. For example, Rowland et al. (2000) reported that elk showed a strong selection for habitats that occurred 1,500 m to 2,000 m from a road. In addition, more recent research reported elk used habitats less than 500 m from a road; however, the relative probability of selection increased with increasing distance from roads (up to 2,000 m) during spring and fall migration in southwestern Alberta (Paton et al. 2017). This study showed hunting exacerbated road avoidance, especially for males during the fall, which may not reflect the levels of hunting pressure or the road network in the wildlife LAA.

As discussed in the EIA, Volume 4, Appendix H, Section 11A.2.4, there are several factors that influence elk response to roads, such as traffic volume, time of day, sex, and road type (McCorquodale 2013; Buchanan et al. 2014; Prokopenko 2016). Additional literature sources also recognized these factors and others including:

- habitat quality (Gagnon et al. 2007)
- season, hunting activity (Paton 2012; Paton et al. 2017)
- type of road (Sawyer et al. 2007)
- road density (Frair et al. 2008)

As an example of how elk can change their response to road conditions, Gagnon et al. (2007) reported that elk responded to changes in traffic volume by shifting away from a highway at high traffic volumes but returned to utilize areas near the highway when traffic volume was relatively low. All of these factors represent additional sources of variability that create complexity and challenges for the development of expert-based models.

Overall, the scientific literature, including studies conducted in southwestern Alberta (Paton 2012), has identified several factors that influence elk response to roads. This has resulted in reporting of a range of road avoidance distances. The development of the habitat suitability model required a reasonable estimate within that range to adjust habitat ratings that best



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reflected the factors that might affect elk use near roads within the wildlife LAA. Alberta Transportation maintains the distances used to develop the habitat suitability models for elk (250 m and 500 m) and the corresponding reduction in suitability ratings are a reasonable estimate of reduced habitat effectiveness based on the existing conditions in the wildlife LAA, the literature review by McCorquodale (2013) and other local studies (e.g., Prokopenko et al. 2017).

Similarly, all the scientific papers (20 of 20) used to describe grizzly bear distribution and ecology were based on studies conducted in Alberta, including the seven peer-reviewed papers used to inform the ratings adjustments and zone of influence related to grizzly bear response to roads (EIA, Volume 4, Appendix H, Attachment 11A). These studies were conducted in the Bow Valley or Banff National Park (Benn and Herrero 2002; Gibeau et al. 2002; Mueller et al. 2004), the eastern slopes of the Canadian Rocky Mountains in west-central Alberta (Nielsen et al. 2002; Roever et al. 2008) or near Pincher Creek in southwestern Alberta (Northrup et al. 2012a,b). The studies examined various road types including highways, secondary paved road and, gravel roads with varying levels of traffic volume, which were considered representative of the road types and traffic volumes found in the LAA and RAA.

Grizzly bear avoidance of roads varies with type of road, time of day, frequency of human use, habitat quality as well as age and sex of the bear. As such, there is a range of road avoidance distances in the literature for grizzly bear. Proctor et al. (2018) also recently recognized this variability related to grizzly bear displacement near roads (e.g., 100 m to 1,000 m) and recommended a 500 m buffer be considered as a reasonable distance to estimate reduced habitat effectiveness or increased mortality risk. Therefore, Alberta Transportation maintains the buffer distances used in the grizzly bear habitat suitability model are appropriate, given the number of factors that result in variability in bear response to roads.

The 500 m buffer used to estimate the potential effects of industrial development on elk and grizzly bear habitat use (i.e., reduced habitat effectiveness) was based on the type of infrastructure, which in this instance was a single natural gas valve site, the assumed level of human activity at this site (i.e., maintenance activities), government recommendations (e.g., setback distances, GoA 2018) and professional judgment with consideration of reported grizzly bear and elk response to anthropogenic disturbance and human presence similar to roads (Proctor et al. 2018; Ciuti et al. 2012; GoA 2018).

Alberta Transportation's response to Round 1 CEAA Package 2, IR2-18(a) provided an explanation of how elevation and aspect were incorporated into the grizzly bear habitat suitability models. That response is repeated here for clarification:

"Elevation and aspect were not excluded from the grizzly bear habitat suitability models. These physical features are inherent to the ecosite classification system. To clarify, within the Foothills Parkland Natural Subregion, which occurs between 1,025 m and 1,400 m (ESRD)



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2012), ecosite phases are classified using vegetation as well as topography, slope and aspect (see Volume 10A, Section 10.2.1.1, page 10.11). Habitat suitability ratings for grizzly bear reflect the vegetation as well as physical characteristics (e.g., aspect) of each ecosite phase."

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Conformity IR2-14

<u>Topic:</u> Wildlife - Survey Timing, Detection and Mitigation

Sources:

EIS Guidelines Part 2, Section 6.1.8, 6.1.9; 6.2.3; 6.3.4

EIS Volume 4, Appendix H

Samson Cree Nation – Springbank Off-Stream Reservoir Project Written Submission – June 25, 2018 (CEAR # 52)

CEAA Information Requests Related to the Environmental Impact Statement Round 1 Part 2, IR2-14

Alberta Transportation Responses to IR Round 1, SR1 CEAA IR Package 2, June 14, 2019

Context and Rationale

In CEAA Information Requests Related to the Environmental Impact Statement Round 1 Part 2, IR2-14, the Agency required Alberta Transportation to provide a rationale for survey timing for western toad and yellow rail and explain how potential impacts of survey timing on detection rates were considered in the understanding of baseline conditions, assessment of effects, and proposed mitigation. As noted in the information request, the EIS Guidelines require the proponent to identify changes to key habitat for culturally important species and assess the



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effects of changes to the environment on Indigenous peoples, including on current use and physical and cultural heritage.

Alberta Transportation's response to IR2-14 indicates that recommended survey timing for western toad, as described in ESRD (2013), for nocturnal acoustic surveys, is May 15 to June 14. As referenced in the information request, Samson Cree Nation raised concerns regarding both the timing of the western road and yellow rail surveys. Samson Cree Nation indicates that the timing of the amphibian survey falls within the recommended period for northern leopard frogs; however, it is outside the recommended period for western toads. As surveys were completed May 5 to May 11, the timing of surveys may have affected western toad detections.

In Alberta Transportation's response to IR2-14, Alberta Transportation indicates that the survey timing is sufficient for determining the existing conditions, assessment of effects, and mitigation. No explanation is provided regarding how the effects of survey timing on detection rates were considered in the understanding of baseline conditions, assessment of effects, and proposed mitigation measures for western toad and yellow rail.

Information Requests:

- a) Discuss the potential effects of using a survey timing outside of the recommended period for the western toad on detection rates.
- b) Explain how potential effects of survey timing on detection rates were considered in the understanding of baseline conditions, assessment of effects, and proposed mitigation.

Response

a) In regard to statements in the Context and Rationale, survey timing as well as other factors (e.g., annual variation in amphibian abundance and air temperature) can affect amphibian detectability. However, the focus of the amphibian survey was to identify northern leopard frog because this species has a wider distribution and more suitable habitat in the wildlife LAA and the mitigation for both northern leopard frog and western toad would be the same. Northern leopard frog has a peak calling period that occurs earlier than western toad (ESRD 2013). As such, the survey timing was designed to coincide with the peak calling period for northern leopard frog. Nonetheless, because western toad was not the focus of the survey, it is possible that western toad was present in the wildlife LAA but not detected (i.e., underestimated site occupancy during baseline surveys). However, as stated in Alberta Transportation's response to Round 1 CEAA Package 2, IR2-14, early May surveys for western toad are considered acceptable, given the 2016 spring conditions as evidenced by an incidental observation of western toad west of the wildlife LAA on April 16, 2016, which suggests they were active earlier than their typical calling period (May 15 to June 14) (ESRD 2013).



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Although western toad was not detected during the nocturnal amphibian baseline surveys, pre-construction surveys will be conducted, which will provide another opportunity to detect amphibian species at risk—including western toad—and implement appropriate mitigation. If a western toad breeding wetland is identified within 100 m of the construction footprint during pre-construction surveys, site-specific mitigation (e.g., exclusion fencing) will be implemented to protect the western toad breeding wetland and any individuals encountered within the exclusion area will be removed to other suitable areas.

- b) The potential effects of survey timing on detection rates did not affect Alberta Transportation's understanding of baseline conditions, assessment of effects or proposed mitigation because:
 - As described above, the focus of the amphibian survey was northern leopard frog and not western toad, although habitats for these species overlap, and the mitigation for both species is the same.
 - The amphibian baseline surveys were conducted within the recommended survey timing period for northern leopard frog (April 15 to mid-May) as defined by provincial protocols (ESRD 2013).
 - The amphibian survey effort adequately described baseline conditions based on the number of visits (two nocturnal and one diurnal visit), number and distribution of amphibian survey stations in the wildlife LAA (n = 22), as well as environmental (ambient) survey conditions (EIA, Volume 4, Appendix H, Section 3.2).
 - The nocturnal and visual amphibian surveys did identify amphibian breeding wetlands. Although the nocturnal survey indicated the presence of two common amphibian species (i.e., boreal chorus frog and wood frog), these results provided an adequate description of existing (baseline) conditions (for the reasons described above) to determine Project residual effects on amphibian breeding wetlands including western toad. The results also indicated where mitigation may be applied, contingent on the results of the pre-construction surveys (i.e., species confirmation of occupancy).

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Conformity IR2-15

Topic: Wildlife - Habitat Connectivity and Wildlife Movement

Sources:

EIS Guidelines Part 2, Section 2.2; 6.1.8, 6.1.9; 6.2.3; 6.3.4

EIS Volume 3A, Section 11

EIS Volume 3B, Section 11

Piikani Nation – Technical Review of EIS, June 15, 2018 (CEAR #48)

Louis Bull Tribe – EIS Review Submission, June 18, 2018 (CEAR # 49)

Stoney Nakoda Nations – Alberta Transportation Workshops, February and March 2018

Montana First Nation – Review of Springbank Off-Stream Reservoir EIA, June 2018 (CEAR # 51)

Samson Cree Nation – Springbank Off-Stream Reservoir Project Written Submission – June 25, 2018 (CEAR # 52)

CEAA Information Requests Related to the Environmental Impact Statement Round 1 Part 2, IR2-15

Alberta Transportation Responses to IR Round 1, SR1 CEAA IR Package 2, June 14, 2019

Context and Rationale

In CEAA Information Requests Related to the Environmental Impact Statement Round 1 Part 2, IR2-15, the Agency requested Alberta Transportation describe the potential benefits related to wildlife movement and mortality of an overpass over Highway 22 at various locations connected to the project area and discuss the feasibility of overpass options. Additionally, the Agency required Alberta Transportation to include a discussion of Indigenous groups' views on wildlife crossings, mitigation, and accommodation. As noted in the information request, the EIS Guidelines require the proponent to identify changes to key habitat for culturally important species, assess the effects of changes to the environment on Indigenous peoples, and conduct an alternative means analysis that addresses project design components related to environmental effect mitigation. The cover letter to the information requests and the EIS Guidelines further direct the proponent to present points of disagreement between the views of Alberta Transportation and Indigenous groups, along with a description of efforts undertaken to reconcile these differences and a rationale for conclusions.



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In Alberta Transportation's response to IR2-15, Alberta Transportation indicates that a review of the existing literature suggests that when placed in the right locations and designed properly, wildlife crossing structures (over and underpasses) are beneficial for wildlife because they can maintain connectivity between suitable habitats and populations as well as reduce wildlife mortality risk along highways. Alberta Transportation then presents a discussion regarding the feasibility of underpasses, indicating that overpasses and other crossing structures are not necessary. The response does not evaluate the potential benefits to wildlife movement and mortality of an overpass over Highway 22 at various locations within the project area.

While some mitigation measures are proposed in the EIS, if changes to the project design or operation are not successful to reduce potential effects to wildlife movement, other actions to improve wildlife movement may be required.

Information Requests:

- a) Considering information from a thorough review of existing literature, describe the potential benefits related to wildlife movement and mortality of an overpass over Highway 22 at various locations connected to the project area and discuss the feasibility of overpass options. Include a discussion of Indigenous groups' views on wildlife crossings, mitigation, and accommodation.
- b) Identify and discuss areas of disparity between the views of Indigenous groups and Alberta Transportation on potential effects to wildlife movement, efforts made to reconcile the disparities, and rationale for conclusions on matters for which disparity in views remains.

Response

a) Alberta Transportation recognizes the views of Indigenous groups on wildlife crossings as discussed in Alberta Transportation's response to Round 1 CEAA Package 2, IR2-15. A further discussion is provided below related to the potential benefits and feasibility of constructing an overpass over Highway 22 at various locations within the PDA.

BENEFITS OF AN OVERPASS OR UNDERPASS

Alberta Transportation acknowledges that a wildlife crossing structure, such as an overpass, can be beneficial to reduce animal-vehicle collisions and to facilitate wildlife movement if placed in the correct locations and designed properly (e.g., in mountain ecosystems such as Banff National Park). There are several other studies that have reported the effectiveness of overpasses as well as underpasses (e.g., open-span bridges) to reduce animal-vehicle collisions and maintain wildlife movement, especially for deer where there are known migration routes and high densities of collisions (Bissonette and Rosa 2012; Coe et al. 2015), elk (Clevenger and Barrueto 2014) and bears (Sawaya et al. 2013; Clevenger and Barrueto 2014).



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The current animal-vehicle collisions on Highway 22 are related to existing conditions in the area and will not be the direct effect of constructing the Project. However, Alberta Transportation has included an underpass for the Highway 22 bridge over the diversion channel as part of Project design to facilitate wildlife movement (e.g., deer, elk) in the wildlife LAA (see Alberta Transportation's response to Round 1CEAA Package 2, IR2-15, Figure IR15-2) and which will provide some mitigation for the current animal-vehicle collisions that occur in the absence of the Project. The underpass should allow wildlife passage as supported by other research that has demonstrated the effectiveness of underpasses, including open span bridges (Bissonette and Rosa 2012; Coe et al. 2015; Simpson et al. 2016). The effectiveness of the Highway 22 bridge over the diversion channel will also be monitored to assess wildlife movement as part of the WMMP (see Alberta Transportation's response to Round 1 CEAA Package 1, IR1-09, Appendix IR9-1).

The culvert (3 km from the proposed underpass) at the bottom of the raised intersection of Highway 22 could also function as a second underpass for smaller wildlife to pass under the road, which will also be monitored to determine mitigation effectiveness. Overall, having two wildlife crossing structures within 5.5 km of each other is consistent with the recommended average spacing interval for wildlife crossing structures, which has been reported to be approximately 1.9 km, depending on target species and mitigation objectives (Clevenger and Huisjer 2011).

FEASIBILITY OF AN OVERPASS

There are several factors that are considered in evaluating the feasibility of constructing a wildlife overpass in an area, including construction costs, wildlife mortality rates/km/year, potential benefits (i.e., reduced animal-vehicle collisions and reduced cost of collisions), site-specific location(s), target species (e.g., deer, elk), wildlife movement patterns, road dimensions, topography, vegetation, and adjacent land use and human disturbance (Huijser et al. 2009; Clevenger and Huijser 2011).

The primary constraints limiting the feasibility of a wildlife overpass across Highway 22 are related to topography and the dimensions required for the crossing structure.

Wildlife overpasses typically require a road clearance of 6 m above asphalt with the addition of 2 m to 3 m of fill at the peak of the crossing structure. As presented in the Project description (EIA, Volume 1, Section 2.2.6.1), Highway 22 will need to be raised up to approximately 5 m in places which would increase the necessary elevation of the structure above the surrounding land grade.

In addition, Highway 22 where it intersects the PDA and wildlife LAA is part of the High Load Corridor network, which is designed to accommodate oversize and overweight commercial vehicles (Alberta Transportation 2019). The High Load Corridor network consists of designated highways within the Province of Alberta, which have had the overhead utility lines raised to accommodate loads up to 9 m high. The clearance height requirement of 9 m within the



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High Load Corridor presents a feasibility constraint related to the construction of an overpass over Highway 22.

The relatively flat terrain does not provide a natural transition for wildlife approaches (i.e., ramps), given the required elevation of the structure. Approaches to a wildlife overpass should be no steeper than 3:1; however, it is preferred to be gentler than 5:1, which would not be feasible due to the existing topography (i.e., flat terrain). The increase in the footprint of the structure required to accommodate the necessary design may reduce the storage capacity of retained water during floods.

Alberta Transportation is committed to monitoring animal-vehicle collisions during post construction as part of the Animal-Vehicle Collision (AVC) Safety Program "Alberta Wildlife Watch", which will continue to monitor Highway 22. Should an AVC-prone location be identified, it will be investigated and mitigated.

b) With respect to areas of disparity, Alberta Transportation agrees with the concerns raised by Indigenous groups that the Project has potential to affect wildlife movement. In response to these concerns, the design of the diversion channel and the earthen dam were modified to facilitate the passage of wildlife along Elbow River and through the PDA (as described in the EIA, Volume 3A, Section 11). In addition, Alberta Transportation revised proposed mitigation under the Highway 22 bridge over the diversion channel to include filling in the rip-rap with finer materials to further address Indigenous concerns. While Alberta Transportation considers this a reasonable and meaningful response to the concerns of Indigenous groups regarding potential effects on wildlife movement, Alberta Transportation acknowledges areas of disparity may remain. Efforts to reconcile such disparities will be made through ongoing consultation and engagement initiatives, including: wildlife monitoring (e.g., remote camera monitoring program) through the provision of Project information, the incorporation of feedback that results in changes to Project planning or through commitment to further exploring an issue, concern or recommendation.

Alberta Transportation acknowledges the disparity of views between Stoney Nakoda Nations and Alberta Transportation regarding the need for a wildlife overpass over Highway 22. For the reasons outlined above, Alberta Transportation does not view a wildlife overpass as feasible or necessary. Alberta Transportation has made efforts to reconcile this disparity through meetings to clarify potential effects of the Project on wildlife movement and to discuss mitigation measures, which are summarized in Table 15-1. Alberta Transportation committed to working with Stoney Nakoda Nations to try to seek mutually acceptable solutions to this issue; concerns or recommendations identified and those that remain unresolved will be tracked through Alberta Transportation's ongoing engagement.



Table 15-1 Indigenous Group Views Related to Potential Project Effects on Wildlife Movement and Alberta Transportation's Responses

Views related to Potential Effects on Wildlife and Biodiversity	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
Stoney Nakoda Nation (SNN)			
 Asked if the SR1 Project would include any wildlife crossings, and also inquired about fencing. Emphasized the importance of wildlife crossings and was concerned that if not properly managed could be a problem for the SR1 Project. SNN expressed concerns that there are no dedicated wildlife crossings for the SR1 Project. SNN would prefer overpasses for wildlife rather than underpasses. SNN expressed concerns over wildlife passage through the SR1 area following construction. Inquired if there would be wildlife crossings built over Highway 22 or Highway 8. There is a concern with the lack of wildlife corridors and that the Project will impact wildlife movement. Wildlife need space and the option to travel the corridors. This goes back to Elder memories because how the animals use the land today is similar to how they used the land in the past. 	SNN meeting with Alberta Transportation (May 4, 2016) SNN meeting with Alberta Transportation and CEAA (September 14, 2017) SNN meeting with Alberta Transportation (June 4, 2018 & February 22, 2019) (cited in SNN SR1 SCRT Aug 2014-Jun Aug 2019 (Specific Concern #8 & 9)	 Alberta Transportation responded to this concern by highlighting that the diversion channel and the earthen dam would be designed to allow the passage of wildlife along the Elbow River. Alberta Transportation responded that there will likely be some fencing on the Project. Alberta Transportation responded on March 23, 2018 with the following response: "Although the Project would result in additional anthropogenic features on the landscape that might hinder wildlife movement in the LAA, Alberta Transportation has made adjustments to accommodate wildlife movement such as revegetating the floodplain berm with materials conducive for ungulate movement." Alberta Transportation proposed wildlife friendly fencing to reduce potential Project effects on wildlife movement. Potential effects on wildlife movement were addressed in the EIA (see Volume 3A, Section 11.4.3 and Volume 3B, Section 11.3.3) as well as in response to Round 1 CEAA Package 2, IR2-15 and part a) and part b) in this response. The EIA concluded that the residual effects on wildlife movement are unlikely to pose a long-term threat to the persistence or viability of a wildlife species, including species at risk (EIA, Volume 3A and 3B Section 11). The potential effects of the Project on elk movement are assessed in the EIA (see Volume 3A, Section 11.4.3 and Volume 3B, Section 11.3.3). In addition, Alberta Transportation has clarified proposed mitigation to facilitate wildlife movement in response to Round 1 CEAA Package 2, IR2-15 and part a) and part b) in this response. 	Alberta Transportation acknowledges the disparity between the SNN position and Alberta Transportation regarding the need for a wildlife overpass over Highway 22. Alberta Transportation has made efforts to reconcile this disparity through meetings to clarify potential effects of the Project on wildlife movement and to discuss mitigation measures, which are summarized below: • At the meeting held on September 14, 2017, Alberta Transportation responded that there was no plan to build wildlife overpasses due to feasibility constraints. • On March 23, 2018, Alberta Transportation sent detailed responses to Specific Concerns raised to date by providing a copy of Project Specific Concerns and Responses - Stoney Nakoda Nations from the Ela: There is no plan to build wildlife overpasses. The diversion channel and dam were contoured to allow for wildlife passage through the PDA during non-flood times. The channel will be directed under Highway 22 and Township Road 242. The area underneath the bridges will contain riprap, however, the rip rap under the bridges will be filled with gravel potentially enabling animals to move under the bridges and avoid crossing the roads. • At the meeting held on June 4, 2018, Stantec brought their wildlife biologist to answer questions. The wildlife biologist explained that they were revegetating the structure to make it easier for animals to walk across. Alberta Transportation also explained that the fencing would have smooth top and bottom wires to allow for wildlife going under and over the fence. • At the meeting held on September 13, 2018, Alberta Transportation described that the underpasses; but, the design has included measures to accommodate the passage of wildlife that would otherwise cross over Highway 22. The Highway 22 underpasses; but, the design has included measures in place for wildlife, including fencing, vegetating slopes, and a remote camera maniforing program that SNN can provide input on. They also showed a drawing of the bridge under Highway 22 and how it will be



Table 15-1 Indigenous Group Views Related to Potential Project Effects on Wildlife Movement and Alberta Transportation's Responses

Views related to Potential Effects on Wildlife and Biodiversity	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
			 Alberta Transportation will be monitoring wildlife habitat use and movement within the LAA as part of the WMMP to address the concerned raised, which will help verify predictions of potential Project effects on wildlife movement and assess effectiveness of mitigation measures. In addition, Alberta Transportation will develop the WMMP with input from Indigenous groups. With respect to Project design, the side slopes and bottom of the diversion channel will be vegetated, with the following exceptions. Where the diversion channel passes through bedrock, the channel would remain as an exposed bedrock cut. Articulated concrete matting will be provided in select areas of the channel where pipelines cross. Riprap erosion protection will be provided at critical areas including at bridge crossings, around the emergency spillway and for a 1.4 km stretch in the outlet area. The south portion, farthest from Elbow River, will be a 450 m earthen embankment vegetated with native grasses. The floodplain berm will also be covered with materials conducive to ungulate movement (see the EIA, Volume 3A, Section 11). A remote camera program will be designed in consultation with AEP, to identify whether the diversion channel acts as a barrier to wildlife movement during dry operations, especially for ungulates, and determine the effectiveness of mitigation implemented throughout the diversion channel. The remote camera program will also include monitoring along the Elbow River to determine if wildlife use of the KWBZ has been affected by the construction and operation of the Project.
Tsuut'ina Nation (TN)		<u></u>	
Concerned about the impact that the SR1 would have on the migratory herds of elk that pass through TN territory.	 Letter from TN to CEAA (May 30, 2016) Letter from TN to Minister of 	The potential effects of the Project on elk movement were assessed in the EIA (see Volume 3A, Section 11.4.3 and Volume 3B, Section 11.3.3). In addition, Alberta Transportation has clarified proposed mitigation to facilitate wildlife movement in response to Round 1 CEAA Package 2, IR2-15 and part a) and	At the meeting held on October 11, 2018, the impacts to wildlife and wildlife habitat were discussed, along with proposed mitigation measures. Internal fencing currently within the PDA will be removed. Wildlife friendly fencing will be used around the boundaries of the Project.
Concerns over how disruptions to landscape may affect elk (calving grounds, migration routes, water crossings, and critical habitat). TN members regularly hunt these elk for food and ceremony purposes. Potential for Project to influence elk movement patterns.	Infrastructure and Transportation (July 19, 2017); TN TUS 2018; TN 2018 (CEAR #50) (cited in TN SR1 SCRT Aug 2014- Aug 2019; Specific Concern #25)	vegetating the structures and covering up riprap with conducive material for crossing). However, the structures may still act as sensory disturbances and the degree to which elk might habituate to the Project structures and maintain daily or seasonal movements is uncertain. The magnitude of residual Project effects on elk movement are therefore predicted to be moderate. Elk are known to habituate to other human activities if human and physical	Under cover dated November 23, 2018, Alberta Transportation provided their report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information, including the mitigation table. In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA for wildlife, including how ungulate and other wildlife movement will be facilitated. Where possible, temporary workspaces will be in areas that avoid wildlife features and construction activities during the RAPs will be avoided or reduced. A remote camera program will be designed to determine the effectiveness of mitigation implemented throughout the diversion channel. Alberta Transportation also met with TN on December 6, 2018 to discuss the response and mitigation table.
		disturbances are relatively constant and predictable (Thompson and Henderson 1998); therefore, it is likely that they would habituate to these structures over time.	Alberta Transportation will be monitoring wildlife habitat use and movement within the LAA as part of the WMMP to address the concerned raised, which will help verify predictions of potential Project effects on wildlife movement and assess effectiveness of mitigation measures. In addition, Alberta Transportation will develop the WMMP with input from Indigenous groups.
			In December 2019, Alberta Transportation provided written responses to the TN Technical Review dated June 2018, which included wildlife concerns in Annex D, Questions 1, 3, 4 and 5. Alberta Transportation will offer to meet with TN regarding the written responses.



Table 15-1 Indigenous Group Views Related to Potential Project Effects on Wildlife Movement and Alberta Transportation's Responses

Views related to Potential Effects on Wildlife and Biodiversity	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
Kainai First Nation/Blood Tribe (KFN)	•		
Potential for Project to influence elk movement patterns.	KFN 2018 (CEAR #47) (cited in KFN SR1 SCRT Aug 2014- Aug 2019; Specific Concern #19)	The potential effects of the Project on elk movement were assessed in the EIA (see Volume 3A, Section 11.4.3 and Volume 3B, Section 11.3.3). In addition, Alberta Transportation has clarified proposed mitigation to facilitate wildlife movement in response to Round 1 CEAA Package 2, IR2-15 and part a) and part b) in this response.	Alberta Transportation will be monitoring wildlife habitat use and movement within the LAA as part of the WMMP to address the concerned raised, which will help verify predictions of potential Project effects on wildlife movement and assess effectiveness of mitigation measures. In addition, Alberta Transportation will develop the WMMP with input from Indigenous groups.
			A remote camera program will be designed with AEP, to identify whether the diversion channel acts as a barrier to wildlife movement during dry operations, especially for ungulates, and determine the effectiveness of mitigation implemented throughout the diversion channel. The final number and location of remote cameras will be confirmed following discussion with regulators and Indigenous groups.
			Where fencing is proposed to restrict livestock access to Project structures (e.g., diversion channel), wildlife-friendly fencing will be installed to allow ungulate passage.
			In December 2019, Alberta Transportation provided written responses to the KFN Technical Review dated June 2018, which included this concern in Annex D, Question 3. Alberta Transportation will offer to meet with KFN regarding the written responses.
Elk movement observations were not described other than a brief overview of 70 elk crossing Highway 22. Are there dominant movement patterns for elk in this area and/or seasonal movement patterns? Provide context for elk movement patterns in the area currently.	• KFN 2018 (CEAR #47)	Although the remote camera survey indicated elk use a variety of habitats within the LAA during all seasons, it is not possible to identify seasonal movement patterns from this data. However, the winter tracking survey provided data that indicated daily travel routes during winter within the LAA. Overall, the potential for the Project to affect wildlife movement is provided in the ElA, Volume 3A, Section 11.4.3.1, Section 11.4.3.3, and Volume 3B, Section 11.3.3.3. An assessment of potential cumulative effects on wildlife movement in the RAA including elk are discussed in the ElA, Volume 3C, Section 1.2.7.1. In summary, major components of the Project such as the diversion channel may act as semi-permeable barriers to elk movement. These structures will be designed to allow elk to physically cross (e.g., appropriate side-slope angles, vegetating the structures and covering up riprap with conducive material for crossing). However, the structures may still act as sensory disturbances and the degree to which elk might habituate to the Project structures and maintain daily or seasonal movements is uncertain. The magnitude of residual Project effects on elk movement are therefore predicted to be moderate. Elk are known to habituate to other human activities if human and physical disturbances are relatively constant and predictable (Thompson and Henderson 1998); therefore, it is likely that they would habituate to these structures over time. The traditional data provided in the KFN Traditional Knowledge, Land, and Resource Use Study (O'Connor 2018) related to elk habitat use and movement along the Elbow River is consistent with the information provided in Volume 3A, Section 11.2.2.	Alberta Transportation will be monitoring wildlife habitat use and movement within the LAA as part of the WMMP to address the concerned raised, which will help verify predictions of potential Project effects on wildlife movement and assess effectiveness of mitigation measures. In addition, Alberta Transportation will develop the WMMP with input from Indigenous groups. A remote camera program will be designed with AEP, to identify whether the diversion channel acts as a barrier to wildlife movement during dry operations, especially for ungulates, and determine the effectiveness of mitigation implemented throughout the diversion channel. The final number and location of remote cameras will be confirmed following discussion with regulators and Indigenous groups. Where fencing is proposed to restrict livestock access to Project structures (e.g., diversion channel), wildlife-friendly fencing will be installed to allow ungulate passage. In December 2019, Alberta Transportation provided written responses to the KFN Technical Review dated June 2018, which included this concern in Annex D, Question 3. Alberta Transportation will offer to meet with KFN regarding the written responses.



Table 15-1 Indigenous Group Views Related to Potential Project Effects on Wildlife Movement and Alberta Transportation's Responses

Views related to Potential Effects on Wildlife and Biodiversity	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
Ermineskin Cree Nation (ECN)			
Concerns expressed to maintain the migratory patterns and game trails for wildlife. Potential impacts of the Project on wildlife migration routes and wildlife abundance and availability in the	ECN meeting with Alberta Transportation (June 27, 2017) ECN TUS 2018 (CEAR #46) (cited in ECN SR1	The potential effects of the Project on wildlife movement were assessed in the EIA. In addition, Alberta Transportation has clarified proposed mitigation to facilitate wildlife movement in response to Round 1 CEAA Package 2, IR2-15 and part a) and part b) in this response.	Alberta Transportation will be monitoring wildlife habitat use and movement within the LAA as part of the WMMP to address the concerned raised, which will help verify predictions of potential Project effects on wildlife movement and assess effectiveness of mitigation measures. In addition, Alberta Transportation will develop the WMMP with input from Indigenous groups.
area.	SCRT Oct 2016- Sept 2019; Specific Concern #7)		Vegetation removal will be avoided during the RAP for nesting migratory birds and raptors. The recommended RAP to avoid destruction and disturbance to raptor nests is from February 15 to August 15. If vegetation removal is scheduled to occur within the RAP for migratory birds and raptors, a qualified wildlife biologist will inspect the site for active nests within seven days of the start of the proposed construction activity (e.g., vegetation removal, blasting).
			A remote camera program will be designed with AEP, to identify whether the diversion channel acts as a barrier to wildlife movement during dry operations, especially for ungulates, and determine the effectiveness of mitigation implemented throughout the diversion channel. The final number and location of remote cameras will be confirmed following discussion with regulators and Indigenous groups.
Concerns regarding assessment of wildlife, especially elk, upon which the ECN depend for hunting.	ECN 2018 (CEAR #46) (cited in ECN SR1 SCRT Oct 2016- Sept 2019; Specific Concern #8)	The potential effects of the Project on wildlife movement including elk were assessed in the EIA (see Volume 3A, Section 11.4.3 and Volume 3B. Section 11.3.3.). In addition, Alberta Transportation has clarified proposed mitigation to facilitate wildlife movement in response to Round 1 CEAA Package 2, IR2-15 and part a) and part b) of this response.	Alberta Transportation will be monitoring wildlife habitat use and movement within the LAA as part of the WMMP to address the concerned raised, which will help verify predictions of potential Project effects on wildlife movement and assess effectiveness of mitigation measures. In addition, Alberta Transportation will develop the WMMP with input from Indigenous groups.
			In December 2019, Alberta Transportation provided written responses to the ECN Technical Review dated June 2018, which included wildlife concerns in Annex D, Questions 1, 3, 4 and 5. Alberta Transportation will offer to meet with ECN regarding the written responses.
Louis Bull Tribe (LBT)			
LBT noted concerns regarding local wildlife populations (including moose, deer, cougars, coyotes, wolves, beaver, and muskrat) and habitat loss, and suggested mitigation measures including adhering to RAP, reduction of the Project footprint, and limitations on the uses of chemicals.	• LBT TUS 2018 (CEAR #1228)	The potential effects of the Project on wildlife habitat including ungulates (e.g., deer and elk) and other species of management concern including those of cultural importance are discussed in the EIA and in response to Round 1 CEAA Package 2, IR2-11 and the response to CEAA Conformity Package 2, IR2-11. RAPs are discussed in the EIA as part of the mitigation measures proposed to reduce potential effects of the Project on wildlife. In addition, Alberta Transportation has summarized proposed mitigation for RAP periods for wildlife species at risk that overlap the construction phase in response to CEAA Conformity Package 2, IR2-16.	Alberta Transportation has stated that where possible, construction activities during the RAP for the KWBZ identified along Elbow River (December 15 to April 30) will be avoided or reduced. This will limit potential sensory disturbance to wintering ungulates (ESRD 2015, GoA 2017). If construction activities must occur during this time period, a wildlife mitigation and monitoring plan will be developed in consultation with regulators, which will include monitoring ungulate habitat use and response to human disturbance. Alberta Transportation responded to LBT's TUS report on August 8, 2019 with mitigation measures and responses and met on November 14, 2019 to discuss the written response. Wildlife mitigations from the TUS response was discussed.



Table 15-1 Indigenous Group Views Related to Potential Project Effects on Wildlife Movement and Alberta Transportation's Responses

Views related to Potential Effects on Wildlife and Biodiversity	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps		
Montana First Nation (MFN)					
Does remote camera data provide quantitative information on wildlife movement that could be used to support impact predictions? If so, please describe.	• MFN 2018 (CEAR #51)	Alberta Transportation provided clarification of this concern in response to MFN SoC 12, copied below for convenience: "The remote camera data will be used to verify impact predictions and determine effectiveness of mitigation focusing on wildlife habitat use, movement, and crossing success. Relative abundance (e.g., photographic rate) or occupancy will be used to compare baseline data with remote camera data collected during construction and post-construction phases. The program will determine whether large mammals use and cross permanent Project components, as well as use the diversion channel to travel under the Highway 22 bridge. Crossing success rates will be calculated, for each component, as the total number of occasions an individual animal (or group) walks over or through a component, divided by the total number of occasions that animal (or group) approached the component (i.e., number of individuals that enter the frame of the camera). Limitations of the study design include, but are not limited to spatial and temporal scales (wildlife LAA or wildlife RAA); probability of detection (i.e., potential bias with non-random camera placement); camera model and trigger time; detectability of a species or individual based on size, movement speed, curiosity or wariness; and the possibility of camera failure (Fisher and Burton 2012; Popescu et al. 2012; Caravaggi et al. 2017; Steenweg et al. 2017). Overall, it should be recognized that data collected from remote cameras represent a sample of observations, which may contain potential biases that can affect inferences (Caravaggi et al. 2017)."	Alberta Transportation will be monitoring wildlife habitat use and movement within the LAA as part of the WMMP to address the concerned raised, which will help verify predictions of potential Project effects on wildlife movement and assess effectiveness of mitigation measures. In addition, Alberta Transportation will develop the WMMP with input from Indigenous groups. In December 2019, Alberta Transportation provided written responses to the MFN Technical Review dated June 2018, which included this concern in Question 12. Alberta Transportation will offer to meet with MFN regarding the written responses.		
Piikani Nation (PN)					
Alberta Transportation should provide supporting information to demonstrate that successful ungulate crossings can be achieved with the proposed cover materials for rip-rap and revise the significance rating to reflect the predicted measurable change in the abundance and distribution of ungulates in the LAA.	PN 2018 (CEAR #48); (cited in PN SR1 SCRT Aug 2014- Aug 2019; Specific Concern #16)	Alberta Transportation provided a discussion of ungulate crossing and rip-rap in the response to Round 1 CEAA Package 2, IR2-15. In addition, Alberta Transportation provided clarification of this concern including the request for a revision to the significance rating in response to PN SoC 40. The response to PN SoC 12 copied below for convenience: "The initial design for riprap in the diversion channel under the bridges of Range Road 242 and Highway 22 did not include additional fill material. However, through public consultation, stakeholders and Indigenous groups have shown concern for potential Project effects on wildlife movement; therefore, to help facilitate the movement of wildlife through the diversion channel under the bridges, the riprap in the diversion channel beneath the bridges will be filled with finer material on the bottom to create a more conducive substrate for wildlife to walk on (Clevenger 2011). Most crossable sections of the diversion channel will be soil that is vegetated with grasses.	At the meetings held on September 18-19, 2018, Alberta Transportation described the mitigation for wildlife listed in the wildlife assessment in the EIA, including wildlife friendly fencing; vegetated and gentle slopes; observing RAPs and setbacks during construction; and camera monitoring programs. Alberta Transportation will be monitoring wildlife habitat use and movement within the LAA as part of the WMMP to address the concerned raised, which will help verify predictions of potential Project effects on wildlife movement and assess effectiveness of mitigation measures (e.g., vegetated riprap). In addition, Alberta Transportation will develop the WMMP with input from Indigenous groups. In December 2019, Alberta Transportation provided written responses to the PN Technical Review dated June 2018, which included this concern in Question 40. Alberta Transportation will offer to meet with PN regarding the written responses.		



Table 15-1 Indigenous Group Views Related to Potential Project Effects on Wildlife Movement and Alberta Transportation's Responses

Views related to Potential Effects on Wildlife and Biodiversity	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps		
		An updated effects assessment is not required because the assessment conclusion for effects on wildlife movement would not change based on the information available. However, there is some uncertainty related to wildlife movement and how various species might respond to the filled riprap. A monitoring program using remote cameras will be designed to identify whether permanent features of the Project, such as the diversion channel, act as a barrier to wildlife movement, especially for ungulates (see EIA, Volume 3C, Section 2.10). A draft wildlife mitigation and monitoring plan is provided in Alberta Transportation's response to Round 1 CEAA Package 1, IR1-09, Appendix IR9-1.			
Samson Cree Nation (SCN)					
SCN identified a potential concern related to how the Project could impact regional movement of wildlife species, which would require	SCN 2018 (CEAR #52) (cited in SCN SR1 SCRT Oct 2016 - Sept 2019; Specific Concern #6)	The potential effects of the Project on wildlife movement are assessed in the EIA (see Volume 3A, Section 11.4.3 and Volume 3B, Section 11.3.3). In addition, Alberta Transportation has clarified proposed mitigation to facilitate wildlife movement in response to Round 1 CEAA Package 2, IR2-15.	Alberta Transportation will be monitoring wildlife habitat use and movement within the LAA as part of the WMMP to address the concerned raised, which will help verify predictions of potential Project effects on wildlife movement and assess effectiveness of mitigation measures. In addition, Alberta Transportation will		
evaluation beyond the spatial scale that would be typical for the EIA. SCN requests that Alberta Transportation demonstrate how it	specific concern no	The rationale for choosing the RAA spatial boundary to assess potential Project effects and cumulative effects on wildlife is provided in Alberta Transportation's response to Round 1 CEAA Package 2, IR2-12 and SCN Technical Review 6, copied below for convenience:	develop the WMMP with input from Indigenous groups, which will include a discussion of appropriate spatial scales to monitor wildlife movement. At the meeting held on November 26, 2019, Alberta Transportation offered to discuss the WMMP with SCN at their next meeting.		
plans to engage with SCN to identify an appropriate regional-scale approach to further evaluate its concerns regarding regional wildlife movement and effects within the SCN traditional territory.		"The RAA used in the assessment of effects on wildlife (Volume 3A and Volume 3B, Sections 11 of the EIA) provides an appropriate spatial boundary around the Project site (15 km) to address how Project residual effects may interact cumulatively with other past, present, or future projects. The rationale for choosing the RAA spatial boundary to assess potential Project effects and cumulative effects on wildlife is provided in Alberta Transportation's response to information request Round 1 CEAA Package 2, IR2-12, which states the following:	In November 2019, Alberta Transportation provided written responses to the SCN Technical Review dated June 2018, which included this concern in Question Alberta Transportation has offered to meet with SCN regarding the written responses.		
		"Project effects were assessed in the LAA (a 1 km buffer around the PDA), which is the area where the construction and operation of the Project could have direct or indirect effects on wildlife. The 15 km buffer around the PDA is the RAA, which is the spatial boundary in which Project residual effects could interact cumulatively with residual effects of other past, present, and future other projects. The size of the RAA is the average home range of a female grizzly bear, one of the largest ranging species found in the region. The RAA is designed to capture the average home range size of other species of management concern including species of cultural importance to Indigenous groups (e.g., elk, mule deer, coyote). The RAA includes representative land cover types that occur in the Foothills Parkland and Montane natural subregions including native grassland, shrubland, forests, and wetlands, which provide potential habitats for species of management concern and those of cultural importance. The rationale provided meets the requirements of the ElS Guidelines			
		species of management concern and those of cultural importance.			



Table 15-1 Indigenous Group Views Related to Potential Project Effects on Wildlife Movement and Alberta Transportation's Responses

Views related to Potential Effects on Wildlife and Biodiversity	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
		The RAA does not pose limitations to the accuracy of the assessment predictions for wildlife and biodiversity. Selecting an RAA based on an ecological boundary that encompasses a watershed or species management area would not increase the accuracy of assessment predictions on wildlife and biodiversity. In fact, in many cases, it would reduce the accuracy of the Project residual effects on other wildlife species assessed by diluting the effects with an overly large study area. Selection of a larger RAA based on an ecological boundary (e.g., watershed) would lower prediction confidence because the availability and resolution of data over a larger area is less.	
		Project effects on wildlife and biodiversity are predicted to occur near the PDA, and the proposed mitigation measures reflect that proximity. Additional measures would not be required to mitigate potential effects on any of the wildlife species being assessed farther out than the RAA boundary (i.e., direct or indirect Project effects are predicted to occur within 1 km of the PDA and potential cumulative effects are not expected to extend beyond 15 km), nor would they differ if a different boundary were selected."	





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Conformity IR2-16

Topic: Wildlife - Restricted Activity Periods

Sources:

EIS Guidelines Part 2, Section 6.1.8, 6.1.9; 6.2.3; 6.3.4

EIS Volume 3A, Section 11.4

Montana First Nation – Review of Springbank Off-Stream Reservoir EIA, June 2018 (CEAR # 51)

CEAA Information Requests Related to the Environmental Impact Statement Round 1 Part 2, IR2-16

Alberta Transportation Responses to IR Round 1, SR1 CEAA IR Package 2, June 14, 2019

INFC Round 1 IR Completeness Review, June 27, 2019

Context and Rationale

In CEAA Information Requests Related to the Environmental Impact Statement Round 1 Part 2, IR2-16, the Agency requested Alberta Transportation provide an updated project schedule reflecting which restricted access periods (RAPs) may be avoided and which may not be avoided, and if this level of detail is not possible, identify when, within the general project timeline, this information will be available and how this information will be shared with Indigenous groups.

As noted in the information request, the EIS Guidelines require the proponent to identify changes to key habitat for culturally important species and assess the effects of changes to the environment on Indigenous peoples, including on current use and physical and cultural



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heritage. Restricted activity periods may serve to protect species of cultural importance to Indigenous peoples.

In Alberta Transportation's response to IR2-16, Alberta Transportation indicates that due to year-round construction and avoidance with other RAPs, it is likely that activities will need to occur within the migratory bird, raptor, and Key Wildlife and Biodiversity Zones (KWBZ) RAPs; the overlap of these with the construction schedule will be determined when the schedule is finalized. Additional information is provided in Appendix IR9-1, Tables 6-1 and 6-3, which indicate that construction activities will be avoided during RAPs for KWBZ identified along the Elbow River (December 15 to April 30), and if construction during the RAP cannot be avoided, site-specific mitigation will be developed in consultation with AEP.

The response does not provide an overview of the overlap of the various RAPs for species of management concern, or provide an understanding of when this information will be available and how this information will be shared with Indigenous groups.

As referenced in the information request, Montana First Nation noted that Alberta Transportation appears to have prioritized the nesting migratory bird/raptor RAP (February 15 to August 31) and the Key Wildlife Biodiversity Zone (KWBZ) RAP (December 15 to April 30). This leaves a window for construction between September 1 to December 14 which overlaps with other RAPs for species such as the northern leopard frog (year-round) and grizzly bear (October 1 to April 30). Montana First Nation indicates that where the RAP cannot be avoided, a wildlife mitigation and monitoring plan should be developed for the KWBZ, and should be available to Montana First Nation so that potential effects can be understood and mitigations and monitoring can be in place prior to construction. Additionally, Montana First Nation noted that Indigenous communities should be notified if traditional species of concern are identified during pre-construction surveys.

A more thorough understanding of which restricted access periods are not likely to be avoided and associated mitigation and follow-up requirements, including notification to Indigenous communities, is required to understand potential impacts to wildlife species of cultural importance.

<u>Information Requests:</u>

- a) Provide a table that demonstrates all of the restricted access periods that construction may overlap, potential effects of constructing during each period, and the mitigations that would be in place should construction occur during this period.
- b) Describe when and how the finalized wildlife mitigation and monitoring plan will be shared with Indigenous groups.



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Response

a) Table 16-1 provides a summary of RAPs for each wildlife species or group, the potential Project effect associated with construction, and proposed mitigation that will be implemented if Project construction activities overlap a RAP.



Table 16-1 Summary of RAPs and Proposed Mitigation for each Wildlife Group or Species during Construction

Wildlife Group	Restricted Activity Period	Wildlife Species	Habitat Feature	Potential Project Effects	Mitigation Measures
Migratory Birds April 1-A	April 1-August 31	Horned grebe	Nest	Change in Habitat Change in Mortality Risk	Where possible, temporary workspaces and access roads will avoid wildlife features and native vegetation (shrublands, treed areas, wetlands) that contain potential habitat for migratory birds and wildlife species at risk.
					Temporary workspaces will be reclaimed using methods outlined in the Vegetation and Wetland Mitigation, Monitoring and Revegetation Plan (see Alberta Transportation's response to Round 1 CEAA Package 2, IR2-19, Appendix IR19-1).
					 Pre-construction surveys will be conducted to identify appropriate site-specific mitigation including but not limited to implementation of the recommended setback distance (100 m) for horned grebe (Gregoire 2014, pers. comm.).
	April 1-July 31	Western grebe	Nest	Change in HabitatChange in Mortality Risk	Where possible, temporary workspaces and access roads will avoid wildlife features and native vegetation (shrublands, treed areas, wetlands) that contain potential habitat for migratory birds and wildlife species at risk.
					Temporary workspaces will be reclaimed using methods outlined in the Vegetation and Wetland Mitigation, Monitoring and Revegetation Plan.
					 Pre-construction surveys will be conducted to identify appropriate site-specific mitigation including but not limited to implementation of the recommended setback distance (1,000 m) for western grebe (GOA 2018).
May 1	May 1-July 31	Yellow rail	Nest	Change in Habitat Change in Mortality Risk	Where possible, temporary workspaces and access roads will avoid wildlife features and native vegetation (shrublands, treed areas, wetlands) that contain potential habitat for migratory birds and wildlife species at risk.
					Temporary workspaces will be reclaimed using methods outlined in the Vegetation and Wetland Mitigation, Monitoring and Revegetation Plan.
					 Pre-construction surveys will be conducted to identify appropriate site-specific mitigation including but not limited to implementation of the recommended setback distance (350 m) for yellow rail (EC 2009).
	April 15-July 15	Long-billed curlew	Nest	Change in Habitat Change in Mortality Risk	Where possible, temporary workspaces and access roads will avoid wildlife features and native vegetation (shrublands, treed areas, wetlands) that contain potential habitat for migratory birds and wildlife species at risk.
					Temporary workspaces will be reclaimed using methods outlined in the Vegetation and Wetland Mitigation, Monitoring and Revegetation Plan.
					 Pre-construction surveys will be conducted to identify appropriate site-specific mitigation including but not limited to implementation of the recommended setback distance (200 m) for long-billed curlew (EC 2009).
	May 1-August 31	Common nighthawk	Nest	Change in HabitatChange in Mortality Risk	Where possible, temporary workspaces and access roads will avoid wildlife features and native vegetation (shrublands, treed areas, wetlands) that contain potential habitat for migratory birds and wildlife species at risk.
					Temporary workspaces will be reclaimed using methods outlined in the Vegetation and Wetland Mitigation, Monitoring and Revegetation Plan.
					 Pre-construction surveys will be conducted to identify appropriate site-specific mitigation including but not limited to implementation of the recommended setback distance (200 m) for common nighthawk (EC 2009).



Table 16-1 Summary of RAPs and Proposed Mitigation for each Wildlife Group or Species during Construction

Wildlife Group	Restricted Activity Period	Wildlife Species	Habitat Feature	Potential Project Effects	Mitigation Measures
	May 1-August 31	Olive-sided flycatcher	Nest	Change in HabitatChange in Mortality Risk	Where possible, temporary workspaces and access roads will avoid wildlife features and native vegetation (shrublands, treed areas, wetlands) that contain potential habitat for migratory birds and wildlife species at risk.
					Temporary workspaces will be reclaimed using methods outlined in the Vegetation and Wetland Mitigation, Monitoring and Revegetation Plan.
					 Pre-construction surveys will be conducted to identify appropriate site-specific mitigation including but not limited to implementation of the recommended setback distance (300 m) for olive-sided flycatcher (EC 2009).
	May 1-August 15	Loggerhead shrike	Nest	Change in HabitatChange in Mortality Risk	Where possible, temporary workspaces and access roads will avoid wildlife features and native vegetation (shrublands, treed areas, wetlands) that contain potential habitat for migratory birds and wildlife species at risk.
					 Temporary workspaces will be reclaimed using methods outlined in the Vegetation and Wetland Mitigation, Monitoring and Revegetation Plan.
					 Pre-construction surveys will be conducted to identify appropriate site-specific mitigation including but not limited to implementation of the recommended setback distance (400 m) for loggerhead shrike (EC 2009).
	May 1-August 31	Bank swallow	Nest (burrow)/ Colony	Change in HabitatChange in Mortality Risk	Where possible, temporary workspaces and access roads will avoid wildlife features and native vegetation (shrublands, treed areas, wetlands) that contain potential habitat for migratory birds and wildlife species at risk.
					Temporary workspaces will be reclaimed using methods outlined in the Vegetation and Wetland Mitigation, Monitoring and Revegetation Plan.
					 Pre-construction surveys will be conducted to identify active nests (burrows) and colonies. Although there is no specified recommended setback distance for bank swallow, a similar setback distance as for barn swallow (100 m) will be considered based on site conditions. Site-specific mitigation will be developed in consultation with ECCC, where required.
	May 1-August 31	Barn swallow	Nest/Colony	Change in HabitatChange in Mortality Risk	Where possible, temporary workspaces and access roads will avoid wildlife features and native vegetation (shrublands, treed areas, wetlands) that contain potential habitat for migratory birds and wildlife species at risk.
					Temporary workspaces will be reclaimed using methods outlined in the Vegetation and Wetland Mitigation, Monitoring and Revegetation Plan.
					 Pre-construction surveys will be conducted to identify appropriate site-specific mitigation including but not limited to implementation of the recommended setback distance (100 m) for barn swallow (Gregoire 2014, pers. comm.).
	May 1-August 31	Sprague's pipit	Nest	Change in HabitatChange in Mortality Risk	Where possible, temporary workspaces and access roads will avoid wildlife features and native vegetation (shrublands, treed areas, wetlands) that contain potential habitat for migratory birds and wildlife species at risk.
					Temporary workspaces will be reclaimed using methods outlined in the Vegetation and Wetland Mitigation, Monitoring and Revegetation Plan.
					• Pre-construction surveys will be conducted to identify appropriate site-specific mitigation including but not limited to implementation of the recommended setback distance (350 m) for Sprague's pipit (EC 2009).



Table 16-1 Summary of RAPs and Proposed Mitigation for each Wildlife Group or Species during Construction

Wildlife Group	Restricted Activity Period	Wildlife Species	Habitat Feature	Potential Project Effects	Mitigation Measures
	May 1-August 31	Baird's sparrow	Nest	Change in HabitatChange in Mortality Risk	Where possible, temporary workspaces and access roads will avoid wildlife features and native vegetation (shrublands, treed areas, wetlands) that contain potential habitat for migratory birds and wildlife species at risk.
					Temporary workspaces will be reclaimed using methods outlined in the Vegetation and Wetland Mitigation, Monitoring and Revegetation Plan.
					Pre-construction surveys will be conducted to identify active nests. There is no specified recommended setback distance for Baird's sparrow. As such, appropriate site-specific mitigation will be developed in consultation with ECCC, where required.
	May 1-August 31	Chestnut-collared longspur	Nest	Change in HabitatChange in Mortality Risk	Where possible, temporary workspaces and access roads will avoid wildlife features and native vegetation (shrublands, treed areas, wetlands) that contain potential habitat for migratory birds and wildlife species at risk.
					Temporary workspaces will be reclaimed using methods outlined in the Vegetation and Wetland Mitigation, Monitoring and Revegetation Plan.
					 Pre-construction surveys will be conducted to identify appropriate site-specific mitigation including but not limited to implementation of the recommended setback distance (200 m) for chestnut-collared longspur (EC 2009).
	May 1-August 31	McCown's longspur	Nest	Change in HabitatChange in Mortality Risk	Where possible, temporary workspaces and access roads will avoid wildlife features and native vegetation (shrublands, treed areas, wetlands) that contain potential habitat for migratory birds and wildlife species at risk.
					Temporary workspaces will be reclaimed using methods outlined in the Vegetation and Wetland Mitigation, Monitoring and Revegetation Plan.
					 Pre-construction surveys will be conducted to identify appropriate site-specific mitigation including but not limited to implementation of the recommended setback distance (200 m) for McCown's longspur (EC 2009).
	May 1-August 31	Bobolink	Nest	Change in HabitatChange in Mortality Risk	Where possible, temporary workspaces and access roads will avoid wildlife features and native vegetation (shrublands, treed areas, wetlands) that contain potential habitat for migratory birds and wildlife species at risk.
					Temporary workspaces will be reclaimed using methods outlined in the Vegetation and Wetland Mitigation, Monitoring and Revegetation Plan.
					 Pre-construction surveys will be conducted to identify appropriate site-specific mitigation including but not limited to implementation of the recommended setback distance (200 m) for bobolink (EC 2009).
	May 1-July 31	Rusty blackbird	Nest	Change in HabitatChange in Mortality Risk	Where possible, temporary workspaces and access roads will avoid wildlife features and native vegetation (shrublands, treed areas, wetlands) that contain potential habitat for migratory birds and wildlife species at risk.
					Temporary workspaces will be reclaimed using methods outlined in the Vegetation and Wetland Mitigation, Monitoring and Revegetation Plan.
					 Pre-construction surveys will be conducted to identify appropriate site-specific mitigation including but not limited to implementation of the recommended setback distance (300 m) for rusty blackbird (EC 2009).



Table 16-1 Summary of RAPs and Proposed Mitigation for each Wildlife Group or Species during Construction

Wildlife Group	Restricted Activity Period	Wildlife Species	Habitat Feature	Potential Project Effects	Mitigation Measures
Raptors	March 15-July 15	Golden eagleBald eaglePrairie falconPeregrine falcon	Nest	Change in Habitat Change in Mortality Risk	 Where possible, temporary workspaces and access roads will avoid wildlife features and native vegetation (shrublands, treed areas, wetlands) that contain potential habitat for sensitive raptors. Temporary workspaces will be reclaimed using methods outlined in the Vegetation and Wetland Mitigation, Monitoring and Revegetation Plan. Pre-construction surveys will be conducted to identify appropriate site-specific mitigation
	February 15-July 15	Great horned owl	Nest	Change in Habitat Change in Mortality Risk	 including but not limited to implementation of the recommended setback distance (1,000 m) for sensitive raptors (GOA 2018). Where possible, temporary workspaces and access roads will avoid wildlife features and native vegetation (shrublands, treed areas, wetlands) that contain potential habitat for great horned owl.
					 Temporary workspaces will be reclaimed using methods outlined in the Vegetation and Wetland Mitigation, Monitoring and Revegetation Plan. Pre-construction surveys will be conducted to identify appropriate site-specific mitigation including but not limited to implementation of a recommended setback distance (100 m) for active raptor nests that do not a have species-specific setback distance (GOA 2018).
	April 1-July 31	Short-eared owl	Nest	 Change in Habitat Change in Mortality Risk 	 Where possible, temporary workspaces and access roads will avoid wildlife features and native vegetation (shrublands, treed areas, wetlands) that contain potential habitat for short-eared owl. Temporary workspaces will be reclaimed using methods outlined in the Vegetation and Wetland Mitigation, Monitoring and Revegetation Plan. Pre-construction surveys will be conducted to identify appropriate site-specific mitigation including but not limited to implementation of the recommended setback distance (200 m) for short-eared owl (EC 2009).
	April 1-August 31	Osprey	Nest	 Change in Habitat Change in Mortality Risk 	 Where possible, temporary workspaces and access roads will avoid wildlife features and native vegetation (shrublands, treed areas, wetlands) that contain potential habitat for raptors. Temporary workspaces will be reclaimed using methods outlined in the Vegetation and Wetland Mitigation, Monitoring and Revegetation Plan. Pre-construction surveys will be conducted to identify appropriate site-specific mitigation including but not limited to implementation of the recommended setback distance (750 m) for osprey (GOA 2018).
Amphibians	Year round	 Northern leopard frog Western toad Western tiger salamander 	Breeding Wetland	Change in Habitat Change in Mortality Risk	 Pre-construction surveys will be conducted to identify amphibian species of management concern (SOMC) breeding wetlands and appropriate site-specific mitigation developed including but not limited to avoidance of amphibian active periods (April 15-September 30 for northern leopard frog) periods and implementation of recommended setback distances (100 m). If construction activities occur within 100 m of an amphibian SOMC breeding wetland during the breeding season (approximately April 15 to September 30), install silt fencing around the perimeter of the wetlands to prevent amphibians from moving into active construction areas. Any individuals encountered within the exclusion area will be removed to other suitable areas.



Table 16-1 Summary of RAPs and Proposed Mitigation for each Wildlife Group or Species during Construction

Wildlife Group	Restricted Activity Period	Wildlife Species	Habitat Feature		Potential Project Effects		Mitigation Measures
Mammals	Year round	Little brown myotis	Hibernacula/ Roosting Sites	•	Change in Habitat Change in Mortality Risk	•	There is no known overwintering habitat available in the Project development area (PDA) or wildlife LAA for little brown myotis. If a roost is found during other pre-construction surveys that overlap the active bat season (May-September), site-specific mitigation will be developed in consultation with ECCC.
	October 1-April 30	Grizzly bear	Den	•	Change in Habitat Change in Movement Change in Mortality Risk (e.g., increased bear- human conflict)	•	Where possible, temporary workspaces and access roads will avoid wildlife features and native vegetation (shrublands, treed areas, wetlands) that contain potential habitat for wildlife species at risk. Temporary workspaces will be reclaimed using methods outlined in the Vegetation and Wetland Mitigation, Monitoring and Revegetation Plan. There are no known hibernation (den) sites available in the PDA or wildlife LAA for grizzly bear. Pre-construction surveys will be conducted to identify hibernation sites (dens). If an active bear den is discovered, site-specific mitigation will be developed in consultation with ECCC and AEP. Revegetation along sections of the floodplain berm will allow bear passage along Elbow River. Wildlife-friendly fencing will be installed to allow bear passage. Waste will be stored in wildlife proof- containers and wildlife awareness training will be provided to staff on site to reduce human-bear conflict. All construction traffic will adhere to safety, road closure regulations, and other access measures and guidelines for the construction area and associated access roads. Personnel will not be permitted to have dogs at the construction site. Firearms are not permitted in Project vehicles or on the construction footprint, or at associated Project facilities. Incidents with wildlife will be reported to an Alberta Transportation representative. All bear sightings or encounters during construction will be reported to the environmental inspector(s) or designate and resolved by a wildlife resource specialist and the responsible regulatory agencies, if necessary.
	Year round	American badger	Den	•	Change in Habitat Change in Mortality Risk	•	Where possible, temporary workspaces and access roads will avoid wildlife features and native vegetation (shrublands, treed areas, wetlands) that contain potential habitat for wildlife species at risk. Temporary workspaces will be reclaimed using methods outlined in the Vegetation and Wetland Mitigation, Monitoring and Revegetation Plan. Pre-construction surveys will be conducted in areas of suitable habitat to identify active maternal dens during spring/summer or prior to snowfall to identify potential winter dens. If an active badger den is discovered, site-specific mitigation will be developed in consultation with ECCC and AEP. All construction traffic will adhere to safety, road closure regulations, and other access measures and guidelines for the construction area and associated access roads.



Table 16-1 Summary of RAPs and Proposed Mitigation for each Wildlife Group or Species during Construction

Wildlife Group	Restricted Activity Period	Wildlife Species	Habitat Feature	Potential Project Effects	Mitigation Measures
Wildlife Group KWBZ	Restricted Activity Period December 15-April 30	Wildlife Species Elk Mule deer White-tailed deer Grizzly bear	Habitat Feature Habitat use along the Elbow River within the KWBZ	Change in Habitat Potential sensory disturbance and displacement Change in Movement Change in Mortality risk (e.g., increased bear-human conflict)	 Where possible, construction activities during the RAP for the KWBZ identified along the Elbow River (December 15 to April 30) will be avoided or reduced. If construction activities are planned to occur within the KWBZ RAP, site-specific mitigation will be developed in consultation with AEP, which would include: Monitoring wildlife use within the KWBZ as part of the remote camera monitoring program described in the draft WMMP. Temporarily suspending activities if focal wildlife species (e.g., elk) are encountered within the KWBZ and construction footprint. Revegetating the floodplain berm with materials conducive to maintaining ungulate movement within the KWBZ. The section of reinforced concrete (approximately 250 m) closest to the Elbow River will be covered with topsoil and seeded with native grasses. The central portion of the floodplain berm includes approximately 550 m of exposed riprap, where sections will be filled with substrate finer than riprap, such as sand, gravel and vegetation to allow for more walkable sections. The south portion, furthest from the Elbow River, will be a 450 m earthen embankment vegetated with native grasses.
					 Waste will be stored in wildlife-proof containers and wildlife awareness training will be provided to on site staff to reduce human-wildlife conflict (e.g., bears that might be present during the latter part of the RAP ~ April).



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b) The draft WMMP has been developed for the entire PDA, including the KWBZ, and will be finalized following Project approval. Prior to Project approval, Alberta Transportation will engage with Indigenous groups in the development of the WMMP including, but not limited to, remote camera study design and participation in remote camera placement during implementation. In addition, as stated in Section 7.1.1.6 of the draft WMMP (Alberta Transportation's response to Round 1 CEAA Package 1, IR1-09), remote camera monitoring results will be made available to Indigenous groups and public stakeholders at the end of each monitoring year, and camera results will show the presence of certain traditional species of concern, such as elk, deer, and grizzly bear. The WMMP and the IPP will also outline opportunities for Indigenous groups to participate in monitoring activities, and the results of monitoring activities such as preconstruction nest surveys would be made available to Indigenous groups and public stakeholders.

REFERENCES

- EC (Environment Canada). 2009. Petroleum Industry Guidelines for Wildlife Species at Risk in the Prairie and Northern Region (Updated November 2011). Canadian Wildlife Service, Prairie and Northern Region, Edmonton, Alberta. 64 pp.
- GoA (Government of Alberta). 2018. Master Schedule of Standards and Conditions. Accessed on September 2019. Available at: https://open.alberta.ca/dataset/133e9297-430a-4f29-b5d9-4fea3e0a30c2/resource/aa3e5504-22c8-472d-8ab5-35b99c07b74a/download/masterschedstandardsconditions-dec18-2018.pdf.
- Gregoire, P. 2014. Best management practices for migratory birds. Senior Environmental Assessment Officer, Canadian Wildlife Service, Environment and Climate Change Canada, Prairie and Northern Region. Personal communication, email, August 20, 2014.

Conformity IR2-23

Topic: Navigation

Sources:

EIS Guidelines Section 6.3.5

EIS Volume 3A Section 12.4.2

Alberta Transportation Responses to CEAA Annex 2: A) Early Technical Issues, May 11, 2018

Transport Canada Comments on the EIS - June 18, 2018 (CEAR # 31)

CEAA Information Requests Related to the Environmental Impact Statement Round 1 Part 2, IR2-23



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Alberta Transportation Responses to IR Round 1, SR1 CEAA IR Package 2, June 14, 2019

Context and Rationale

In CEAA Information Requests Related to the Environmental Impact Statement Round 1 Part 2, IR2-23, the Agency required the proponent to provide additional information on current navigation practices on the Elbow River, potential project effects on navigation practices, and the proposed permanent portage. The cover letter to the information requests and the EIS Guidelines further direct the proponent to present points of disagreement between the views of Alberta Transportation and Indigenous groups, along with a description of efforts undertaken to reconcile these differences and a rationale for conclusions.

Alberta Transportation's response to IR2-23 reiterates information from the EIS on navigation practices, naming the types of boating that occur on the Elbow River. No further detail is provided on public navigation practices on the Elbow River. The response summarizes that Indigenous groups have identified the Elbow River as a transportation route and therefore important to culture and use. The response references responses to information requests pertaining to impacts to rights (IR2-1) and culture (IR2-2). These responses do not demonstrate thorough consideration of Indigenous groups' views on the interconnection between navigation, rights, culture, and use.

Information Requests:

- a) Describe current navigation practices of the Elbow River, including information on the frequency and timing of various navigation practices and the relative importance of the affected sections of the Elbow River to navigation practices on this and connected waterways.
- b) In responding to the conformity gaps identified pertaining to impacts to rights, culture, and traditional land and resource use, include consideration of the interconnection between navigation, rights, culture, and use.

Response

a) Alberta Transportation has contacted the Alberta Whitewater Association, Paddle Alberta and Alberta Slalom Canoe Kayak with a questionnaire regarding the frequency and timing of navigation practices on the Elbow River from Bragg Creek to the Glenmore Reservoir. Alberta Transportation received responses from the Alberta Whitewater Association and Paddle Alberta. Communications with First Nations and Métis communities regarding navigation are addressed in part (b) below.

Paddle Alberta provided a response from one of its local clubs in Table 23-1.



Table 23-1 Paddle Alberta Questionnaire Responses

	Question	Answer
1.	How frequently do your organization's members navigate the reach of the Elbow River between Bragg Creek and Glenmore Reservoir?	Semi-frequently
2.	Are you aware of how frequently other members of the public may navigate this section?	Somewhat
3.	What times of year do people typically navigate this reach of the river? or; at what flows to people typically navigate this reach of the river?	Spring and summer. medium water levels are ideal
4.	What type of vessels do users typically use to navigate this reach of the Elbow River?	Canoes and kayaks
5.	Are you aware of any natural or man-made obstructions in this reach that limit navigability?	No
6.	Are there any sections of the river where portage is necessary?	Not that I am aware



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Alberta Whitewater Association's responses are shown in Table 23-2.

Table 23-2 Alberta Whitewater Association Questionnaire Responses

	Question	Answer
1.	How frequently do your organization's members navigate the reach of the Elbow River between Bragg Creek and Glenmore Reservoir?	 There are technically three sections to this river run: Bragg Creek to Highway 22 bridge at Camp Kiwanis Highway 22 to Highway 8 Highway 8 to Glenmore Reservoir All of the runs would be classified as Grade I+ but with significant hazards that require intermediate to advanced paddling skills. There are a couple of rapids near Bragg Creek that could be classified as Class II. The Elbow River between Bragg Creek and the Glenmore Reservoir is not a highly used reach by our clubs or individuals. The main two reasons for this: The reach from Bragg Creek to Highway 22 runs through the TN Reserve and obtaining permission to run the river is challenging. This section is also plagued by lots of logjams and sweepers that make paddling trip through this section dangerous. Because the log jams can shift from season to season paddlers have to be constantly on the vigil for new hazards. The braided river channel flowing through a gravel bed in a flat plain creates this problem. There are other river runs in the Calgary area that either have easier and safer characteristics, (i.e., the Bow River, lower Highwood and lower Sheep Rivers) or have more challenging but safer characteristics (i.e., Kananaskis, upper Elbow, upper Highwood and Sheep Rivers, upper Red Deer River). Based on the character of the lower Elbow and the availability of other rivers either easier or harder that are all safer than this river, our groups only use the lower section from Highway 22 down to Highway 8 infrequently. We would estimate that the river would see the following number of users each day as outlined in Table 23-3 below.
2.	Are you aware of how frequently other members of the public may navigate this section?	See above
3.	What times of year do people typically navigate this reach of the river?; or; at what flows to people typically navigate this reach of the river.	The Elbow River has a consistent flow throughout the year. The high water season from June 1 to July 10.



Table 23-2 Alberta Whitewater Association Questionnaire Responses

	Question	Answer
4.	What type of vessels do users typically use to navigate this reach of the Elbow River:	 a) At high water? A: Canoes and Kayaks would be the normal boats used - 60 / 40 b) At low water? A: Canoes, Kayaks, Rafts, Tubes, Stand-Up Paddleboards - 30 / 20 / 20 / 10
5.	Are you aware of any natural or man-made obstructions in this reach that limit navigability?	The major obstructions that limit navigation are the log jams, sweepers and shifting channels.
6.	Are there any sections of the river where portage is necessary?	From year to year portages may be necessary around the log jams if they choke off the flow down one of the channels.



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Table 23-3 Estimated Users on the Elbow River

Reach	May Midweek	May Weekends	June Midweek	June Weekends	July Midweek	July Weekends	August Midweek	August Weekends	Sept. Midweek	Sept. Weekends
British Columbia to Highway 22	0 /day	2 /day	0 /day	2 /day	4 /day	10 /day	4 /day	10 /day	0 /day	2 /day
Highway 22 to Highway 8	2 /day	10 /day	4 /day	20 /day	6 /day	20 /day	6 /day	20 /day	2 /day	10 /day
Highway 8 to Glenmore Reservoir	2 /day	10 /day	4 /day	20 /day	8 /day	30 /day	8 /day	30 /day	2 /day	10 /day
Days in Month	22	9	22	8	22	9	22	9	21	9
Users per Month	n/a	286	n/a	512	n/a	936	n/a	936	n/a	182

Total Users per Year 2852

Note:

n/a = not applicable



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Alberta Transportation also notes The Alberta Whitewater Associations questionnaire response was accompanied by statements of concerns of navigation, fish passage, and a request to include recreational and environmental features into the design. Additionally, Alberta Whitewater Association responded on behalf of Alberta Slalom Canoe Kayak. Alberta Transportation will be arranging a meeting with the Alberta Whitewater Association to provide information on the Project and address their concerns.

It is Alberta Transportation's understanding that there are currently no physical barriers to navigation on the reach of the Elbow River between Bragg Creek and the Glenmore Reservoir; but, hinderances to navigation are present seasonally due to low water, where flows splay out across the braided channel creating shallow areas that require portage of watercraft. It is also noted that there are considerable hazards presented by woody debris and high energy currents that may limit navigability to more skilled paddlers.

A Project-specific field investigation was completed on October 22, 2014 whereby single person kayaks, guided by a local professional, navigated Elbow River from Bragg Creek to Glenmore Reservoir. The splayed-out channel profile created very shallow areas at low water requiring portage for approximately one-third of the total distance. This suggests that recreational navigation is not a common activity during periods of low water. On that day, the flow rate was recorded to be 7.8 m³/s at hydrometric station 05BJ004 at Bragg Creek, which implies that there was approximately 0.42 m of depth at the proposed diversion structure's service spillway location. That location could be navigated on that day, even though much of the reach could not be navigated.

During periods of higher water, the Elbow River is navigable, and Alberta Transportation has included measures in the Project to preserve the common right to navigation. While Alberta Transportation will provide a portage and post signage upstream and downstream of the diversion structure there would be no enforced exclusion measures that prevent individuals from navigating over the proposed diversion structure's service spillway. While not inviting the public to navigate through the diversion structure's service spillway, the structure has been designed to be reasonably safe for reasonably skilled navigators at flow rates up to 70 m³/s. This flow rate which corresponds to a 2-year flood on the Elbow River. When the Project is in flood operations, it is not safe to navigate through the diversion structure and would not be safe anywhere in this stretch of the Elbow River for any watercraft user under such conditions. Physical exclusion, such as a floating boom, have been considered not feasible at these flow rate because of water velocities and debris.

The open water season on the Elbow River occurs from April to November and mean-monthly flow rates for this period as recorded at Water Survey Canada hydrometric station 05BJ004 at Bragg Creek are provided in Table 23-4 alongside the average channel depth at the location of the diversion structure's service spillway under existing conditions and with the structure in place during dry operations.



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Table 23-4 Mean Monthly Open Water Flow and Channel Depth at the Proposed Diversion Structure Service Spillway under Existing Conditions and During Dry Operations

Month	Mean Monthly Flow (m³/s)	Flow Depth at the Proposed Service Spillway Location – Existing Conditions (m)	Flow Depth at the Service Spillway – with the Project (During Dry Operations) (m)
April	4.7	0.33	0.36
Мау	14.6	0.59	0.62
June	25.9	0.78	0.81
July	15.4	0.61	0.64
Aug	9.4	0.47	0.50
Sept.	8.1	0.44	0.47
Oct.	6.56	0.39	0.43
Nov.	4.8	0.33	0.37

Table 23-4 shows that depths through the service spillway are maintained and navigability is preserved with the Project should individuals chose to not use the portage. There will also not be a measurable change in channel depth at the diversion structure service spillway under existing conditions and during dry operations.

b) Indigenous groups have raised concerns about navigability of the Elbow River waterway following construction of the Project. Specifically, in their May 20, 2016 letter to Alberta Transportation the Siksika Nation identified the Elbow River as "a major transport corridor for Siksika Members and has been for millennia". In their May 30, 2016 letter to CEAA, Specific Concern #8, the Tsuut'ina Nation raised concern about how other uses of the Elbow River will be affected including for transportation. They also stated that they would like the river to be looked at as a navigable waterway. Alberta Transportation is considering the Elbow River as a navigable waterway and elected to "opt-in" to the Navigation Protection Act (see Alberta Transportation's response to CEAA's December 19, 2017 Annex 2 B Advice to the Proponent – Transport Canada, pg.158). As of June 2019, the Project will now be addressed under the Canadian Navigable Waters Act with similar considerations.

Some of the concerns have been tied to the original proposed land use for the Project which indicated no public access for some areas in the Elbow River (Volume 1, Section 1 of the EIA). As stated in Alberta Transportation's response to Round 1 NRCB IR113 part b), the updated principles for future land use for the PDA (provided in Round 1 NRCB IR2, Appendix IR2-1 and Round 1 CEAA Package 2 IR2-01, Appendix IR1-2) will not include any restrictions from the public using the current bed and shore of Elbow River. The updated land-use figure has been revised to show access to the main channel of Elbow River at the diversion structure. The draft principles for future land use has advanced since filing the responses to



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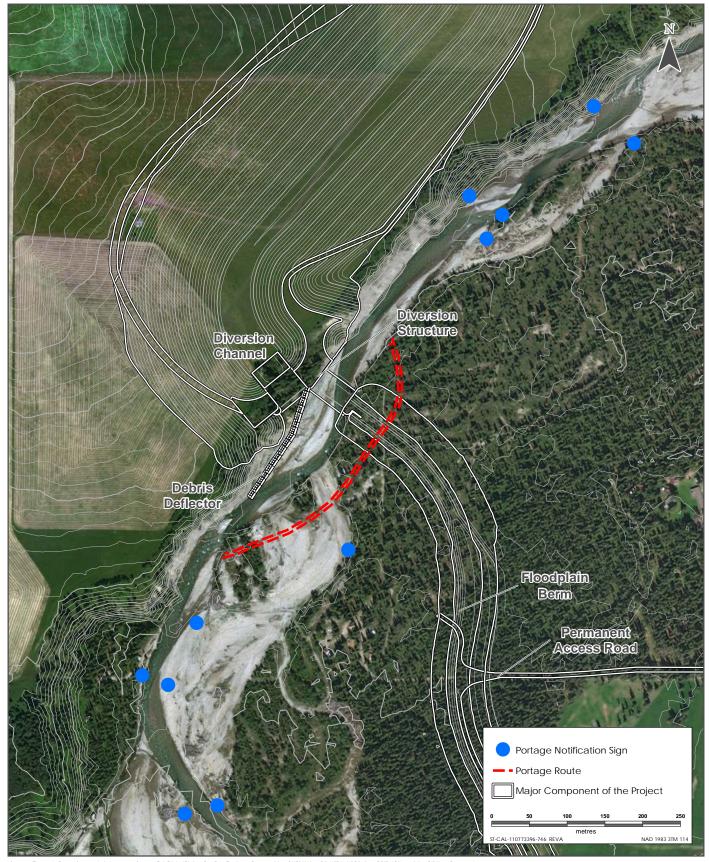
Round 1 IRs; see the response to CEAA Conformity IR2-09 for the updated principles for future land use.

The public will not be excluded from the main channel within the diversion structure, but the same hazards that currently exist on Elbow River may also be present within the spillway during select times of dry operation. This could include the accumulation of debris, and the formation of currents that may challenge inexperienced river users. There are very dangerous whitewater conditions on the Elbow River when flows are greater than a 2-year flood of 70 m³/s. At these flow rates, the banks are overtopped, woody debris is mobilized, sweepers are submerged, rapids form, and the bed becomes highly mobile. It is expected that only the most experienced and knowledgeable whitewater users would attempt to run the river in these conditions; and it is likely that few, if any, do.

Flood operations also create dangerous conditions at the diversion structure and persons must not attempt to navigate the service spillway during flood operations. A sign with flashing lights that is visible to 100 m will be placed upstream of the diversion structure to signal when flows are in excess of 70 m³/s and those operating vessels on the river should use the portage, rather than navigate the service spillway. The signage will include the text "Danger: Must Use Portage When Lights Flashing". The portage around the diversion structure and signage instructing those navigating the river to use the portage is intended to encourage persons to use the portage rather than navigate over the diversion structure's service spillway during dry operations (see Alberta Transportation's response to Round 1 NRCB IR113, Figure IR113-2 for the location of the permanent portage and signage locations, reproduced here as Figure 23-1).

The Project will not prevent navigation of the Elbow River waterway for flows up to a 2-year flood and, because an appropriately signed portage has been provided for use in all flow condition, it is anticipated that the Project will not have an impact on rights, culture, and traditional land and resource use, including the interconnection between navigation, rights, culture, and use.





iources: Thematic Data - Stantec U.d. Imagery: Source: Exil DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Aitbus DS, USOS, AeroGRID, IGN, and the GIS User Commun.



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Conformity IR3-19

<u>Topic:</u> Groundwater – Culturally Sensitive Groundwater Resources

Sources:

EIS Guidelines Part 2, Sections 6.1.4; 6.1.9; 6.2.2; 6.3.4

Piikani Nation – Technical Review of EIS, June 15, 2018 (CEAR #48)

CEAA Information Requests Related to the Environmental Impact Statement Round 1 Part 3, IR3-19

Alberta Transportation Responses to IR Round 1, SR1 CEAA IR Package 3, June 14, 2019

Context and Rationale

In CEAA Information Requests Related to the Environmental Impact Statement Round 1 Part 3, IR3-19, the Agency required the proponent to identify groundwater dependent traditional uses and culturally sensitive areas and describe pathways of effects, mitigation measures, and monitoring and follow-up.

As noted in the information request, the EIS Guidelines require the proponent to present information regarding groundwater, and assess effects of changes to the environment on Indigenous peoples. The cover letter to the information requests and the EIS Guidelines further direct the proponent to present points of disagreement between the views of Alberta Transportation and Indigenous groups, along with a description of efforts undertaken to reconcile these differences and a rationale for conclusions.

Alberta Transportation's response to IR3-19 presents Indigenous groups concerns on groundwater dependent traditional uses and culturally sensitive areas as discrete pieces of information. No discussion is presented regarding how these concerns were considered in the development or selection of mitigation measures or the assessment of effects. The response does not demonstrate consideration of the concerns raised by Piikani Nation in the source referenced in the information request.

Alberta Transportation's response to IR3-19 includes Appendix IR1-1. Specific Concerns and Response Tables included in this appendix list numerous concerns raised by Indigenous groups with respect to traditional uses and culturally significant resources that may be affected by changes to groundwater that are unresolved.



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Information Request:

a) Identify and discuss areas of disparity between the views and conclusions of Indigenous groups and Alberta Transportation regarding groundwater dependent traditional uses and culturally sensitive areas, efforts made to reconcile the disparities, and rationale for conclusions on matters for which disparity in views remains.

Response

a) Through the Indigenous Engagement Program for the Project, Alberta Transportation has provided numerous opportunities for Indigenous groups to share their views on potential effects on groundwater-dependent traditional uses and culturally sensitive areas, including through funding of TUS and facilitation of site visits. A detailed description of the engagement activities undertaken with each Indigenous group is provided in response to CEAA Conformity Package 2, IR2-01.

Alberta Transportation has consolidated and analyzed feedback received to date regarding Project-related effects on groundwater and changes to the environment on Indigenous peoples, including SoCs, engagement meetings, and TUS reports received. This information has been compiled into s SCRTs (provided in CEAA Conformity IR2-01, Appendix 1-2). The TUS conducted by Indigenous groups provide most of this information.

Table 19-1 presents concerns, issues and potential effects identified by Indigenous groups through the Indigenous Engagement Program for the Project (including TUS), items captured in the SCRTs, as well as technical reviews, SoCs or other material submitted to the CEAA. Table 19-1 also describes both Alberta Transportation's efforts to date and planned commitments to reconcile areas of disparity between the views and conclusions of Indigenous groups and Alberta Transportation regarding potential effects on groundwater-dependent traditional uses and culturally sensitive areas. Mitigation measures proposed by Alberta Transportation to reduce or avoid potential effects on groundwater, outlined below, may serve to mitigate effects on groundwater-dependent traditional uses and culturally sensitive areas.

Groundwater interactions with floodwater are examined in the EIA, Volume 3B, Section 5. Groundwater in the wetted area of the off-stream reservoir will interact with flood water during operations. Effects on groundwater are expected to be localized and short term in duration. Given the low permeability of the underlying sediments, the expected seepage out of the reservoir area will be toward Elbow River, from where the flood water originated.

Alberta Transportation has proposed mitigation measures to reduce or avoid potential effects on groundwater (see the EIA, Volume 4, Appendix C). The location of groundwater mitigation measures is in Table C-1, pages C.4 and C.5; and Table C-2, pages C.28 and C.35. These mitigation measures may also serve to reduce or avoid effects on groundwater dependent traditional uses and culturally sensitive areas.



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The proposed mitigation measures to reduce or avoid potential effects on groundwater include the following:

- Existing water wells within the reservoir footprint will be decommissioned and plugged off
 to prevent groundwater contamination and to prevent flood waters from infiltrating
 nearby water wells.
- During construction, the water management plan, which complies with regulatory requirements, will be implemented for managing dewatering and discharging of water on the construction site.
- Dewatering will be in accordance with the terms and conditions of the *Environmental Protection and Enhancement Act* approval conditions, and *Water Act* approval and the federal *Fisheries Act* and *Navigable Waters Protection Act*.
- During construction, silt fences and turbidity barriers will be used to control total suspended sediment (TSS) so that the water quality from care of water system discharges is equal to or better than the initial water quality. This will be monitored via frequent water quality testing.
- A Care of Water Plan will be developed by the contractor to manage dewatering and discharge of water on the construction site. At locations where flows from care of water operations are discharged into waterbodies, water quality will be tested at the discharge locations and the TSS will be monitored. Discharged water quality will be equal to or better than the initial water source.
- Water will be discharged in a manner to avoid erosion by using turbidity barriers, containment berms and settling ponds.
- Regional-scale effects on groundwater quality will be mitigated by allowing seepage in the diversion channel to infiltrate back into the subsurface or flow back into Elbow River by surface water drainage pathways.

There are areas of disparity that remain between Indigenous groups' views about potential effects on groundwater-dependent traditional uses and culturally sensitive areas and Alberta Transportation's conclusions. In particular, Indigenous groups have raised concerns about:

- potential effects on springs in the Project area during construction or a flood scenario
- potential effects on hydrology and hydrogeology of the Elbow River
- potential effects on groundwater and alluvial aquifers that could affect the drinking water for the Tsuut'ina Nation Reserve, including contaminants entering the groundwater from the reservoir
- concerns about the reliability of groundwater modelling
- concerns about loss or alteration of groundwater flow affecting wetland function



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Through the Indigenous Engagement Program for the Project, Alberta Transportation has provided information to Indigenous groups responding to these concerns. These are summarized in Table 19-1.

In particular, in response to Tsuut'ina Nation's concerns raised during the consultation process regarding groundwater, Alberta Transportation has completed additional work, which resulted in the Hydrogeology Technical Data Report (TDR) Update (Round 1 CEAA Package 3, IR3-14, Appendix IR14-1) that expands on the previous assessment presented in the EIA. The hydrogeology RAA was expanded to include the Tsuut'ina Nation Reserve and the numerical groundwater model was revised accordingly. Alberta Transportation met with Tsuut'ina Nation on September 17, 2019 and received their initial feedback on the updated hydrogeology assessment and will continue to meet with Tsuut'ina Nation to discuss their concerns regarding potential effects on groundwater.

Alberta Transportation is committed to working with Indigenous groups to try to seek mutually acceptable solutions to the issues, concerns or recommendations identified, including concerns regarding potential effects on groundwater-dependent traditional uses and culturally sensitive areas. The issues that remain unresolved will be tracked through Alberta Transportation's ongoing engagement.



Table 19-1 Indigenous Group Views on the Projects Potential Effects on Changes to Culturally Sensitive Groundwater Resources

Views related to Potential Effects on Changes to Culturally Sensitive Groundwater Resources	Source	Alberta Transportation's Response	Efforts to Consult/ Engage/Reconcile and Next Steps
Kainai First Nation/Blood Tribe (KFN)			
 KFN identified a natural spring in the PDA. KFN expressed concern with disruptions to natural springs and the potential for interaction between reservoir/flood water and groundwater in the PDA as a result of Project construction and in the event of a flood. KFN expressed concern about how direct/indirect loss or alteration of surface or groundwater flow patterns being measured with respect to wetland function. KFN requested "a water well survey of Tsuut'ina private water wells and monitor water levels" and noted, "since the majority of Tsuut'ina private water wells draw water from the upper weathered bedrock, it is possible construction dewatering could significantly affect available groundwater." KFN also noted that "Tsuut'ina First Nation have stated they are concerned about the Project's effect on their groundwater" and requested that potential effects on Tsuut'ina Nation's groundwater be adequately assessed. 	 KFN 2018 (CEAR # 47) (cited in KFN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #39) KFN TUS 2018 (CEAR #47) (cited in KFN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #44) KFN TUS 2018, pp. 19, 94 (CEAR #47) 	Springs in the off-stream reservoir area could interact with flood water that is retained during flood operations. Effects on springs in the off-stream reservoir area would be short term in duration. Mapped springs are situated near the outer edge of the reservoir and, as a result, any interactions between flood water and these springs are only expected during a design flood. Regional-scale effects on groundwater quality will be mitigated by allowing seepage in the diversion channel to infiltrate back into the subsurface, or flow back into Elbow River through surface water drainage pathways. During construction, silt fences and turbidity barriers will be used to control TSS so that the water quality from care of water system discharges is equal to or better than the initial water quality (frequent water quality testing will be conducted to confirm this). Groundwater in the wetted area of the off-stream reservoir will interact with flood water during operations. Effects on groundwater are expected to be localized and short term in duration. Given the low permeability of the underlying sediments, the expected seepage out of the reservoir area will be low and will flow toward the Elbow River, from where the flood water originated. Alberta Transportation has also committed to offset the loss of wetland	Alberta Transportation responded to KFN's TUS report on August 9, 2019 and met on October 17, 2019 to discuss the response. Mitigation proposed to reduce or avoid potential effects on groundwater, outlined in the body of this response, may serve to mitigate effects on groundwater dependent traditional uses and culturally sensitive areas. Alberta Transportation commits to offering to hold workshops with KFN to discuss mitigation measures.
		area and function in accordance with the Alberta Wetland Policy.	
Piikani Nation (PN)			
 Alberta Transportation should confirm and clarify if it has considered potential traditional groundwater use in any culturally sensitive areas and, if traditionally used, develop mitigative measures to protect these sensitive areas. The application did not appear to have assessed 	PN 2018 (CEAR#48) (cited in PN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #41)	Alberta Transportation has been engaged with PN since 2014 to understand how the Project potentially impacts rights, and traditional uses including offering and funding site visits and TUS studies. The TUS submitted by PN did not identify groundwater-dependent, traditionally used culturally sensitive areas, such as cabins, recreational sites, fishing, hunting, and plant gathering areas within the LAA that could be impacted by the Project.	PN Elders and knowledge holders participated in 14 days of site visits facilitated by Alberta Transportation. Results of the site visits were reported in the PN TUS study submitted to Alberta Transportation on February 22, 2017. The results of the TUS were considered in the EIA. Alberta Transportation will provide a written response to PN in December 2019 addressing the concerns and issues raised in the TUS and will offer to meet with PN regarding the written responses.
potential existence of groundwater-dependent, traditionally used culturally sensitive areas, such as cabins, recreational sites, fishing, hunting, and plant gathering areas within the LAA that could be impacted by the Project.		be impacted by the Froject.	In December 2019, Alberta Transportation provided written responses to the PN Technical Review and SoC dated June 2018, which included these concerns as Question 5. Alberta Transportation will offer to meet with PN regarding the written responses.
			Mitigation proposed to reduce or avoid potential effects on groundwater, outlined above, may serve to mitigate effects on groundwater dependent traditional uses and culturally sensitive areas.
			Alberta Transportation is committed to offering to meet with PN to discuss the concerns regarding potential effects groundwater dependent traditional uses and culturally sensitive areas and recommendations for mitigation.



Table 19-1 Indigenous Group Views on the Projects Potential Effects on Changes to Culturally Sensitive Groundwater Resources

Views related to Potential Effects on Changes to Culturally Sensitive Groundwater Resources	Source	Alberta Transportation's Response	Efforts to Consult/ Engage/Reconcile and Next Steps
 PN expressed concern for groundwater and stated that Project doesn't plan to line the reservoir, so any contaminants would likely seep into the groundwater system. PN noted that TN relies on the Elbow River and on the groundwater in the Elbow River Alluvial Aquifer for the reserve's drinking water. Additional monitoring is required to validate assessment predictions to better understand potential effects on groundwater quality and quantity in the RAA. Monitoring during construction and dry operation of the Project will be necessary to confirm the localized effects on groundwater surface water interaction. PN requests that Alberta Transportation consults with PN to inform and participate in monitoring activities related to culturally sensitive areas and considers incorporating the role groundwater plays in sustaining identified areas for monitoring and mitigation. PN requests Alberta Transportation conduct additional water quality sampling from more wells, long-term monitoring of more wells, updates PN of these results, and consults with PN about mitigation plans should there be unexpected effects on groundwater quality in the RAA. 	PN 2018 (CEAR #48) (cited in PN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #42, 43)	Given the low permeability of the underlying sediments, the expected seepage out of the reservoir area will be low and will flow toward the Elbow River, from where the flood water originated. Alberta Transportation has developed a Draft Groundwater Monitoring Plan (see Alberta Transportation's response to Round 1 CEAA Package 3, IR3-15, Appendix IR15-1). The Draft Groundwater Monitoring Plan outlines a tiered approach to groundwater monitoring, which reflects the variation in the timing and spatial extent of potential effects during the different Project phases (e.g., construction, dry operations, flood operations). The conceptual monitoring plan also outlines the frequency of monitoring and analytical parameters to be measured during monitoring events, both of which vary depending on the potential effects pathways during the different Project phases. Alberta Transportation is committed to Indigenous participation in the Project including through potential training and contracting opportunities. As such, Alberta Transportation is preparing an IPP for the Project. The goal of this IPP is to create training and contracting opportunities with Indigenous groups, including PN. These opportunities may include monitoring.	In December 2019, Alberta Transportation provided written responses to the PN Technical Review and SoC dated June 2018, which included these concerns as Questions 3, 4 and 5. Alberta Transportation will offer to meet with PN regarding the written responses. Mitigation proposed to reduce or avoid potential effects on groundwater, outlined above, may serve to mitigate effects on groundwater dependent traditional uses and culturally sensitive areas. Alberta Transportation is committed to offering to meet with PN to discuss the concerns regarding potential effects groundwater dependent traditional uses and culturally sensitive areas and recommendations for mitigation.
Siksika Nation (SN)			
SN expressed concerns about agricultural pesticides and herbicides, which end up in the river. How is this Project going to help avoid those impacts?	Meeting between SN and Alberta Transportation, April 26, 2018	 Volume 3A and 3B, Sections 5, 6, and 7 of the EIA assess groundwater, hydrology, and surface water, respectively. Without the Project, the same effects that occurred in 2013 will occur again. With the Project, the water flow through Elbow River would be decreased. The water that would be temporarily retained in the reservoir would have a chance to sit, and the debris and silt would settle before the water is released back into the river. The water will be tested as it is released back into Elbow River. Herbicides will be applied according to Environmental Code of Practice for Pesticides (GoA 2010): restrict herbicide mixing and loading within 30 m of an open body of water identify open bodies of water within the application sites mark or flag of open bodies of water that will not be clearly visible to the applicator 	s s Mitigation proposed to reduce or avoid potential effects on groundwater, outlined above, may serve to mitigate effects on groundwater dependent traditional uses and culturally sensitive areas. Alberta Transportation is committed to offering to meet with SN to discuss the concerns regarding potential effects groundwater dependent traditional uses and culturally sensitive areas and recommendations for mitigation.



Table 19-1 Indigenous Group Views on the Projects Potential Effects on Changes to Culturally Sensitive Groundwater Resources

Views related to Potential Effects on Changes to Culturally Sensitive Groundwater Resources	Source	Alberta Transportation's Response	Efforts to Consult/ Engage/Reconcile and Next Steps					
Stoney Nakoda Nations (SNN)								
 SNN is concerned about the hydrology of the SR1 area. In particular cited of the Elbow River vs. groundwater impacts. SNN has expressed concern about impacts from SR1 to groundwater as well as surface water. SNN stated: "the Stoney have a historical and legal stance on water" and "wanted to acknowledge that point as part of the work on SR1." 	Meeting with SNN, Alberta Transportation and CEAA, September 13- 14, 2017 (cited in SNN SR1 SCRT Aug 2014- Aug 2019; Specific Concern #17) Meeting with SNN and Alberta Transportation (September 14, 2017)	The residual effects on groundwater quantity from the Project are assessed as not significant because they would not decrease the yield of groundwater supply wells to the point where they can no longer be used. The residual effects on groundwater quality from the Project are assessed as not significant because changes in groundwater quality at existing wells would not deteriorate to the point where it becomes non-potable or cannot meet the Guidelines for Canadian Drinking Water Quality for a consecutive period exceeding 30 days (for those parameters which don't already, under existing conditions, exceed those guidelines). Effects to groundwater would be limited to the LAA. Given the low permeability of the underlying sediments, the expected seepage out of the reservoir area will be low and flow will be toward the Elbow River, from where the flood water originated.	On March 23, 2018, Alberta Transportation sent detailed responses to Specific Concerns raised to date by providing a copy of Table 7-4 SR1 Project Specific Concerns and Responses - Stoney Nakoda Nations from the March 2018 EIA. Alberta Transportation has met with SNN to provide information and discuss potential effects of the Project on hydrology and the proposed mitigation measures. At the meeting held on June 4, 2018, Stantec showed figures to help explain the hydrology of the SR1 Project area. Alberta Transportation also explained that the natural clay till cap would act as a natural barrier and not allow flood water to mix with groundwater. At the meeting held on September 13, 2018, Alberta Transportation responded that hydrology information had been shared in Sections 3A and 3B of the EIA. Mitigation proposed to reduce or avoid potential effects on groundwater, outlined above, may serve to mitigate effects on groundwater dependent traditional uses and culturally sensitive areas. Mitigation proposed to reduce or avoid potential effects on hydrology are provided in the EIA, Volume 4, Appendix C, pages C.5 and C.28 and include mitigation measures for change in hydrological regime beyond the range evident in the historical record; change in sediment transport dynamics; and change in channel morphology. Alberta Transportation is committed to offering to meet with SNN to discuss the concerns regarding potential effects groundwater-dependent traditional uses and culturally sensitive areas and recommendations for mitigation.					
Tsuut'ina Nation (TN)								
TN expressed concerns that the Project will affect water flow on the TN reserve, including reducing the flow as well as affecting wells, springs and underground drinking water.	 TN TUS 2018, p.16 Letter from TN to CEAA, May 30, 2016; Meeting between TN and Alberta Transportation, August 8, 2018; Letter from TN to Alberta Transportation, February 28, 2019; (cited in TN SR1 SCRT Aug 2014 - Aug 2019; Specific Concern #8) TN 2018 (CEAR#50) 	In response to TN's concerns regarding groundwater, Alberta Transportation has expanded on the previous hydrogeological assessment (EIA, Volume 4, Appendix I) in the Hydrogeology TDR Update (see Alberta Transportation's response to Round 1 CEAA Package 3, IR3-14, Appendix IR14-1).	Alberta Transportation has held multiple meetings with TN to discuss concerns related to potential effects to groundwater and wells and drinking water on the TN reserve. Alberta Transportation has updated the hydrogeological assessment in response to TN concerns. Results of the updated assessment have been discussed with TN, most recently on					
 The Elbow River is an important source of drinking water as it is connected to the groundwater on their reserve. 		Changes to the groundwater assessment include:	September 17, 2019.					
 TN identified Elbow River as a source of drinking water and noted the importance of the river's connection to ground water. TN also indicated that they depend on the groundwater in the Elbow River Alluvial Aquifer for the reserves' domestic drinking water. TN indicated that any potential contamination or change to the flow of the Elbow River is likely to contaminate this aquifer. TN noted that there are over 1,500 wells on the reserve. 		 Expansion of the hydrogeology (groundwater) RAA to encompass areas south of Elbow River and all areas of the TN Reserve that are within the Elbow River watershed. The groundwater models are updated with additional hydrogeologic information from areas south of Elbow River and on the TN Reserve. This model characterizes the underlying geologic units and groundwater flow regime for the expanded RAA. 	On March 23, 2018, Alberta Transportation sent detailed responses to Specific Concerns raised to date by providing a copy of Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation from the March 2018 EIA. In a letter dated July 20, 2018, Alberta Transportation advised TN that, based on the comments by PGL Environmental, they are revisiting the hydrogeological modelling.					



Table 19-1 Indigenous Group Views on the Projects Potential Effects on Changes to Culturally Sensitive Groundwater Resources

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	Views related to Potential Effects on Changes to Culturally Sensitive Groundwater Resources	Source	Alberta Transportation's Response	Efforts to Consult/ Engage/Reconcile and Next Steps		
	TN has observed groundwater bubbling up on their reserve lands, including around the Redwood Meadows area as it flows back from the Elbow River. Should the		In total, 4,250 well records were screened to remove records with no usable information. 1,893 well records remained and were used to reinterpret and update the assessment for the expanded RAA.	At the meeting held on August 8, 2018, Alberta Transportation provided an explanation of the additional work being done on the hydrogeological model.		
	water in either the surface or the groundwater system become contaminated as a result of a flood event, there is a real risk that the Project's infrastructure will facilitate		In addition, some model parameters have been updated and adjusted in the numerical groundwater model based on requests from TN and AEP. The numerical model was recalibrated using additional data from south of the Elbow River and on the TN Reserve. Additional data south of the river included:	Alberta Transportation responded to the TN's TUS report on November 22, 2018 and met on December 6, 2019 to discuss the response. In December 2019, Alberta Transportation provided written responses to		
	the spread of these materials onto the TN reserve. TN is concerned that the Project may impact groundwater in the Elbow River Alluvial Aquifer. Water			the TN Technical Review submitted May and July 2018, which included these concerns as Question 3-8. Alberta Transportation will offer to meet with TN regarding the written responses.		
	stored in the Reservoir may cause an increase in aquifer		water well drilling records and lithological informationgroundwater level data	Mitigation proposed to reduce or avoid potential effects on		
	pressures, altering local groundwater flow regime.		 mapped groundwater spring locations 	groundwater, outlined above, may serve to mitigate effects on		
	TN stated that the EIS does not evaluate groundwater or aquifer use on TN lands. The revised EIA also does not		regional geological and hydrogeological reports	groundwater-dependent traditional uses and culturally sensitive areas.		
	consider which aquifers are used by TN for potable water		LiDAR elevation data	At the request of Indigenous groups, Alberta Transportation will fund and participate in a ceremony prior to the start of construction (to show		
	and how these aquifers interact with the Elbow River. The result is that potential impacts to TN's rights and interests, including those briefly touched on above, remain		Calibration metrics were improved across the model domain. Residual statistics from steady-state calibration improved as follows:	respect for the spirit of the water). Alberta Transportation is committed to offering to meet with TN to discuss		
	unknown.		mean residual statistics decreased from 9.7% for the previous model calibration to 2.8% for the expanded model and was much lower than the recommended 10% threshold	the concerns regarding potential effects groundwater dependent traditional uses and culturally sensitive areas and recommendations for mitigation.		
			the correlation coefficient between observed and simulated heads improved from 0.95 to 0.99			
			New model simulations of dry and flood operations were undertaken.			
	TN expressed concern about how direct/indirect loss or alteration of surface or groundwater flow patterns being measured with respect to wetland function.	• TN 2018 (CEAR # 50) (cited in TN SR1 SCRT Aug 2014 - Aug 2019;	Springs in the off-stream reservoir area could interact with flood water that is retained during flood operations. Effects on springs in the off-stream reservoir area would be short term in duration.	Alberta Transportation has held multiple meetings with TN to discuss concerns related to potential effects to groundwater and wells and drinking water on the TN reserve. Alberta Transportation has updated the		
	TN expressed concern about potential effects of flood water on natural springs, specifically effects on ground water when a spring is flooded and covered up.	Specific Concern #51)Letter from TN to CEAA, May 30, 2019	Regional-scale effects on groundwater quality will be mitigated by allowing seepage in the diversion channel to infiltrate back into the subsurface, or flow back into the Elbow River via surface water drainage	hydrogeological assessment in response to TN concerns. Results of the updated assessment have been reviewed with TN, most recently on September 17, 2019.		
	TN is concerned about impacts to spring and groundwater, including contamination and barriers to access at traditional gathering sites.	Letter from TN to Minister of Infrastructure and Transportation, May 18, 2017 • Letter from TN to AEP Nov 1, 2017 • Letter from TN to Alberta Transportation February 28, 2019 • Meeting between TN and Alberta Transportation, October 11, 2018	Letter from TN to Minister of Infrastructure and Transportation, May 18, 2017 Letter from TN to AEP Nov 1, 2017 Albeet Plan 1R3-	Letter from TN to Minister of Infrastructure and Transportation, pathways. During co to control TSS so that discharges is made e	pathways. During construction, silt fences and turbidity barriers will be used to control TSS so that the water quality from care of water system discharges is made equal to or better than the initial water quality by carrying out frequent water quality testing.	On March 23, 2018, Alberta Transportation sent detailed responses to Specific Concerns raised to date by providing a copy of Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation from the March 2018 EIA.
	TN stated that springs are more important than flows. There is potential for springs to be plugged up during construction. If there is no monitoring plan, no baseline, people will get sick.			Alberta Transportation has developed a Draft Groundwater Monitoring Plan (see Alberta Transportation's response to Round 1 CEAA Package 3, IR3-15, Appendix IR15-1). The Draft Groundwater Monitoring Plan outlines a	At the meeting held on August 8, 2018, Alberta Transportation provided an explanation of the additional work being done on the hydrogeological model.	
	TN expressed concerns about effects on groundwater and springs as a result of the Project, including the potential for water contamination and effects on access at traditional gathering areas. TN added that the construction of the diversion area will have an effect on springs.		tiered approach to groundwater monitoring, which reflects the variation in the timing and spatial extent of potential effects during the different Project phases (e.g., construction, dry operations, flood operations). The conceptual monitoring plan also outlines the frequency of monitoring and analytical parameters to be measured during monitoring events, both of which vary depending on the potential effects pathways during the different Project phases.	At the meeting held on October 11, 2018, Alberta Transportation provided an update on the work being done on the hydrogeologic model.		
	TN is concerned that there is no plan to line the reservoir, which causes concerns that any contaminants would seep into the groundwater.					



Table 19-1 Indigenous Group Views on the Projects Potential Effects on Changes to Culturally Sensitive Groundwater Resources

Views related to Potential Effects on Changes to Culturally Sensitive Groundwater Resources	Source	Alberta Transportation's Response	Efforts to Consult/ Engage/Reconcile and Next Steps
	Meeting between TN and Alberta Transportation February 21, 2019; (cited in TN SR1 SCRT Aug 2014 - Aug 2019; Specific Concern #60) Meeting between TN and Alberta Transportation, October 11, 2018 TN TUS 2018 Letter from TN to CEAA, May 30, 2016 (cited in TN SR1 SCRT Aug 2014 - Aug 2019; Specific Concern #62)	Groundwater in the wetted area of the off-stream reservoir will interact with flood water during operations. Effects on groundwater are expected to be localized and short term in duration. Given the low permeability of the underlying sediments, the expected seepage out of the reservoir area will be low and flow will be toward the Elbow River, from where the flood water originated. Alberta Transportation has also committed to offset the loss of wetland area and function in accordance with the Alberta Wetland Policy.	On November 23, 2018, Alberta Transportation provided its report, Response to TN TLRU Information including Mitigation Table. In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA for surface water, groundwater, hydrogeology, and hydrology, and how potential contaminant-related effects will be mitigated. Alberta Transportation also provided the mitigation measures proposed in the EIA for traditional use, including development of a land use plan. Alberta Transportation also met with TN December 6, 2018 to discuss the response and mitigation table. At the meeting held on February 21, 2019, Alberta Transportation detailed the additional work that has been done with the hydrogeological model. In a letter dated June 18, 2019, Alberta Transportation further provided an update on the additional hydrogeological modelling done. Mitigation proposed to reduce or avoid potential effects on groundwater, outlined above, may serve to mitigate effects on groundwater-dependent traditional uses and culturally sensitive areas.
			Alberta Transportation is committed to offering to meet with TN to discuss the concerns regarding potential effects groundwater dependent traditional uses and culturally sensitive areas and recommendations for mitigation.
TN disagrees with the proponent's assumption that there will be no impacts to TN's ability to access groundwater as "the Project will not decrease the yield of groundwater supply wells to the point where they can no longer be used". Impacts to TN use of groundwater are not limited to a complete loss of access. Impacts can	 TN 2018 (CEAR # 50) Meeting between TN and Alberta Transportation, October 11, 2018 (cited in TN SR1 SCRT Aug 2014 - Aug 	In response to TN's concerns, the hydrogeology RAA has been expanded to include areas south of Elbow River. Revised maps of the geologic/hydrogeologic information used (including monitoring wells, geotechnical boreholes, and domestic well information) in the expanded RAA are in Section 3 of the Hydrogeology TDR Update (see Alberta Transportation's response to Round 1 CEAA Package 3, IR3-14, Appendix	Alberta Transportation has held multiple meetings with TN to discuss concerns related to potential effects to groundwater and wells and drinking water on the TN reserve. Alberta Transportation has updated the hydrogeological assessment in response to TN concerns. Results of the updated assessment have been reviewed with TN, most recently on September 17, 2019.
also result from changes to the quality and quantity of groundwater. As such, the proponent's assessment is incomplete.	2019; Specific Concern #60)	IR14-1). The numerical groundwater model has been revised in accordance with	Alberta Transportation will work with TN to identify appropriate groundwater monitoring requirements for wells on TN reserve lands.
TN stated that they do not have confidence that the model is making accurate predictions for groundwater on the reserve.		the expanded RAA. Additional data have been incorporated into the model, including water levels from wells that were used to calibrate the updated model. Section 4 of the Hydrogeology TDR Update (see Alberta Transportation's response to Round 1 CEAA Package 3, IR3-14, Appendix IR14.1) placetimes the updated model and a pilipaties.	On March 23, 2018, Alberta Transportation sent detailed responses to Specific Concerns raised to date by providing a copy of Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation from the March 2018 EIA.
Impacts to groundwater resources have not been assessed on TN lands.		IR14-1) describes the updated model and calibration. The results confirm the conclusions in the EIA, Volume 3A, Section 5 and Volume 3B, Section 5: effects an groundwater would be limited to grow	At the meeting held on August 8, 2018, Alberta Transportation provided an explanation of the additional work being done on the
Hydrogeologic model does not include TN lands.		Volume 3B, Section 5; effects on groundwater would be limited to areas north of Elbow River near Project components including the diversion	hydrogeological model.
 TN expressed concerns related to SR1 on TN's ground and surface water and groundwater effects on TN land. Construct water well survey of TN private water wells and 		channel and off-stream reservoir area. Effects on groundwater do not extend laterally southward beyond the Elbow River valley and, in turn, are not expected on TN Reserve 145.	At the meeting held on October 11, 2018, Alberta Transportation provided an update on the work being done on the hydrogeologic model.
monitor prior to and during construction and dry operations, to assess well interference.		The expected on its reserve i let	On November 23, 2018, Alberta Transportation provided its report, Response to Tsuut'ina Nation Traditional Land and Resource Use
Groundwater model fails to predict potential effects on TN IR 145 and contradicts current understanding of the Elbow River watershed.			Information including Mitigation Table. In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA for surface water, groundwater, hydrogeology, and hydrology, and how potential contaminant-related effects will be mitigated. Alberta



Table 19-1 Indigenous Group Views on the Projects Potential Effects on Changes to Culturally Sensitive Groundwater Resources

Views related to Potential Effects on Changes to Culturally Sensitive Groundwater Resources	Source	Alberta Transportation's Response	Efforts to Consult/ Engage/Reconcile and Next Steps	
The perimeter boundary conditions are not well described. The southern boundary should be expanded to include TN IR 145 and numerical groundwater reconstructed.			Transportation also provided the mitigation measures proposed in the EIA for traditional use, including development of a land use plan. Alberta Transportation also met with TN on December 6, 2018 to discuss the response and mitigation table.	
 The groundwater model must be improved to be capable of predicting effects on TN and adjacent private lands. There are potable water wells on TN land 			At the meeting held on February 21, 2019, Alberta Transportation detailed the additional work that has been done with the hydrogeological model.	
immediately south of the proposed diversion channel where the groundwater model predicts a permanent decrease in hydraulic head of 5.5 m during dry			In a letter dated June 18, 2019, Alberta Transportation further provided an update on the additional hydrogeological modelling done.	
conditions. The groundwater model as designed, fails to adequately predict potential changes to groundwater in TN wells due to the presence of the diversion structure.			In December 2019, Alberta Transportation provided written responses to the TN Technical Review dated June 2018, which included the groundwater concerns as Annex A, Questions 1 through 9, Alberta Transportation will offer to meet with TN regarding the written responses.	
TN has concluded that the hydrogeological impact assessment does not assess potential groundwater impacts to IR 145, except for a small portion of land at the north end of IR 145 around Highway 22. The RAA			Mitigation proposed to reduce or avoid potential effects on groundwater, outlined above, may serve to mitigate effects on groundwater-dependent traditional uses and culturally sensitive areas.	
which coincides with the boundaries of the groundwater model, does not encompass IR 145. Any predictions presented in the EIA that are based on this groundwater model do not predict potential groundwater impacts on IR145.			Alberta Transportation is committed to offering to meet with TN to discuss the concerns regarding potential effects groundwater dependent traditional uses and culturally sensitive areas and recommendations for mitigation.	
 In addition to the new modelling, TN also maintains that additional data needs to be collected, including from dedicated monitoring wells on TN reserve, to properly calibrate the model. 				
Ermineskin Cree Nation (ECN)				
 ECN expressed concern about how direct/indirect loss or alteration of surface or groundwater flow patterns being measured with respect to wetland function. Run numerical groundwater model simulations that predict potential effects from construction dewatering. 	• ECN 2018 (CEAR # 46) (cited in ECN SR1 SCRT Oct 2016 – Sept 2019; Specific Concern #20, 21)	Regional-scale effects on groundwater quality will be mitigated by allowing seepage in the diversion channel to infiltrate back into the subsurface, or flow back into Elbow River through surface water drainage pathways. During construction, silt fences and turbidity barriers will be used to control TSS so that the water quality from care of water system	In December 2019, Alberta Transportation provided written responses to the ECN Technical Review dated June 2018, which included these concerns as Annex A, Question 7 and Annex C, Question 2, Alberta Transportation will offer to meet with ECN regarding the written responses.	
		discharges is equal to or better than the initial water quality (frequent water quality testing will be conducted to confirm this).	Mitigation proposed to reduce or avoid potential effects on groundwater, outlined above, may serve to mitigate effects on groundwater-dependent traditional uses and culturally sensitive area Construction dewatering, if required, would be done locally and	
		Groundwater in the wetted area of the off-stream reservoir will interact with flood water during operations. Effects on groundwater are expected to be localized and short term in duration.		
		The need for temporary construction dewatering will be evaluated during construction planning and will be determined based on the construction method to be employed at a given location, local water table conditions at the time of construction, the timeframe for construction, and the locations and depth of excavations (or other subsurface disturbance) required.	according to the terms and conditions of dewatering licenses issued b AEP (where applicable and if required) and best management practices. Mitigation measures are discussed in Volume 3, Section 5.4.2 of the EIA. With mitigation measures in place, effects are expected to low in magnitude.	
		Alberta Transportation has also committed to offset the loss of wetland area and function in accordance with the Alberta Wetland Policy.		



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REFERENCE

GoA (Government of Alberta). 2010. Environmental Code of Practice for Pesticides. Alberta Queen's Printer. Edmonton. 30 pages.

Conformity IR3-29

Topic: Fish and Fish Habitat – Fish Stranding

Sources:

EIS Guidelines Part 2, Sections 6.1.5; 6.3.1

EIS Volume 3B, Section 8.2.4

EIS Volume 3C, Section 1.3.5.1

Samson Cree Nation – Springbank Off-Stream Reservoir Project Written Submission – June 25, 2018 (CEAR #52)

Piikani Nation – Technical Review of EIS, June 15, 2018 (CEAR #48)

Fisheries and Oceans Canada – Comments on the EIS, June 19, 2018 (CEAR #28)

CEAA Information Requests Related to the Environmental Impact Statement Round 1 Part 3, IR3-29

Alberta Transportation Responses to IR Round 1, SR1 CEAA IR Package 3, June 14, 2019

DFO Round 1 IR Completeness Review Comments, June 28, 2019

Context and Rationale

In CEAA Information Requests Related to the Environmental Impact Statement Round 1 Part 3, IR3-29, the Agency required the proponent to provide additional detail related to fish stranding, including information on potential effects to fish trapped in the reservoir (specifically sensitive salmonid species), mitigation measures to reduce effects to fish should stranding occur, natural law implications, and follow up and monitoring programs.

As noted in the information request, the EIS Guidelines require the proponent to assess the effects of changes to the environment on fish and fish habitat and on Indigenous peoples. The cover letter to the information requests and the EIS Guidelines further direct the proponent to present points of disagreement between the views of Alberta Transportation and Indigenous groups, along with a description of efforts undertaken to reconcile these differences and a rationale for conclusions.



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Alberta Transportation's response to IR3-29 does not provide additional evidence to support findings related to potential effects to fish trapped in the reservoir and does not demonstrate that the full suite of pathways of effects to fish trapped in the reservoir have been considered. The response does not demonstrate consideration of potential effects to sensitive salmonid species. The response identifies mitigation measures associated with monitoring and fish rescue. Mitigation measures specific to the full suite of pathways of effects to fish trapped in the reservoir are not identified.

Alberta Transportation's response to IR3-29 presents no discussion of Indigenous groups' views pertaining to the Project's implications for interspecies relationships and natural law and associated effects of the Project on Indigenous peoples.

Information Request:

- a) Present evidence to support findings related to the potential effects of changes in water quality and threats of predation. Include a discussion of mitigation measures associated with each of the pathways of effects to fish trapped within the reservoir and the effectiveness of these mitigation measures.
 - Present a discussion specific to potential effects to and mitigation for sensitive salmonid species of fish that could be trapped in the reservoir.
- b) Identify and discuss areas of disparity between the views and conclusions of Indigenous groups and Alberta Transportation regarding the Project's implications for interspecies relationships and natural law and associated effects of the Project on Indigenous peoples, efforts made to reconcile the disparities, and rationale for conclusions on matters for which disparity in views remains.

Response

a) The potential effects of fish entrained in the reservoir (including salmonid species), effects pathways for entrained fish, mitigation, and mitigation effectiveness are presented in Table 29-1. Additional considerations related to fish rescue, temperature and dissolved oxygen, and predation follow in Table 29-1. This response is an expansion on Alberta Transportation's response to Round 1 CEAA Package 3, IR3-29.



Table 29-1 Fish and Fish Habitat Pathway of Effects as it Relates to Water Retention in the Reservoir and Reservoir Water Drawdown

Project Component and Physical Activities	Relevant Pathway of Effects	Relevant Potential Effects on Fish (Including Salmonid Species)	Mitigation	Effectiveness of Mitigation	Residual Effects
reservoir The off-stream du flo	Fish species may be swept into the reservoir during flood operation and remain within the reservoir until water can be released through the low-level outlet and unnamed creek to Elbow River.	Change in temperature during water retention in reservoir Water retention in the reservoir might cause an increase in water temperature relative to the Elbow River. An increase in temperature can induce physiological stress and behavioral changes in fish if the increases occur over a prolonged period of time.	 Mitigation for change in temperature The diversion channel and reservoir are designed to grades that convey reservoir water to the center of the reservoir and avoid isolated pooling where fish may be trapped and where shallow water stagnates. The contours and elevations of the reservoir will inherently pool water to a deeper central area; this topography will increase water depth and decrease surface area to minimize solar exposure and temperature increase. The topography of the reservoir mitigates potential effects related to water temperature and subsequent changes to dissolved oxygen concentrations (i.e., water oxygen holding capacity increases at lower temperatures). Water temperature will be monitored in the reservoir during reservoir drawdown, further details related to the monitoring efforts is in Alberta Transportation's response to Round 1 CEAA Package 1, IR1-02, Appendix IR2-1 (draft Surface Water Quality Monitoring Plan). Fish rescue efforts will be maximized to the extent possible when safe to do so by increasing manpower to multiple fish rescue teams. This added manpower will mitigate potential effects to fish increasing fish rescue efforts and the rate of capture to the extent possible. Alberta Transportation will investigate adding cover structure along the perimeter of the reservoir for shade. Cover may be added in the form of woody debris, (e.g., spruce trees) or tarps with floats. Cover along the perimeter will provide shade to limit sun exposure and reduce increases in temperature to the reservoir water. 	 Alberta Transportation is continuing to assess operational management options and mitigations to address changes to water quality. Ongoing assessments will be used to inform adaptive management procedures for the Project. Design parameters are expected to be effective to address potential changes to temperature and dissolved oxygen and subsequent effects on fish. Fish rescues prior to reservoir drawdown may not be practical or safe. Further discussion related to fish rescues is provided in the text that follows this table. Additional mitigation measures to address temperature and dissolved oxygen were considered and found to not be practical. Further discussion related to temperature, and dissolved oxygen considerations is provided in the text that follows this table. Mitigation that explicitly addresses the potential for predation during drawdown has been considered for this Project. However, mitigation for predation has been considered to mitigation for predation is provided in the text that follows this table. It is expected that the design mitigation will be effective in minimizing changes to temperature and dissolved oxygen. 	The potential effects described have been mitigated to the extent possible. The potential change in temperature during the water retention period in the reservoir is not anticipated to result in residual effects on fish. This conclusion considers mitigation measures outlined herein, which will reduce potential effects to the extent possible, coupled with the low frequency of floodwater diversion by the Project. The potential effects described in the extent possible of the extent possible of the extent possible of the extent possible. The potential effects described in the extent possible of the extent poss



Table 29-1 Fish and Fish Habitat Pathway of Effects as it Relates to Water Retention in the Reservoir and Reservoir Water Drawdown

Project Component and Physical Activities	Relevant Pathway of Effects	Relevant Potential Effects on Fish (Including Salmonid Species)	Mitigation	Effectiveness of Mitigation	Residual Effects
		Change in dissolved oxygen during water retention in reservoir Water retention in the reservoir may cause a change in dissolved oxygen concentration relative to concentrations in Elbow River. Decreased levels of dissolved oxygen can induce physiological stress and behavioral changes in fish if the decrease in dissolved oxygen concentrations occur over a prolonged period of time.	 Mitigation for change in dissolved oxygen The design mitigation stated above applies to both change in temperature and change in dissolved oxygen. Furthermore, increased fish rescue efforts and adding cover structure (discussed in mitigation for change in temperature above) will mitigate potential effects to fish as a result of a change in dissolved oxygen. Dissolved oxygen will be monitored in the reservoir during post-flood operation and reservoir drawdown, further details related to monitoring efforts is in Alberta Transportation's Response to Round 1 CEAA Package 1, IR1, Appendix IR2-1 (draft Surface Water Quality Monitoring Plan). 		The potential effects described have been mitigated to the extent possible. In addition, natural mixing of water due to wind action will oxygenate the reservoir during the retention period. Potential change in dissolved oxygen during the water retention period in the reservoir is not anticipated to result in residual effects to fish. This conclusion considers mitigation measures outlined herein, which will reduce potential effects to the extent possible, coupled with the low frequency of diversion of floodwaters by the Project.
		Predation of fish entrained during water retention in the reservoir Fish that are swept into and retained in the reservoir during flood operation will remain in the reservoir for a period of time before water is discharged back to Elbow River. During this timeframe, fish may be at an increased risk of predation (e.g., predatory birds, predatory fish).	 Mitigation for entrained fish The contours and elevations of the reservoir will inherently pool water to a deeper central area; this topography will increase depth. Depth in the reservoir provides refuge to potential predation. Alberta Transportation will investigate adding cover structure along the perimeter of the reservoir for shade. Cover may be added in the form of woody debris, (e.g., spruce trees) or tarps with floats. Cover along the perimeter will mitigate potential effects on fish by providing refuge potential along the perimeter of the reservoir for cover. 		The potential effects have been mitigated to the extent possible. Fish that move to the deeper water in the reservoir will be less prone to predation. Cover in the form of depth and features along the perimeter of the reservoir will provide refuge to fish that may be present in the reservoir. Potential predation of fish is not anticipated to result in residual effects to fish. This conclusion considers mitigation measures outlined herein, which will reduce potential effects to the extent possible, coupled with the low frequency of diversion of floodwaters by the Project.
		 Change in suspended sediment Concentrations Fish that are present within the reservoir during the water retention period might be exposed to sediment-laden water that has been diverted to the reservoir during a flood event. Sediment-laden water would also be experienced in Elbow River at this time; however, the fish that are held within the reservoir will be exposed to higher sediment concentrations for a longer duration relative to conditions in Elbow River. Higher suspended sediment concentrations may be experienced during the latter stages of water release from the reservoir. 	Mitigation for suspended sediment effects to fish in the reservoir Fish rescue efforts will be maximized to the extent possible when safe to do so by increasing manpower to staff multiple fish rescue teams. This added manpower will increase the effectiveness of fish capture and rescue activities and mitigate potential effects to fish from changes in suspended sediment concentrations.		The potential effects have been mitigated to the extent possible. Sediment will settle within the reservoir and fish will not be exposed to high sediment loads for the full duration that they are retained. This conclusion considers mitigation measures outlined herein, which will reduce potential effects to the extent possible, coupled with the low frequency of diversion of floodwaters by the Project.



Table 29-1 Fish and Fish Habitat Pathway of Effects as it Relates to Water Retention in the Reservoir and Reservoir Water Drawdown

Project Component and Physical Activities Relevant Pathway of Effects	Relevant Potential Effects on Fish (Including Salmonid Species)	Mitigation	Effectiveness of Mitigation	Residual Effects
	 PN expressed concern that the Project will have a negative impact on various fish species trapped in standing water, and that little to no consideration was given by Alberta Transportation to this issue. 	The diversion channel and reservoir are designed to grades that convey reservoir water to the center of the reservoir and avoid isolated pooling where fish may be trapped and where shallow water could stagnate.		
	 PN requested information as to how the design of the Project ensures that fish mortality is limited during floods. PN requested confirmation that fish entrainment will be monitored, and a fish salvage plan be put in place. This concern was also expressed from KFN and SN at a meeting in September 2016. (Source: Meeting with PN, KFN and SN, September 15, 2016 (cited in SCRT Specific Concern #24). PN and SCN have requested a description of Alberta Transportation's plan to mitigate the impacts to Section 35 rights relating to fisheries, and how the groups can be involved in monitoring of fisheries. 	 Fish rescue efforts will be maximized to the extent possible when safe to do so by increasing manpower to multiple fish rescue teams. This added manpower will mitigate potential effects to fish as a result of change in temperature by increasing fish rescue efforts and the rate of capture to the extent possible. Structures will be designed so that stormwater runoff and wash water from the access roads, decks, side slopes, and approaches are directed into a retention pond or vegetated area to remove suspended solids, dissipate velocity, and prevent sediment and other deleterious substances from entering watercourses. Alberta Transportation has met with PN on seven occasions to discuss potential effects of the Project, including effects on fish, fish habitat and Commercial, Recreational and Aboriginal (CRA) fisheries. Alberta Transportation is committed to ongoing consultation with PN and will provide information about fish monitoring during a flood scenario and fish rescue. Alberta Transportation is committed to Indigenous participation in the Project including through potential training and contracting opportunities. As such, Alberta Transportation is preparing an IPP for the Project. The goal of this IPP is to create contracting, employment and training opportunities with Indigenous groups including PN. These opportunities may include monitoring. 		



Table 29-1 Fish and Fish Habitat Pathway of Effects as it Relates to Water Retention in the Reservoir and Reservoir Water Drawdown

Project Component and Physical Activities Relevant Pathway of Effects	Relevant Potential Effects on Fish (Including Salmonid Species)	Mitigation	Effectiveness of Mitigation	Residual Effects
Reservoir water drawdown: The off-stream reservoir will be drawn down such that flow returns to Elbow River through the low-level outlet and into the unnamed creek. The off-stream reservoir will be drawn down such that flow returns to Elbow River through the low-level outlet and into the unnamed creek. Change in timing, duration and frequency flow Fish that are entrained in the reservoir will be trapped and unable to migrate into Elboo River as per their typical movement patterns. As water levels begin to recede during reservoir drawdown fish may become trapped in low-lying depressions or small pools within the reservoir. Fish may also naturally move the opposite direction of flow through the low-level outlet, who could lead to possit trapping in low-lying areas of the reservoir.	reservoir drawdown if fish become isolated in pools throughout the area of the reservoir at low water levels. Isolated pools of water may directly lead to fish physiological stress, mortality or facilitate an increase in predation in the area. • PN expressed concern that the draining of water back into Elbow River may result in fish being trapped in the reservoir due to the control of reservoir drawdown. There was also concern for the silt shadow created downstream of the reservoir drainage and the impact on the downstream forest and river valley (Source: PN 2018 (CEAR#48)(cited in PN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #24)). • SCN has expressed that the mitigation of slowly lowering the water level within the reservoir to support fish travelling from the reservoir back to Elbow River is inadequate to reduce fish mortality. SCN requests that Alberta Transportation commit to	 Mitigation for fish entrainment The low-level outlet will be designed and operated in a manner that allows fish egress from the reservoir and downstream into the unnamed creek during release of water from the reservoir. This mitigation measure is in place to address potential entrainment, or mortality of fish as a result of entrainment or predation. Drainage areas within the reservoir will be graded to reduce stranding of fish during release of retained flood water from the reservoir. During reservoir drawdown, fish monitoring will be necessary to identify isolated shallow areas that develop in the reservoir that could strand fish as the water levels drop. This monitoring will be done to inform fish rescue activities and will be directed by a qualified aquatic environmental specialist (QAES), professional fisheries biologist, or professional aquatic biologist. Monitoring for fish rescue activities is presented in Alberta Transportation's response to Round 1 CEAA Package 3, IR3-29. Fish rescues will be conducted when safe and effective to do so. Further information is discussed in the subsections that follow this table. This mitigation measure is in place to address potential entrainment, impingement, or mortality of fish. Alberta Transportation is committed to Indigenous participation in the Project, including training, employment, and contracting opportunities. To this end, Alberta Transportation is preparing a draft IPP with the goal to create training, employment, monitoring, and contracting opportunities with interested Indigenous groups potentially affected by the Project. Alberta Transportation aims to obtain Indigenous comment and feedback on the draft IPP, the final draft of which will identify how that feedback was incorporated. 	Design parameters and fish rescues are expected to provide effective mitigation to address fish entrainment and predation issues associated with reservoir drawdown. It is anticipated that potential effects on fish as a result of reservoir drawdown can be mitigated such that residual effects on fish are unlikely.	Given the low frequency of diversion and with the implementation of mitigation measures, changes to flow as a result of reservoir drawdown is not anticipated to result in residual effects on fish, given the topography of the reservoir, low-level outlet, and the fish rescue program.



Table 29-1 Fish and Fish Habitat Pathway of Effects as it Relates to Water Retention in the Reservoir and Reservoir Water Drawdown

Project Component and Physical Activities	Relevant Pathway of Effects	Relevant Potential Effects on Fish (Including Salmonid Species)	Mitigation	Effectiveness of Mitigation	Residual Effects
		KFN requested information on how the design of the Project is being undertaken to ensure that during a flood/drain event, the mortality of fish is limited. (Source: Meeting with KFN, PN, SN and Alberta Transportation, September 15, 2016) (cited in KFN SCRT Aug 2014-Aug2019; Specific Concern #29). SN and PN expressed similar concerns at the meeting.			
		 MFN raised a concern about how the Project will affect fish passage in the river during a flood when the gates are up (Source: Meeting between MFN and Alberta Transportation, June 27, 2018 (cited in MFN SCRT Oct 2016-Sept 2019; Specific Concern #15). 			
		LBT also requested to be involved in post flood mitigation activities, including the fish rescue program. (Source: Meeting between LBT, Alberta Transportation and Stantec, November 6, 2018; LBT TUS 2018 (CEAR#1228) (cited in LBT SCRT Oct 2016-Sept 2019; Specific Concern #12).			





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FISH RESCUE CONSIDERATIONS

Mitigation measures described in Table 29-1 include fish rescues to address potential effects related to fish entrainment within the reservoir. This mitigation is associated with the reservoir drawdown process. Literature evidence reporting on large scale fish rescues was limited; a single paper (Higgins and Bradford 1996) found assessing fish salvage efforts primarily using electrofishing. The fish salvage was in response a large water release from a hydroelectric dam in British Columbia and stranding of fish in depressions as the water levels lowered. A total of 14,242 (77.4%) fish were rescued alive and 4,169 (22.6%) fish mortalities were reported. Most of the fish mortalities were redside shiners (greater than 3,800 fish). When considering only salmonid species, reported mortalities were less than a 1% live fish. The authors did not report how much effort was spent searching for fish mortalities or comment on if the ratio of reported dead to live fish reflected the actual mortality rate. However, fish rescue activities will be scaled to maximize the potential to salvage fish and minimize mortalities. The offsetting plan associated with the *Fisheries Act* Authorization will account for the low level of fish mortality in the reservoir that cannot be mitigated, and therefor compensate for any loss in fisheries productivity.

A number of factors may limit the ability to conduct fish rescues prior to initiation of reservoir drawdown including: personnel safety during a flood; equipment access to the reservoir during flood conditions (i.e., boat launches, truck access); rate of capture during high water levels and within a large space; ability to install block nets or trapping equipment during high water levels and within a large space, effective relocation prior to reservoir drawdown (i.e., holding and transport times to relocate fish within Elbow River). Post-flood operations (i.e., the timing and duration of reservoir release for fish to egress to Elbow River) and the fish rescue will be dictated by Elbow River flow conditions and by personnel safety conditions. The following describes considerations for the fish rescue program and mitigation outlined in Table 29-1.

Fish rescues prior to reservoir drawdown have been considered, but the practicality of conducting a fish rescue prior to reservoir drawdown will depend on the volume of water that is diverted in the reservoir. Fish rescues prior to reservoir drawdown present a number of limitations, including obtaining safe access to the reservoir during or immediately following a flood and water levels within the reservoir to effectively rescue fish. Water levels may be high such that certain fishing methods may not be practical until water levels have been drawn down. The following details have been factored into Project plans:

- Backpack electrofishing equipment may not be feasible due to depth, and boat electrofishing would only be practical if the area can be safely accessed with a trailer following a flood.
- Boat electrofishing effort becomes ineffective over large areas unless a series of block nets can be installed such that fish cannot evade the pulsed current from the electrofishing equipment.



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- A setup to facilitate partitioned electrofishing workspaces may not be feasible until water can be released from the reservoir, depending on the size of the reservoir. The effectiveness of electrofishing may also be impeded by water quality if conductivity is high, which potentially renders rescue ineffective until the water levels drop, and nets can be used.
- Gill nets have been considered as an option to facilitate early fishing effort; however, gill nets were considered to pose a risk of injury or stress to fish that would negate the intent of early fish rescue.
- Fyke nets can be installed but are unlikely to yield high catch-per-unit-effort (CPUE) over the area at high water levels.
- Snorkeling was considered an option to encourage fish to enter nets (gill or fyke nets), but the added manpower is not likely to yield effective CPUE, and it could also be considered a safety concern.

For reasons summarized above, fish rescue efforts prior to reservoir drawdown are unlikely to offer additional mitigation beyond what is currently proposed for the program, which includes design mitigation to minimize stranding, and fish rescue efforts after drawdown is completed when CPUE will be relatively high.

TEMPERATURE AND DISSOLVED OXYGEN CONSIDERATIONS

Water temperature in the reservoir can increase during water retention if air temperatures are sufficiently warm. However, water temperature is unlikely to reach levels causing fish mortality. The Project has been designed such that water will pool in the reservoir to offer maximum depth, which will minimize potential effects related to warm temperatures.

Evidence used for reservoir water temperature included using temperatures reported for shallow Alberta lakes; small shallow lakes were considered as analogous for temperature assessments in the Project. The epilimnion (i.e., upper water column) water temperatures in small shallow lakes in Alberta may reach the low 20°C during the mid-summer months (Prepas and Mitchell 1990, ALMS 2016, ALMS 2017, and ALMS 2018a, b, and c). Historic Glenmore Reservoir water temperatures have reached the low 20°C. The effects to fish in the reservoir associated with temperature are discussed in Alberta Transportation's response to Round 1 CEAA Package 1, IR1-05.

Potential loss of dissolved oxygen may occur due to low water velocity and increased temperature within the reservoir. Additional mitigation to address this potential decrease is limited; the number of lake aerators and generators that would be required for an effective distribution in the reservoir would introduce additional noise considerations for wildlife. However, wind mixing is anticipated to replenish dissolved oxygen diffused from the reservoir (EIA, Volume 3B, Section 7.4.3, page 7.2.4). With the implementation of mitigation measures described herein and the low frequency of floodwater diversion by the Project, there should be no residual effects on fish due to low dissolved oxygen concentrations in the reservoir.



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PREDATION CONSIDERATIONS

As indicated in Alberta Transportation's response to Round 1 CEAA Package 3, IR3-29, delaying fish rescues in the reservoir until drawdown may result in a temporary increase in predation risk from piscivorous fish, raptors (e.g., osprey, bald eagle), waterfowl and waterbirds (e.g., cormorant) (Price and Nickum 1995), which might be potential predators of fish in the reservoir. Evidence of potential predation was reported by Sorel et al. (2016) where the authors estimated "modest" rates of predation on salmonids (Kokanee [Oncorhynchus nerka] and Chinook Salmon [Oncorhynchus tshawytscha]) introduced to a reservoir in Washington state. Resident predators included northern pikeminnow (Ptychocheilus oregonensis) and tiger muskellunge (Esox masquinongy × Lucius). The results of their work was based on population studies detailing the demographics of resident fish in a test reservoir and bioenergetic modelling. Defining "moderate" levels of predation associated with the Project without an estimation of abundance of fish entrained in the reservoir is not possible. Mitigation for potential effects related to predation is limited to fish rescues. Additional mitigation measures to manage the potential effects of bird predation such as the use of bird deterrents (visual, audio) or netting may not be effective over the long-term due to potential habituation or practical given the potential size of the areas affected.

During the early period of fish entrainment, reservoir water will be turbid from the inflow of flood waters, which will provide cover and, therefore, limit predation of fish in the reservoir during this period.

SUSPENDED SEDIMENT CONSIDERATIONS

Evidence for potential effects to fish from elevated suspended sediments are discussed in Alberta Transportation's response to Round 1 CEAA Package 1, IR1-05.

Empirical modelling has demonstrated that a correlation exists between suspended sediment concentrations and adverse behavioral and physiological effects on salmonid species (Newcombe and Jensen 1996; Newcombe and MacDonald 1991; Newcombe 2003; Kjelland et al. 2015). This relationship between sediment and effects on fish is commonly qualified through the Severity of III Effects (SEV) Index (Newcombe and Jensen 1996), which was developed through modelling the association of TSS levels with categories of physiological and metabolic stress related effects. In general, TSS presents a variety of adverse effects on fish physiology and behavior, and these effects are compounded by the duration of TSS exposure.

The potential for effects to fish are further discussed in Alberta Transportation's response to Round 1 CEAA Package 1, IR1-05. Suspended sediment levels in the reservoir are dependent on the concentration of suspended sediments in flood water entering the reservoir. The reservoir is predicted to act as a settling pond with most sediments settling out of the water column. As the reservoir draws down, water leaving the reservoir begins to increase in velocity as it is conveyed toward the outlet. Some sediments will be resuspended and peak



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concentrations will occur at the outlet and extending to the center of the reservoir (EIA, Volume 3B, Section 6.4.3; Table 29-2 below).

Table 29-2 Modelled Total Suspended Sediment Concentrations in the Off-stream Reservoir (EIA, Volume 3B, Section 6.4.3)

	Predicted TSS Concentration in the Reservoir ¹			Elbow River During Flood
Flood	Peak	Average	Minimum	Peak
Design	17,961 mg/L	2,188 mg/L	200-300 mg/L	139,682 mg/L
1:100 year	20,789 mg/L	7,333 mg/L	200-300 mg/L	77,649 mg/L
1:10 year	1,798 mg/L	1,658 mg/L	1,500 mg/L	4,818 mg/L

NOTES:

b) With respect to areas of disparity, Alberta Transportation acknowledges that differences in views on the Project's potential effects on interspecies relationships and natural law remain between Indigenous groups and Alberta Transportation. Alberta Transportation has reviewed relevant information from numerous sources, including CEAA submissions, SoCs, engagement meetings, correspondence, and TUS. This information has been compiled into SCRTs.

Alberta Transportation has carefully reviewed the SCN written submission and the PN technical review referenced in the Context and Rationale to this request and has not been able to find reference to interspecies relationships or natural law.

Through its review of the records of the engagement program and other filed material for the Project, Alberta Transportation is aware that the ECN has referenced natural law in their Traditional Knowledge and Use Study (CEAR #46):

"Those who hunt for trophies and who are wasteful and disrespectful are considered to be in violation of natural laws and represent a source of deep frustration to many Ermineskin hunters" (WSSS, 2018, p.26).

Although natural law is not specifically defined in the materials provided by Indigenous groups, Alberta Transportation believes that, in this context, Indigenous groups feel that fish being stranded and possibly dying in the reservoir is considered wasteful and is not consistent with their views. This response focuses on disparity around fish stranding and mitigation to reduce the likelihood of fish dying.

Table 29-3 provides a summary of the area of disparity in views that remains. The specific area of disparity is:

concerns regarding fish being stranded in the reservoir after drawdown



⁻⁻ not applicable

¹ Approximate TSS concentration modelled for the low level outlet (i.e., water leaving the reservoir)

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As discussed in the EIA, Volume 3A, Section 8.4.4.3 and Volume 3B, Section 8.5.3, given the low frequency of diversion and with the implementation of mitigation measures, changes to flow as a result of reservoir drawdown is not anticipated to result in residual effects on fish, given the topography of the reservoir, low-level outlet, and the fish rescue program.

Despite this assessment conclusion, Alberta Transportation acknowledges that Indigenous groups may have ongoing concerns about fish stranding.

Going forward, efforts to reconcile areas of disparity may occur, generally, through the provision of Project information, the development of principles for future land use, the incorporation of feedback that results in changes to Project planning or through commitment to further exploring an issue, concern or recommendation. For example, as of September 2019 Alberta Transportation has provided a written response for each TUS received, apart from Piikani Nation and Métis Nation of Alberta, Region 3, which will receive written responses to their TUS in December 2019. Alberta Transportation has met with or will meet with each Indigenous group that has submitted a TUS to receive their comment and feedback. The written responses that Alberta Transportation has provided to Tsuut'ina Nation, Kainai First Nation, Louis Bull Tribe, and Ermineskin Cree Nation is provided in the response to CEAA Conformity IR2-01 Appendix 1-1. As such, Alberta Transportation's response to Round 1 CEAA Package 3 IR3-29, also describes both Alberta Transportation's efforts to date and planned commitments to reconcile areas of disparity between the views and conclusions of Indigenous groups and Alberta Transportation regarding the Project's potential effects on interspecies relationships and natural law.

Alberta Transportation is committed to working with Indigenous groups to try to seek mutually acceptable solutions to the issues, concerns or recommendations identified and those that remain unresolved will be tracked through Alberta Transportation's ongoing engagement.





Table 29-3 Indigenous Group Views Related to Potential Project Effects on Fish and Fish Stranding and Alberta Transportation's Response

Views related to Potential Effects on Treatment of Fish and Fish Stranding	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
Kainai First Nation/Blood Tribe (KFN			
KFN requested impact information on fish and fish habitat resulting from the SR1 Project.	Meeting between KFN and Alberta Transportation September 15, 2016 (cited in KFN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #29)	In responses to concerns raised by Indigenous groups, Alberta Transportation has developed a fish rescue program. Monitoring will inform fish rescue activities and it will be directed by a QAES, professional fisheries biologist, or professional aquatic biologist. Monitoring for fish rescue activities is presented in Alberta Transportation's response to Round 1 CEAA Package 3, IR3-29. Fish rescues will be conducted when safe and effective to do so. This mitigation measure is in place to address potential entrainment, impingement, or mortality of fish. Given the low frequency of diversion and with the implementation of mitigation measures, changes to flow as a result of reservoir drawdown is not anticipated to result in residual effects on fish, given the topography of the reservoir, low-level outlet, and the fish rescue program. The low-level outlet will be designed and operated in a manner that allows fish egress from the reservoir and downstream into the unnamed creek during release of water from the reservoir. This mitigation measure is in place to address potential entrainment, or mortality of fish as a result of entrainment or predation. Drainage areas within the reservoir will be graded to reduce stranding of fish during release of retained flood water from the reservoir. During reservoir drawdown, fish monitoring will be necessary to identify isolated shallow areas that develop in the reservoir that could strand fish as the water levels drop.	On March 23, 2018, Alberta Transportation sent detailed responses to Specific Concerns raised to date by providing a copy of Table 7-7 SR1 Project Specific Concerns and Responses - Kainai First Nation from the March 2018 EIA. Alberta Transportation responded to the KFN's TUS report on August 9, 2019 which included responses related to fish passage and met on October 17, 2019 to discuss the response. KFN was provided the draft IPP on November 12, 2019, which includes fish rescue. A meeting to discuss the IPP document was held November 21, 2019. Alberta Transportation is committed to providing opportunities for feedback on and participation in the fish rescue program.
Piikani Nation (PN)			
 PN requested information on how the design of the SR-1 is being undertaken to ensure that during a flood event that the mortality of fish is limited. Request confirmation that fish entrainment will be monitored and a fish salvage plan be put in place. 	PN 2018 (CEAR # 48) (cited in PN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #24) PN 2018 (CEAR # 48) (cited in PN SR1 SCRT Aug 2019; Specific Concern #24)	In responses to concerns raised by Indigenous groups, Alberta Transportation has developed a fish rescue program. Monitoring will inform fish rescue activities and it will be directed by a QAES, professional fisheries biologist, or professional aquatic biologist. Monitoring for fish rescue activities is presented in Alberta Transportation's response to Round 1 CEAA Package 3, IR3-29. Fish rescues will be conducted when safe and effective to do so. This mitigation measure is in place to address potential entrainment, impingement, or mortality of fish. Given the low frequency of diversion and with the implementation of mitigation measures, changes to flow as a result of reservoir drawdown is not anticipated to result in residual effects on fish, given the topography of the reservoir, low-level outlet, and the fish rescue program. The low-level outlet will be designed and operated in a manner that allows fish egress from the reservoir and downstream into the unnamed creek during release of water from the reservoir. This mitigation measure is in place to address potential entrainment, or mortality of fish as a result of entrainment or predation. Drainage areas within the reservoir will be graded to reduce stranding of fish during release of retained flood water from the reservoir. During reservoir drawdown, fish monitoring will be necessary to identify isolated shallow areas that develop in the reservoir that could strand fish as the water levels drop.	On March 23, 2018, Alberta Transportation sent detailed responses to Specific Concerns raised to date by providing a copy of Table 7-6 SR1 Project Specific Concerns and Responses - Piikani Nation from the March 2018 EIA. At the meetings held on September 18-19, 2018, Alberta Transportation described the effects to fish and fish habitat and the mitigation proposed, including that structures will allow fish passage along Elbow River as well as into and out of the reservoir, and there will be rescue of stranded fish after the reservoir is emptied. At the meeting held on December 17, 2018, Alberta Transportation reiterated the mitigation measures for fish. In December 2019, Alberta Transportation provided written responses to the PN Technical Review dated June 2018, which included these concerns as Question 12. Alberta Transportation has will offer to meet with PN regarding the written responses. PN was provided the draft IPP on November 15, 2019, which includes fish rescue. Alberta Transportation is committed to providing opportunities for feedback on and participation in the fish rescue program.



Table 29-3 Indigenous Group Views Related to Potential Project Effects on Fish and Fish Stranding and Alberta Transportation's Response

Views related to Potential Effects on Treatment of Fish and Fish Stranding	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
Siksika Nation (SN)			
 SN requested information on how the design of the SR1 is being undertaken to ensure that during a flood event that the mortality of fish is limited. Concerns were raised about fish entering the reservoir during a flood. 	Meeting between SN and Alberta Transportation (September 15and December 10, 2016) (cited in SN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #13)	In responses to concerns raised by Indigenous groups, Alberta Transportation has developed a fish rescue program. Monitoring will inform fish rescue activities and it will be directed by a QAES, professional fisheries biologist, or professional aquatic biologist. Monitoring for fish rescue activities is presented in Alberta Transportation's response to Round 1 CEAA Package 3, IR3-29. Fish rescues will be conducted when safe and effective to do so. This mitigation measure is in place to address potential entrainment, impingement, or mortality of fish. Given the low frequency of diversion and with the implementation of mitigation measures, changes to flow as a result of reservoir drawdown is not anticipated to result in residual effects on fish, given the topography of the reservoir, low-level outlet, and the fish rescue program. The low-level outlet will be designed and operated in a manner that allows fish egress from the reservoir and downstream into the unnamed creek during release of water from the reservoir. This mitigation measure is in place to address potential entrainment, or mortality of fish as a result of entrainment or predation. Drainage areas within the reservoir will be graded to reduce stranding of fish during release	On March 23, 2018, Alberta Transportation sent detailed responses to Specific Concerns raised to date by providing a copy of Table 7-5 SR1 Project Specific Concerns and Responses - Siksika Nation from the March 2018 EIA. On April 26, 2018, Alberta Transportation met with SN to review their Specific Concerns and the responses and proposed mitigation measures in Table 7-5 SR1 Project Specific Concerns and Responses - Siksika Nation. At the meeting held on December 10, 2018, Alberta Transportation explained the mitigation for fish that is in the EIA, and described that there will be a plan for a monitoring and fish rescue program after the floods had passed and the reservoir was releasing the water. SN was provided the draft IPP on November 15, 2019, which includes fish rescue. Alberta Transportation is committed to providing opportunities for feedback on and participation in the fish rescue program.
		of retained flood water from the reservoir. During reservoir drawdown, fish monitoring will be necessary to identify isolated shallow areas that develop in the reservoir that could strand fish as the water levels drop.	
Stoney Nakoka Nations (SNN)			T
Concern using electrofishing and that fish will die during relocation. SNN would like Alberta Transportation to explore other ways of retrieving and relocating the stranded fish.	 Meeting between SNN and Alberta Transportation (June 4, 2018) (cited in SNN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #16) 	In responses to concerns raised by Indigenous groups, Alberta Transportation has developed a fish rescue program. Monitoring will inform fish rescue activities and it will be directed by a QAES, professional fisheries biologist, or professional aquatic biologist. Monitoring for fish rescue activities is presented in Alberta Transportation's response to Round 1 CEAA Package 3, IR3-29. Fish rescues will be conducted when safe and effective to do so. This mitigation measure is in place to address potential entrainment, impingement, or mortality of fish. Given the low frequency of diversion and with the implementation of mitigation measures, changes to flow as a result of reservoir drawdown is not anticipated to result in residual effects on fish, given the topography of the reservoir, low-level outlet, and the fish rescue	At the meeting held on June 4, 2018, Alberta Transportation said they will look at methods of capturing fish and note the concern with electrofishing. SNN was provided the draft IPP on November 12, 2019, which includes fish rescue. A meeting to discuss the IPP document was held November 19, 2019. Alberta Transportation is committed to providing opportunities for feedback on and participation in the fish rescue program.
		program. The low-level outlet will be designed and operated in a manner that allows fish egress from the reservoir and downstream into the unnamed creek during release of water from the reservoir. This mitigation measure is in place to address potential entrainment, or mortality of fish as a result of entrainment or predation. Drainage areas within the reservoir will be graded to reduce stranding of fish during release of retained flood water from the reservoir.	
		During reservoir drawdown, fish monitoring will be necessary to identify isolated shallow areas that develop in the reservoir that could strand fish as the water levels drop.	



Table 29-3 Indigenous Group Views Related to Potential Project Effects on Fish and Fish Stranding and Alberta Transportation's Response

Views related to Potential Effects on Treatment of Fish and Fish Stranding	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
Tsuut'ina Nation (TN)			
 Concern that fish could be carried into the Diversion Structure and into the Reservoir and become stranded when water released. Concerns about mitigation for salvaging and if there is fish rescue, will the Nation be included. 	Letter from TN to CEAA (May 16, 2016) Meeting between TN and Alberta Transportation (May 14-15, 2018) Meeting between TN and Alberta Transportation August 8, 2018 (cited in TN SR1 SCRT Aug 2014-Aug 2019; Specific Concern #38)	In responses to concerns raised by Indigenous groups, Alberta Transportation has developed a fish rescue program. Monitoring will inform fish rescue activities and it will be directed by a QAES, professional fisheries biologist, or professional aquatic biologist. Monitoring for fish rescue activities is presented in Alberta Transportation's response to Round 1 CEAA Package 3, IR3-29. Fish rescues will be conducted when safe and effective to do so. This mitigation measure is in place to address potential entrainment, impingement, or mortality of fish. Given the low frequency of diversion and with the implementation of mitigation measures, changes to flow as a result of reservoir drawdown is not anticipated to result in residual effects on fish, given the topography of the reservoir, low-level outlet, and the fish rescue program. The low-level outlet will be designed and operated in a manner that allows fish egress from the reservoir and downstream into the unnamed creek during release of water from the reservoir. This mitigation measure is in place to address potential entrainment, or mortality of fish as a result of entrainment or predation. Drainage areas within the reservoir will be graded to reduce stranding of fish during release of retained flood water from the reservoir. During reservoir drawdown, fish monitoring will be necessary to identify isolated shallow areas that develop in the reservoir that could strand fish as the water levels drop.	On March 23, 2018, Alberta Transportation sent detailed responses to Specific Concerns raised to date by providing a copy of Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation from the March 2018 EIA. At the meeting held on October 11, 2018, the impacts to fish and fish habitat, along with the proposed mitigation measures, were discussed. On November 23, 2018, Alberta Transportation provided its report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table. In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA for fish and fishing, including mitigation measures for prior to, during, and following construction. Alberta Transportation also met with TN December 6, 2018 to discuss the response and mitigation table. TN was provided the draft IPP on November 12, 2019, which includes fish rescue. Alberta Transportation is committed to providing opportunities for feedback on and participation in the fish rescue program.
Louis Bull Tribe (LBT)			
Concern about impacts of fish spawning and spawning habitat relating to the design. LBT would like to be involved in the post flood mitigation projects, including the fish rescue program.	Meeting between LBT and Alberta Transportation November 6, 2018 (cited in LBT SR1 SCRT Oct 2016-Sept 2019; Specific Concern #12)	In responses to concerns raised by Indigenous groups, Alberta Transportation has developed a fish rescue program. Monitoring will inform fish rescue activities and it will be directed by a QAES, professional fisheries biologist, or professional aquatic biologist. Monitoring for fish rescue activities is presented in Alberta Transportation's response to Round 1 CEAA Package 3, IR3-29. Fish rescues will be conducted when safe and effective to do so. This mitigation measure is in place to address potential entrainment, impingement, or mortality of fish. Given the low frequency of diversion and with the implementation of mitigation measures, changes to flow as a result of reservoir drawdown is not anticipated to result in residual effects on fish, given the topography of the reservoir, low-level outlet, and the fish rescue program. The low-level outlet will be designed and operated in a manner that allows fish egress from the reservoir and downstream into the unnamed creek during release of water from the reservoir. This mitigation measure is in place to address potential entrainment, or mortality of fish as a result of entrainment or predation. Drainage areas within the reservoir will be graded to reduce stranding of fish during release of retained flood water from the reservoir. During reservoir drawdown, fish monitoring will be necessary to identify isolated shallow areas that develop in the reservoir that could strand fish as the water levels drop.	At the meeting held on November 6, 2018, Alberta Transportation committed to continuing discussions on this topic. Alberta Transportation responded to LBT's TUS report on August 8, 2019 with mitigation measures and responses. In December 2019, Alberta Transportation provided written responses to the LBT Technical Review dated June 2018, which included fish passage concerns as Question 2. Alberta Transportation will offer to meet with LBT regarding the written responses. LBT was provided the draft IPP on November 12, 2019, which includes fish rescue. A meeting to discuss the IPP document was held November 14, 2019. Alberta Transportation is committed to providing opportunities for feedback on and participation in the fish rescue program.



Table 29-3 Indigenous Group Views Related to Potential Project Effects on Fish and Fish Stranding and Alberta Transportation's Response

Views related to Potential Effects on Treatment of Fish and Fish Stranding	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
Samson Cree Nation (SCN)			
 The sole proposed mitigation measure of slowly lowering the water level within the reservoir to support fish travelling from the reservoir back to the Elbow River is considered inadequate to reduce fish mortality. To reduce fish mortality, SCN requests that Alberta commit to maintaining grading in the reservoir such that low-lying areas will be present where stranded fish can be salvaged and safely returned to the river. SCN also requests that Alberta engage with SCN so that community members can support or participate in fish salvage activities should they be required. 	SCN 2018 (CEAR # 52) (cited in SCN SR1 SCRT Oct 2016-Sept 2019; Specific Concern #13) • SCN 2018 (CEAR # 52) (cited in SCN SR1 SCRT Oct 2016-Sept 2019; Specific Concern #13)	In responses to concerns raised by Indigenous groups, Alberta Transportation has developed a fish rescue program. Monitoring will inform fish rescue activities and it will be directed by a QAES, professional fisheries biologist, or professional aquatic biologist. Monitoring for fish rescue activities is presented in Alberta Transportation's response to Round 1 CEAA Package 3, IR3-29. Fish rescues will be conducted when safe and effective to do so. This mitigation measure is in place to address potential entrainment, impingement, or mortality of fish. Given the low frequency of diversion and with the implementation of mitigation measures, changes to flow as a result of reservoir drawdown is not anticipated to result in residual effects on fish, given the topography of the reservoir, low-level outlet, and the fish rescue program. The low-level outlet will be designed and operated in a manner that allows fish egress from the reservoir and downstream into the unnamed creek during release of water from the reservoir. This mitigation measure is in place to address potential entrainment, or mortality of fish as a result of entrainment or predation. Drainage areas within the reservoir will be graded to reduce stranding of fish during release of retained flood water from the reservoir. During reservoir drawdown, fish monitoring will be necessary to identify isolated shallow areas that develop in the reservoir that could strand fish as the water levels drop.	In November 2019, Alberta Transportation provided written responses to the SCN Statement of Concern, June 2018, which included these concerns as Question 3. Alberta Transportation has offered to meet with SCN regarding the written responses. LBT was provided the draft IPP on November 12, 2019, which includes fish rescue. A meeting to discuss the IPP document was held November 26, 2019. Alberta Transportation is committed to providing opportunities for feedback on and participation in the fish rescue program.



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- ALMS. 2018a. Lakewatch: Buffalo Lake. Alberta Lake Management Society Volunteer Lake Monitoring Program.
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WSSS (Willow Springs Strategic Solutions). 2018. Ermineskin Cree Nation Traditional Knowledge and Use Study: Springbank Off-Stream Reservoir Project.

Conformity IR3-30

Topic: Fish and Fish Habitat - Westslope Cutthroat Trout

Sources:

EIS Guidelines Part 2, Sections 6.1.5; 6.3.1

EIS Volume 3A, Section 8.2.2.3

Métis Nation British Columbia – Technical Review (CEAR #1153)

Samson Cree Nation – Springbank Off-Stream Reservoir Project Written Submission – June 25, 2018 (CEAR #52)

CEAA Information Requests Related to the Environmental Impact Statement Round 1 Part 3, IR3-30

Alberta Transportation Responses to IR Round 1, SR1 CEAA IR Package 3, June 14, 2019

DFO Round 1 IR Completeness Review Comments, June 28, 2019

Context and Rationale

In CEAA Information Requests Related to the Environmental Impact Statement Round 1 Part 3, IR3-30, the Agency required the proponent to present additional information regarding westslope cutthoat trout.

As noted in the information request, the EIS Guidelines require the proponent to assess the effects of changes to the environment on fish and fish habitat and on Indigenous peoples. The cover letter to the information requests and the EIS Guidelines further direct the proponent to present points of disagreement between the views of Alberta Transportation and Indigenous groups, along with a description of efforts undertaken to reconcile these differences and a rationale for conclusions.



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Alberta Transportation's response to IR3-30 does not demonstrate consideration of the concerns raised and information presented by Samson Cree Nation. As referenced in the information request, Samson Cree Nation noted that the PDA has historically provided habitat for westslope cutthroat trout and they remain present in the upper Elbow River and its tributaries, outside of the PDA. Additional information is required to assess effects on fish and effects on Indigenous peoples.

Information Request:

a) Identify and discuss areas of disparity between the views and conclusions of Indigenous groups and Alberta Transportation regarding historic and current habitat for westslope cutthroat trout, potential effects of the Project on westslope cutthroat trout, and associated effects on Indigenous peoples, efforts made to reconcile the disparities, and rationale for conclusions on matters for which disparity in views remains.

Response

a) Alberta Transportation acknowledges and agrees with Samson Cree Nation that westslope cutthroat trout were historically present in Elbow River within the LAA. Westslope cutthroat trout are the only native cutthroat trout subspecies that occur in Alberta (Alberta Westslope Cutthroat Trout Recovery Team 2013). Alberta Transportation acknowledges that westslope cutthroat trout are a Schedule 1 species that is 'threatened' under the Species at Risk Act (SARA) and the Alberta Wildlife Act. The Critical Habitat Order prohibits destruction of critical habitat of this species.

Genetically pure strain westslope cutthroat trout occur in localized stream habitats where introduced species such as rainbow trout are absent or in low enough densities that hybridization has not occurred (Alberta Westslope Cutthroat Trout Recovery Team 2013). These habitats generally include small, higher elevation or higher gradient streams (COSEWIC 2016). As a result of hybridization and other environmental pressures, genetically pure westslope cutthroat trout are no longer present in Elbow River below Elbow River falls and are only present in upper reaches of Elbow River watershed (Alberta Westslope Cutthroat Trout Recovery Team 2013; DFO 2014). Pure strain westslope cutthroat trout has been studied throughout south-western Alberta using genetic testing and morphological analysis (Westslope Cutthroat Trout Recovery Team 2013) to determine their geographical extent. Based on this research, the closest known population of genetically pure westslope cutthroat trout is in Silvester Creek and Prairie Creek (DFO 2014), both of which are outside the RAA and would not be affected by the Project.

Non-pure strain westslope cutthroat trout are still present within the LAA and were considered within the EIA with the conclusion that no significant effects were predicted as a result of the Project. The presence of cutthroat trout within the LAA does not change the conclusion of the assessment that pure strain westslope cutthroat trout will not be affected. This is because pure strain westslope cutthroat trout are not present in the LAA, and only



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found in the upper reaches of Elbow River watershed which will not be affected by construction or operation of the Project. It is unlikely a population of pure strain westslope cutthroat trout would be sustainable within the LAA due to hybridization with species such as rainbow trout.

Samson Cree Nation stated that the EIA did not consider the historical presence of westslope cutthroat trout in the PDA. However, Alberta Transportation acknowledges the PDA is within the historic range for this species. The baseline scenario in the EIA accounted for the current presence of pure-strain populations in the watershed (i.e., extent of critical habitat as per the Alberta Westslope Cutthroat Trout Recovery Team 2013) and cutthroat-rainbow trout hybrid populations in the LAA (EIA, Volume 3A, Section 8.2.2; Volume 4, Appendix M, Section 3.1.1). The Project does not preclude efforts by the Alberta Westslope Cutthroat Trout Recovery Team to restore westslope cutthroat trout populations within its historical range. Alberta Transportation also agrees with Samson Cree Nation that an opportunity exists for offsetting to include improvements to westslope cutthroat trout habitat in the upper Elbow River or its tributaries. Alberta Transportation will develop offsetting measures, in consultation with First Nations and DFO, that will provide habitat for salmonids in Elbow River watershed. Alberta Transportation is committed to ongoing engagement with Samson Cree Nation, including identifying opportunities for Samson Cree Nation to provide feedback on offsetting measures. Alberta Transportation is developing a response to Samson Cree Nation's written submission (Samson Cree Nation – Springbank Off-Stream Reservoir Project Written Submission – June 25, 2018) and will be meeting to discuss these concerns.

As indicated above, Alberta Transportation agrees with Samson Cree Nation that pure westslope cutthroat trout were historically present in Elbow River within the LAA. However, based on information and analysis provided by the Alberta Westslope Cutthroat Trout Recovery Team (2013) and DFO (2014), Alberta Transportation is of the view that pure westslope cutthroat trout are no longer found in the LAA and they are unlikely to re-establish in the Elbow River below Elbow Falls regardless of the presence of the Project. Furthermore, beyond the potential opportunity for habitat offsetting in the upper reaches of the Elbow river, there is no widely accepted means to address or remediate the absence of this species in the LAA. The Project does not preclude efforts by the Alberta Westslope Cutthroat Trout Recovery Team to restore westslope cutthroat trout populations within its historical range. Given this, Alberta Transportation is of the view that historical shifts in the distribution of pure westslope cutthroat trout is not an issue that can be reconciled with Samson Cree Nation, within the scope of the Project.

In November 2019, Alberta Transportation provided written responses to the Samson Cree Nation SoC dated June 2018, which included the concerns related to westslope trout in SoC 2 (Samson Cree Nation Technical Review, 2018). Alberta Transportation has offered to meet with Samson Cree Nation regarding these written responses. Alberta Transportation will continue to offer to meet with Samson Cree Nation in order to confirm an understanding on the status of westslope cutthroat trout and attempt to try to resolve any remaining areas of disparity.



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The Métis Nation of British Columbia also expressed a concern regarding pure strains of westslope trout in a letter dated July 11, 2018. Alberta Transportation responded to their concern in a letter dated June 28, 2019 with the same information on westslope trout provided above.

REFERENCES

Alberta Westslope Cutthroat Trout Recovery Team. 2013. Alberta Westslope Cutthroat Trout Recovery Plan: 2012-2017. Alberta Environment and Sustainable Resource Development, Alberta Species at Risk Recovery Plan No. 28. Edmonton, AB. 77 pp.

COSEWIC (Committee on the Status of endangered Wildlife in Canada). 2016. COSEWIC Assessment and Status Report on the Westslope Cutthroat Trout Oncorhynchus clarkii lewisi, Saskatchewan-Nelson River populations and Pacific populations in Canada – 2016. <a href="https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry/cosewic-assessments-status-reports/westslope-cutthroat-trout-2016.html#_pre

DFO (Fisheries and Oceans Canada). 2014. Recovery Strategy for the Alberta populations of Westslope Cutthroat Trout (*Oncorhynchus clarkii lewisi*) in Canada [Final]. Species at Risk Act Recovery Strategy Series. Fisheries and Oceans Canada, Ottawa. iv + 28 pp + Appendices.

Conformity IR3-41

<u>Topic:</u> Cumulative Effects – Hydrology

Sources:

EIS Guidelines Part 2. Section 6.6.3

EIS Volume 3C, Section 1

Tsuut'ina First Nation, Ermineskin Cree Nation, and Kainai First Nation – Technical Review of the EIS - Annexes - Combined (CEAR # 46, 47, 50)

CEAA Information Requests Related to the Environmental Impact Statement Round 1 Part 3, IR3-41

Alberta Transportation Responses to IR Round 1, SRI CEAA IR Package 3

Context and Rationale

In CEAA information Requests Related to the Environmental Impact Statement Round 1 Part 3, IR3-41, the Agency required additional information to support its understanding of how cumulative effects to hydrology, surface water quality, and aquatic ecology interact with other VCs such as wildlife use patterns and culture/sense of place and whether the updated



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cumulative effects assessment affects conclusions for direct or cumulative effects to these VCs. As noted in the information request, the EIS Guidelines require the proponent to identify and assess the Project's cumulative effects, including an assessment of cumulative effects to the Elbow River, its hydrology and seasonal flood process, water quality, and aquatic ecology. The cover letter to the information requests and the EIS Guidelines further direct the proponent to present points of disagreement between the views of Alberta Transportation and Indigenous groups, along with a description of efforts undertaken to reconcile these differences and a rationale for conclusions.

Alberta Transportation's response to IR3-41 notes that wildlife use patterns and culture/sense of place are assessed as relevant and appropriate for the wildlife VC and the traditional land and resource use VC, respectively. Additionally, Alberta Transportation indicates that effects from surface water quality, aquatic ecology and hydrology on wildlife use patterns and cultural/sense of place were not assessed because there are no such effects. The response does not provide an understanding of the potential cumulative effects to wildlife use patterns and cultural/sense of place.

Additional information is required to understand the cumulative effects of the Project on hydrology, surface water quality and aquatic ecology, the interactions of these effects with other factors, and related effects on Indigenous peoples.

Information Requests:

- a) Discuss how cumulative effects to hydrology, surface water quality, and aquatic ecology, interact with other factors such as wildlife use patterns and culture/sense of place as it relates to Indigenous peoples.
 - Discuss whether the updated cumulative effects assessment affects conclusions for direct or cumulative effects to these factors.
 - Identify and discuss areas of disparity between Indigenous groups' and Alberta
 Transportation's views and conclusions regarding how cumulative effects to hydrology,
 surface water quality, and aquatic ecology, interact with other factors such as wildlife
 use patterns and culture/sense of place, efforts made to reconcile these, and rationale
 for conclusions on matters for which disparity in views remains.



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Response

- a) Discuss how cumulative effects to hydrology, surface water quality, and aquatic ecology, interact with other factors such as wildlife use patterns and culture/sense of place as it relates to Indigenous peoples.
 - Discuss whether the updated cumulative effects assessment affects conclusions for direct or cumulative effects to these factors

The cumulative effects assessment for hydrology, surface water quality, and aquatic ecology in the EIA considered all relevant past, present, and reasonably foreseeable future activities (as discussed in the response to Round 1 CEAA Package 3, IR3-41), and as a result, no update to the cumulative effects assessment has been undertaken.

The potential Project effects on wildlife use patterns due to changes in hydrology are considered as part of the assessment related to changes in wildlife habitat and movement during flood operations, which are discussed in Volume 3B, Section 11. During flood operations, the Project would directly alter wildlife habitat as the flood waters temporarily render habitats inaccessible for terrestrial wildlife species. The extent of this change would depend on the flood magnitude. Similarly, the diversion of flood waters into the off-stream reservoir has potential to create physical barriers that might temporarily hinder wildlife movement in the LAA. However, ungulates (deer, elk) and other large mammals (e.g., bear) are expected to travel around the flood waters contained in the off-stream reservoir. In addition, diverting water from the Elbow River would retain connectivity and movement corridors downstream of the diversion structure that would otherwise be flooded.

Similarly, cumulative effects on wildlife use patterns resulting from changes in hydrology during flood operations, have been assessed and are discussed in Volume 3C, Section 1.3.8. Although the Project will contribute to cumulative effects on wildlife in the RAA during a flood, these cumulative changes to wildlife habitat and movement are temporary and not expected to result in a change to the long-term sustainability of wildlife in the RAA.

Interactions between surface water quality and wildlife were considered to assess potential Project effects on change in wildlife health related to water quality and methylmercury production (see EIA, Volume 3B, Section 11.3.6.3). Water released from the off-stream reservoir is not expected to result in methylmercury levels in Elbow River high enough to affect food webs and aquatic ecology (see Alberta Transportation's response to Round 1 CEAA Package 3, IR 3-33).

TUS' have been received since the filing of the EIA, and Alberta Transportation has reviewed and analyzed these in the context of the EIA and have confirmed that no new effects to hydrology, surface water quality, or aquatic ecology were identified that had not been considered in the EIA. Volume 3C, Section 1.2.9.2 concludes that no pathways for cumulative effects on surface water quality or hydrogeology have been identified as a result of construction and dry



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operations; therefore, cumulative effects on the traditional use of water are not anticipated. As discussed in Volume 3C, Section 1.2.7, cumulative effects on wildlife and biodiversity during construction and dry operations are limited because most of the lands affected do not contain high suitability habitat, have been previously disturbed or are primarily agricultural, and are relatively small compared to the availability of habitat in the RAA. Cumulative effects of the Project are not anticipated to threaten the long-term sustainability of wildlife in the RAA. As a result, the cumulative effects assessment conclusions have not changed regarding direct or cumulative effects to the factors of wildlife use patterns and culture/sense of place.

Alberta Transportation is aware of Indigenous views on the interconnectedness of water and all living things and respects that Indigenous groups believe there could be Project and cumulative effects on culture and sense of place. A discussion of potential Project effects on culture, which includes sense of place, is provided in Alberta Transportation's response to Round 1 CEAA Package 2, IR2-02 and supplemented by the response to CEAA Conformity IR2-02. In summary, Alberta Transportation acknowledges that for Indigenous groups culture and sense of place is, as expressed in those responses, a personal and subjective view reflective of the local and regional landscape over one or more generations, and hence is intrinsically representative of cumulative effects.

- a) Discuss how cumulative effects to hydrology, surface water quality, and aquatic ecology, interact with other factors such as wildlife use patterns and culture/sense of place as it relates to Indigenous peoples.
 - Identify and discuss areas of disparity between Indigenous groups' and Alberta
 Transportation's views and conclusions regarding how cumulative effects to hydrology,
 surface water quality, and aquatic ecology, interact with other factors such as wildlife
 use patterns and culture/sense of place, efforts made to reconcile these, and rationale
 for conclusions on matters for which disparity in views remains

With respect to disparities, Alberta Transportation acknowledges that there are differences in views on cumulative effects on water between Alberta Transportation and Indigenous groups. Alberta Transportation has reviewed relevant information from numerous sources, including CEAA submissions, SoCs, engagement meetings, correspondence, and TUS reports received. This information has been compiled into SCRTs (provided in CEAA Conformity Package 2, IR2-01, Appendix 1-2). Information received to date from Indigenous groups related to how cumulative effects to hydrology, surface water quality, and aquatic ecology ay interact with wildlife use patterns and culture or sense of place is provided below in Table 41-1.

Information regarding how cumulative effects to hydrology, surface water quality, and aquatic ecology interact with other factors such as wildlife use patterns and culture/sense of place was not received from Siksika Nation, Samson Cree Nation, Montana First Nation, Foothills Ojibway Society, Ktunaxa Nation, or Métis Nation British Columbia.



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The general areas of disparity in views include views by Indigenous groups that:

- the cumulative effects assessment methodology is not adequate
- cumulative effects on water will result in effects on the ability to exercise rights and engage in TLRU
- cumulative effects on water will result in changes to Indigenous groups' culture and sense of place

ADEQUACY OF THE CUMULATIVE EFFECTS ASSESSMENT METHODOLOGY

With respect to the adequacy of the cumulative effects assessment methodology, Alberta Transportation has engaged with five Treaty 7 First Nations, including Kainai First Nation, Piikani Nation, Siksika Nation, Stoney Nakoda Nations, and Tsuut'ina Nation since 2014 to understand how the Project potentially impacts rights and traditional uses including offering and funding site visits and TUS in addition to workshops and other meetings. Since 2016, Alberta Transportation has also been engaged with the additional eight Indigenous groups identified by the CEAA for engagement on the Project. Through engagement activities, Alberta Transportation has provided multiple opportunities for Indigenous groups to provide information about how potential cumulative effects on hydrology, surface water quality, and aquatic ecology may interact with wildlife use patterns and culture or sense of place. More detail regarding Indigenous engagement activities with each Indigenous group engaged on the Project is provided in Alberta Transportation's response to CEAA Conformity IR2-01, Table 1-1. The cumulative effects assessment was conducted following standard, accepted methodology appropriate to the extent and nature of the Project. This methodology is based on precedent, having been previously accepted by federal and provincial regulatory agencies, including CEAA, on a number of projects. The Project Inclusion list identified all past, present or reasonably foreseeable future projects that may interact cumulatively with residual effects of the Project (Volume 3C, Section 1.1.4, Round 1 CEAA Package 3, IR3-41).

The EIA submitted in March 2018 considered best available TLRU information, including information about hydrology, surface water quality, and aquatic ecology as it related to TLRU and wildlife. As TUS have been received since the filing of the EIA, Alberta Transportation has reviewed and analyzed these in the context of the EIA and have confirmed that no new effects to hydrology, surface water quality, or aquatic ecology were identified that had not been considered in the EIA. Volume 3C, Section 1.2.9.2 concludes that no pathways for cumulative effects on surface water quality or hydrogeology have been identified as a result of construction and dry operations; therefore, cumulative effects on the traditional use of water are not anticipated. As discussed in Volume 3C, Section 1.2.7, cumulative effects on wildlife and biodiversity during construction and dry operations are limited because most of the lands affected do not contain high suitability habitat, have been previously disturbed or are primarily agricultural, and are relatively small compared to the availability of habitat in the RAA.

Cumulative effects of the Project are not anticipated to threaten the long-term sustainability of wildlife in the RAA.



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POTENTIAL FOR EFFECTS ON INDIGENOUS GROUPS' ABILITY TO EXERCISE RIGHTS AND ENGAGE IN TLRU

With respect to Indigenous groups' views that cumulative effects on water will result in effects on Indigenous groups' ability to exercise rights and engage in TLRU activities, Alberta Transportation acknowledges that Indigenous groups may access private lands within the Project area for TLRU purposes with permission from the landowners. Alberta Transportation also recognizes and respects the importance that Indigenous peoples place on harvesting resources and harvesting areas, understanding that access, availability, and distribution of resources are connected with other environmental factors, including hydrology, surface water quality, and aquatic ecology. However, future projects and activities, combined with the Project's predicted cumulative effects on availability of traditional resources for current use and access to traditional resources or areas for current use, are not anticipated to critically reduce or eliminate current use from the RAA. except where permanent structures are erected, such as in the PDA.

The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites First Nations and stakeholders to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.

Despite the assessment conclusion that the Project is not expected to limit the availability of or access to traditional lands and resources in the RAA, Alberta Transportation acknowledges that Indigenous groups may have ongoing concerns about potential effects on the ability to exercise rights and engage in TLRU.

POTENTIAL FOR CHANGES TO INDIGENOUS GROUPS' CULTURE AND SENSE OF PLACE

With respect to views that cumulative effects on water will result in changes to Indigenous groups' culture and sense of place, Alberta Transportation is of the view that the Project is designed to facilitate natural river flow patterns, while mitigating against extreme flood events that can negatively impact river function and that overall flood protection measures help reduce the impacts of extreme flood events. Alberta Transportation has committed to implementing numerous mitigation measures to address concerns raised by Indigenous groups regarding traditional land and resource use, which, in many cases, interact and overlap with elements of cultural and sense of place. These mitigation measures can also be found in the EIA, Volume 4, Appendix C.

Alberta Transportation recognizes that potential effects on experiential values can only be meaningfully evaluated by individuals and communities experiencing these values in their cultural context. Alberta Transportation has, to the extent possible and within its understanding



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of the impact, addressed the concerns by describing effects on continued accessibility and proposing mitigations. Alberta Transportation is not able to assign relative importance to, or preferred use of, the identified resources or areas. Instead when these uses and preferred sites have been identified, Alberta Transportation has recorded and reported this information (see Alberta Transportation's response to Round 1 CEAA Package 2, IR2-01 and IR2-02 as well as Table 41-1 in this response).

In an effort to minimize potential effects on culture and sense of place, Alberta Transportation invites input from Indigenous groups on specific mitigation measures that could be considered to address cultural or spiritual impacts associated with the Project. Alberta Transportation will maintain access to identified current use sites located outside the designated construction and Project site limits during construction and operations. Alberta Transportation has provided written responses to Indigenous groups that have submitted TUS. These are included in CEAA Conformity IR2-01, Appendix 1-1. Alberta Transportation has met with or will meet with each Indigenous group that has submitted a TUS to receive their comment and feedback, including view regarding the effectiveness of proposed mitigation measures.

Despite the assessment conclusion that the Project is not expected to limit the availability of or access to traditional lands and resources in the RAA, Alberta Transportation acknowledges that Indigenous groups may have ongoing concerns about potential effects on culture and sense of place.

Going forward, efforts to reconcile areas of disparity may occur, generally, through the provision of Project information, the incorporation of feedback that results in changes to Project planning or through commitment to further exploring an issue, concern or recommendation. For example, Alberta Transportation has provided written responses to Indigenous groups that have submitted TUS. These are included in CEAA Conformity IR2-01, Appendix 1-1. Alberta Transportation has met with or will meet with each Indigenous group that has submitted a TUS to receive their comment and feedback, including view regarding the effectiveness of proposed mitigation measures. Alberta Transportation's engagement with Indigenous groups is ongoing. As such, Appendix 1-1 also describes both Alberta Transportation's efforts to date and planned commitments to try to reconcile areas of disparity between the views and conclusions of Indigenous groups and Alberta Transportation regarding the Project's potential cumulative effects on hydrology, surface water quality, and aquatic ecology and any potential subsequent interactions with wildlife use patterns and culture and sense of place.

Alberta Transportation is committed to working with Indigenous groups to try to seek mutually acceptable solutions to the issues, concerns or recommendations identified and those that remain unresolved will be tracked through Alberta Transportation's ongoing engagement.





Table 41-1 Indigenous Group Views on Cumulative Effects of the Project on Hydrology, Surface Water Quality and Aquatic Ecology and how They Interact with Wildlife Use Patterns and Culture/Sense of Place

Views related to Potential Effects on TLRU	Source	Alberta Transportation's Response	Efforts to Consult/Engage/ Reconcile and Next Steps
Kainai First Nation/Blood Tribe (KFN)			
 KFN requests that Alberta Transportation revise its modelling inputs to identify and account for changes to Elbow River hydrology; from this KFN requests that Alberta Transportation "use these revised inputs to assess effects to hydrology and fluvial morphology under the construction/dry scenario and reassess effects to hydrology and fluvial morphology under flood post-flood scenarios." KFN also requests that Alberta Transportation "indicate how the assessment/reassessment alter(s) the effects assessments of VCs that depend on the outcome of the hydrology assessment. Specific attention must be paid to interactions between hydrology and: hydrogeology; fluvial morphology; wildlife use patterns, and culture/sense of place." KFN requests Alberta Transportation to reassess effects to federal lands based on regional study spatial boundaries for each biophysical and socioeconomic VC that include the entirety of each of the TN Reserve 145 and the SNN Reserves 142, 143 and 144. This is particularly important with respect to assessing cumulative effects to wildlife as it relates to the exercise of traditional use because cumulative effects of regional development may affect patterns of use across an entire reserve. 	• KFN 2018 (CEAR # 47)	Alberta Transportation has been engaged with KFN since 2014 to understand how the Project potentially impacts rights and traditional uses including offering and funding site visits and TUS studies in addition to workshops and other meetings.	In December 2019, Alberta Transportation provided written responses to the KFN Technical Review dated June 2018, which included these concerns as Annex E Federal Lands, Question 1 and Annex F Cumulative Effects, Questions 1 and 3. Alberta Transportation will offer to meet with KFN regarding the written responses.
		The EIA submitted in March 2018 considered best available TLRU information, including information about the assessment methodology. Volume 3A, Section 14.3.2.1 concludes, given the scope and location of the Project, that effects there will not result in a long-term threat to the persistence and viability of lands and resources in the RAA.	Alberta Transportation has provided multiple opportunities for KFN to provide information and feedback. Alberta Transportation notes that opportunities were offered to each Indigenous group engaged on the Project, including KFN, to participate in a TLRU workshop, facilitated by CEAA (see the EIA, Volume 3A, Section 14.2 and Volume 3B, Section 14.2.2).
		Future projects and activities, combined with the Project's predicted cumulative effects on availability of traditional resources for current use and access to traditional resources or areas for current use, are not anticipated to critically reduce or eliminate current use from the RAA. Except where permanent structures are erected, such as in the PDA. Overall, Alberta Transportation is of the position that the cumulative effects	These workshops were designed to obtain feedback on the draft TLRU sections (EIA, Sections 14 of Volumes 3A and 3B), to obtain input on proposed mitigation measures, and to discuss how Project- Specific Concerns have been addressed in the EIA, including Indigenous groups' perspectives on assessment methodology, proposed mitigation, Project- Specific Concerns and Indigenous groups' perspectives on how the Project may affect TLRU including the persistence and viability of lands and resources in the RAA.
		Overall, Alberta Iransportation is of the position that the cumulative effects assessment was conducted following standard, widely accepted methodology, appropriate for the extent and nature of the Project. This methodology is based on precedent, having been previously accepted by federal and provincial regulatory agencies, including CEAA, on a considerable number of projects. The Project is not expected to limit the availability of or access to traditional lands and resources in the RAA (see the EIA, Volume 3A, Section 8.4.4 and Section 14.8.1). The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see the EIA, Volume 3A, Section 11.4.2 of the EIA). The Project is expected to result in restricted access to areas within the PDA. Fencing of infrastructure would restrict access to traditional resources or current use sites or areas for a small portion of Elbow River. However, the Project will also create access, through the development of a permanent portage for Elbow River. Current use sites and areas located outside the PDA are not anticipated to be directly affected by the Project.	Prior to filing the EIA, Alberta Transportation provided drafts of Volume 3A, Section 14.2 and Volume 3B, Section 14.2.2 (TLRU Effects Assessment for Construction and Dry Operations and TLRU Effects and Assessment for Flood and Post-flood Operations, respectively) to KFN for review and comment.
			In addition, Alberta Transportation has provided TUS funding to KFN. No requirements, restrictions or requests were placed on the conduct of TUS by Indigenous groups, but it has been Alberta Transportation's expectation that the TUS would include a description of traditional use activities and views on cultural practices in relation to the Project.
			Alberta Transportation has also facilitated 9 meetings and 14 days of site visits to Project site with KFN Elders and knowledge holders. These site visits provided an opportunity for KFN to see where the Project will be located, how the Project would be operated, identify traditional use sites, areas, activities and practices that might be intersected by the Project, consider potential mitigation measures, and identify potential impacts to cultural experience and practice.
			As TUS have been received by Alberta Transportation, these have been reviewed and a written response provided to Indigenous groups addressing their comments and concerns. Prior to filing the EIA, Alberta Transportation received an interim TUS report from KFN. A final TUS was received in June 2018.
			The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites KFN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.



Table 41-1 Indigenous Group Views on Cumulative Effects of the Project on Hydrology, Surface Water Quality and Aquatic Ecology and how They Interact with Wildlife Use Patterns and Culture/Sense of Place

Views related to Potential Effects on TLRU	Source	Alberta Transportation's Response	Efforts to Consult/Engage/ Reconcile and Next Steps
		lands affected do not contain high suitability habitat, have been previously disturbed or are primarily agricultural, and are relatively small compared to the availability of habitat in the RAA. Cumulative effects of the Project are not anticipated to threaten the long-term sustainability of wildlife in the RAA. A discussion of potential Project effects on culture, which includes sense of place, was provided in Alberta Transportation's response to Round 1 CEAA Package 2, IR2-02. The assessment of potential effects on federal lands provided in Volume 3A, Section 18 and Volume 3B, Section 18 on a VC-by-VC basis is in accordance with the EIS Guidelines (CEAA 2016) (Part 1, Section. 3.3.2, p. 5; and, Part 2, Section 6.3.5, p. 34). Supporting this VC-by-VC approach is that the EIS Guidelines do not require that federal lands be a VC; instead, the Guideline states (Section 6.3.5) that "additional VCs are to be selected based oneffects to federal lands". The information provided in the EIA follows this direction.	Mitigation measures identified in Alberta Transportation's response to Round 1 CEAA Package 2, IR2-01 will be implemented to reduce potential adverse effects of the Project on current use sites and areas. Alberta Transportation commits to offering to hold workshops with KFN to discuss mitigation measures. The general flood mitigation that forms the basis for this Project is proposed to reduce impacts of extreme flood events. This may include a reduction in impacts on hydrology and surface water quality.
Piikani Nation (PN)			
 PN requests direct consultation to address the Project specific and cumulative loss of lands and natural resources and resulting loss of meaningful opportunities for the exercise of PN treaty and Aboriginal rights and interests. PN expressed concerns about the Project stating that the Oldman River dam has affected river flow, resulting in a loss of access to TLRU areas used by PN for generations. 	 PN 2018 (CEAR # 48) PN TUS 2017,p. 19 	The EIA submitted in March 2018 considered best available TLRU information, including information about the assessment methodology. Volume 3A, Section 14.3.2.1 concludes, given the scope and location of the Project, that effects there will not result in a long-term threat to the persistence and viability of lands and resources in the RAA. Future projects and activities combined with the Project's predicted cumulative effects on availability of traditional resources for current use and access to traditional resources or areas for current use are not anticipated to critically reduce or eliminate current use from the RAA, except where permanent structures are erected, such as in the PDA. Volume 3C, Section 1.2.9.2 concludes that no pathways for cumulative effects on surface water quality or hydrogeology have been identified as a result of construction and dry operations; therefore, cumulative effects on the traditional use of water are not anticipated. As discussed in Volume 3C, Section 1.2.7, cumulative effects on wildlife and biodiversity during construction and dry operations are limited because most of the lands affected do not contain high suitability habitat, have been previously disturbed or are primarily agricultural, and are relatively small compared to the availability of habitat in the RAA. Cumulative effects of the Project are not anticipated to threaten the long-term sustainability of wildlife in the RAA. Current use sites and areas located outside the PDA are not anticipated to be directly affected by the Project. More detail regarding Indigenous engagement activities with PN is provided in Alberta Transportation's response to Round 1 CEAA Package 2, IR2-01.	Alberta Transportation has been engaged with PN since 2014 to understand how the Project potentially impacts rights and traditional uses including offering and funding site visits and TUS studies in addition to workshops and other meetings. Alberta Transportation acknowledges PN's statements that there are culturally important lands and resources within the PDA. Alberta Transportation has provided multiple opportunities for PN to provide information about potential impacts to rights. Alberta Transportation provided drafts of the updated TLRU Effects Assessment sections of the EIA (Volumes 3A and 3B), which were provided February 5, 2018, for PN review and input. Alberta Transportation offered a TLRU workshop in January 2018 with PN to obtain input and feedback on the draft TLRU Effects Assessments, including PN's perspectives on assessment methodology, proposed mitigation, Project-Specific Concerns and how the Project may affect the exercise of Section 35 rights. PN Elders and knowledge holders participated in 14 days of site visits facilitated by Alberta Transportation. Results of the site visits were reported in the PN TUS study submitted to Alberta Transportation on February 22, 2017. Permission to use the spatial information from the TUS has not been received from PN by Alberta Transportation, therefore the information regarding sites and areas has been generalized for use in the EIA. Alberta Transportation is preparing a written response to PN addressing the concerns and issues raised in the TUS. Alberta Transportation sent a letter dated January 28, 2019 that requested the PN provide its views and perspectives on its Aboriginal and Treaty rights, cultural and experiential values, and country foods. The letter listed four specific topics that Alberta Transportation was requesting input on to help answer CEAA IRs. PN has not provided a response.



Table 41-1 Indigenous Group Views on Cumulative Effects of the Project on Hydrology, Surface Water Quality and Aquatic Ecology and how They Interact with Wildlife Use Patterns and Culture/Sense of Place

Views related to Potential Effects on TLRU	Source	Alberta Transportation's Response	Efforts to Consult/Engage/ Reconcile and Next Steps
		With respect to PN's concerns related to the effects to river flow resulting from the presence of the Oldman Dam; it should be noted that SR1 and the Oldman Dam are not comparable projects. The Oldman Dam is an onstream dam that permanently affects the flow of water in the river, while the Project is an off-stream dam that allows flow to continue in the Elbow river and only diverts a portion of the flood peak off-stream when the Project is activated.	The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with PN to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites PN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.
			Mitigation measures identified in Alberta Transportation's response to Round 1 CEAA Package 2, IR2-01 will be implemented to reduce potential adverse effects of the Project on current use sites and areas. Alberta Transportation commits to offering to hold workshops with PN to discuss mitigation measures.
			Alberta Transportation is preparing a written response to PN addressing the concerns and issues raised in the TUS and is committed to offering to meet to discuss the response.
			In December 2019, Alberta Transportation provided written responses to the PN Statement of Concern dated June 2018. Alberta Transportation will offer to meet with PN regarding the written responses.
PN stated "The Siksikaitsitapii maintain an unfettered and continuous relationship to the life surrounding the moraine and riparian landscape of the rivers, our source of spiritual sustenance, the core of our physical needs in this life we live: in this case, where, water is life. The Siksikaitsitapii chose the river valley's as a favored habitual homeland, among our traditional peers; all river corridors' were addressed with the same reverence to be shared among all niītsitapii."	• PN 2018 (CEAR # 48)	Alberta Transportation acknowledges PN's statements about the importance of water to PN traditions and culture. Alberta Transportation also recognizes that potential cumulative effects on water resulting in changes to culture and sense of place can only be meaningfully evaluated by individuals and communities experiencing these values in their cultural context. Alberta Transportation has, to the extent possible and within its understanding of the impact, addressed the concerns by describing effects on continued accessibility and proposing mitigations. Alberta Transportation is not able to assign relative importance to, or preferred use of, the identified resources or areas. Instead when these uses and preferred sites have been identified, Alberta Transportation has recorded and reported this information (see Alberta Transportation's response to Round 1 CEAA Package 2, IR2-01 and IR2-02). The Project is designed to facilitate natural river flow patterns while mitigating against extreme flood events that can negatively impact river function through the introduction and dispersal of foreign and harmful substances (i.e., contaminants and debris).	On March 23, 2018, Alberta Transportation sent detailed responses to Specific Concerns raised to date by providing a copy of Table 7-6 SR1 Project Specific Concerns and Responses - Piikani Nation from the March 2018 EIA. Alberta Transportation has provided multiple opportunities for PN to provide information about culture and sense of place and about the cultural importance of water. Alberta Transportation, through the Indigenous Engagement Program for the Project, has sought feedback on the Project and has taken Indigenous traditional knowledge into consideration in developing mitigation planning. Alberta Transportation has provided TUS funding to PN. No requirements, restrictions or requests were placed on the conduct of TUS by Indigenous groups, but it has been Alberta Transportation's expectation that the TUS would include a description of traditional use activities and views on cultural practices in relation to the Project. As TUS have been received by Alberta Transportation, these have been reviewed and a written response is provided to the Indigenous groups addressing their comments and concerns. Prior to filling the EIA, Alberta Transportation received a Final TUS from PN. Alberta Transportation is preparing a written response to PN addressing the concerns and issues raised in the TUS and is committed to offering to meet to discuss the response. Alberta Transportation has also facilitated 7 meetings and 14 days of site visits to the Project site with PN Elders and knowledge holders. These site visits provided an opportunity for PN to see where the Project will be located, how the Project would be operated, identify traditional use sites, areas, activities and practices that might be intersected by



Table 41-1 Indigenous Group Views on Cumulative Effects of the Project on Hydrology, Surface Water Quality and Aquatic Ecology and how They Interact with Wildlife Use Patterns and Culture/Sense of Place

Views related to Potential Effects on TLRU	Source	Alberta Transportation's Response	Efforts to Consult/Engage/ Reconcile and Next Steps
			Prior to filing the EIA, Alberta Transportation provided drafts of the EIA, Volume 3A, Section 14.2 and Volume 3B, Section 14.2.2 (TLRU Effects Assessment for Construction and Dry Operations and TLRU Effects and Assessment for Flood and Post-flood Operations, respectively) to PN for review and comment.
			Alberta Transportation offered PN opportunities to participate in a TLRU workshop, facilitated by the CEAA (see the EIA, Volume 3A, Section 14.2 and Volume 3B, Section 14.2.2). The workshop was designed to obtain feedback on the draft TLRU sections (Sections 14 of Volumes 3A and 3B), to obtain input on proposed mitigation measures, and to discuss how Project- Specific Concerns have been addressed in the EIA, including PN's perspectives on assessment methodology, proposed mitigation, Project- Specific Concerns and Indigenous groups' perspectives on how the Project may affect TLRU including cultural practices and cultural experiences.
			In an effort to minimize potential effects on culture and sense of place, Alberta Transportation invites input from PN on specific mitigation measures that could be considered to address cultural or spiritual impacts associated with the Project. Alberta Transportation will maintain access to identified current use sites located outside the designated construction and Project site limits during construction and operations.
			In addition, the construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites PN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.
			Alberta Transportation met with PN in September 2018 to discuss opportunities to support cultural programming.
			Alberta Transportation is preparing a written response to PN TUS addressing the concerns and issues raised in the TUS and is committed to offering to meet to discuss the TUS response.



Table 41-1 Indigenous Group Views on Cumulative Effects of the Project on Hydrology, Surface Water Quality and Aquatic Ecology and how They Interact with Wildlife Use Patterns and Culture/Sense of Place

Views related to Potential Effects on TLRU	Source	Alberta Transportation's Response	Efforts to Consult/Engage/ Reconcile and Next Steps
itoney Nakoda Nations (SNN)			
SNN expressed concerns that the lands that are available for TLRU are getting smaller and smaller over the years. This is a cumulative effect and habitat replacement is important. SNN stated that an effect on wildlife results in an effect on Treaty rights. SNN expressed concern that there is a lack of long-term wildlife studies on the cumulative impacts the SR1 Project would have to wildlife.	Meeting between SNN and Alberta Transportation, June 4, 2018 (cited in SNN SR1 SCRT Aug 2014-Aug 2019; Specific Concern/ Response to AT's Effort to Mitigate #4 & 11)	Alberta Transportation has been engaged with SNN since 2014 to understand how the Project potentially impacts rights and traditional uses including offering and funding site visits and TUS studies in addition to workshops and other meetings. Volume 3C, Section 1.2.9.2 concludes that no pathways for cumulative effects on surface water quality or hydrogeology have been identified as a result of construction and dry operations; therefore, cumulative effects on the traditional use of water are not anticipated. As discussed in Volume 3C, Section 1.2.7, cumulative effects on wildlife and biodiversity during construction and dry operations are limited because most of the lands affected do not contain high suitability habitat, have been previously disturbed or are primarily agricultural, and are relatively small compared to the availability of habitat in the RAA. Cumulative effects of the Project are not anticipated to threaten the long-term sustainability of wildlife in the RAA. Future projects and activities combined with the Project's predicted cumulative effects on availability of traditional resources for current use and access to traditional resources or areas for current use are not anticipated to critically reduce or eliminate current use from the RAA, except where permanent structures are erected, such as in the PDA and the other future Project footprints. Volume 3C, Section 1.2.9.2 concludes that no pathways for cumulative effects on the traditional use of water are not anticipated. As discussed in Volume 3C, Section 1.2.7, cumulative effects on wildlife and biodiversity during construction and dry operations; therefore, cumulative effects on the traditional use of water are not anticipated. As discussed in Volume 3C, Section 1.2.7, cumulative effects on wildlife and biodiversity during construction and dry operations are limited because most of the lands affected do not contain high suitability habitat, have been previously disturbed or are primarily agricultural, and are relatively small compared to the	At the meeting held on June 4, 2018. Stantec brought their wildlife biologist, who explained there is a monitoring program planned with wildlife cameras to monitor long-term cumulative effects of the Project on wildlife. At the meeting held on February 22, 2019, Alberta Transportation brought Stantec's wildlife biologist to present the mitigation measures in place for wildlife, including fencing, vegetating slopes, and a remote camera monitoring program that SNN can provide inpu on. In a letter dated June 18, 2019, Alberta Transportation indicated they had created a draft post-construction land use document for the SR1 Project that provides draft principles of future land use for the PDA. The draft land use principles and associated documents were provided to SNN on November 15, 2019 and discussed during a meeting held on November 19, 2019. Alberta Transportation has provided multiple opportunities for SNN to provide information about potential impacts to rights and traditional uses. Alberta Transportation held a TLRU workshop with SNN in February 2018 to obtain input an feedback on the draft TLRU Effects Assessments, including SNN's perspective on assessment methodology, proposed mitigation, Project-Specific Concerns and how the Project may affect the exercise of Section 35 rights. Alberta Transportation has provided funding to SNN to complete a TUS. SNN Elders and knowledge holders participated in 12 meetings and 11 days of site visits facilitated by Alberta Transportation. Alberta Transportation has invited SNN to provide a TUS, however, SNN verbally advised that they do not intend to provide a TUS. If SNN submits one at a later date, Alberta Transportation will review and provide SNN with a written response. The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA.



Table 41-1 Indigenous Group Views on Cumulative Effects of the Project on Hydrology, Surface Water Quality and Aquatic Ecology and how They Interact with Wildlife Use Patterns and Culture/Sense of Place

Views related to Potential Effects on TLRU	Source	Alberta Transportation's Response	Efforts to Consult/Engage/ Reconcile and Next Steps
the traditional lands of the SNN have sustained the SNN people since time immemorial. When Treaty 7 was signed, the SNN neither surrendered their Aboriginal title to water within	Meeting between SNN and Alberta	importance of water to SNN traditions and culture. Alberta Transportation	Alberta Transportation acknowledges SNN's views that there are culturally important lands and resources within the PDA.
	Transportation, June 4, 2018	also recognizes that potential cumulative effects on water resulting in changes to culture and sense of place can only be meaningfully evaluated by individuals and communities experiencing these values in their cultural	Alberta Transportation has provided multiple opportunities for SNN to provide information about potential impacts to rights and about cultural, sense of place, and the cultural importance of water.
their traditional territory nor surrendered any other interests pursuant to an associated Aboriginal right".		context. Alberta Transportation has been engaged with SNN since 2014 to understand how the Project potentially impacts rights and traditional uses including offering and funding site visits and TUS studies in addition to workshops and other meetings.	Alberta Transportation held a TLRU workshop with SNN in February 2018 to obtain input and feedback on the draft TLRU Effects Assessments, including SNN's perspective on assessment methodology, proposed mitigation, Project-Specific Concerns and how the Project may affect the exercise of Section 35 rights.
		The EIA submitted in March 2018 considered best available TLRU information, including information about the assessment methodology. Volume 3A, Section 14.3.2.1 concludes, given the scope and location of the	Alberta Transportation has provided funding to SNN to complete a TUS. SNN Elders and knowledge holders participated in 12 meetings and 11 days of site visits facilitated by Alberta Transportation. Alberta Transportation has invited SNN to provide a TUS, however, SNN verbally advised that they do not intend to provide a TUS. If SNN submits one at a later date, Alberta Transportation will review and provide SNN with a written response.
		Future projects and activities combined with the Project's predicted cumulative effects on availability of traditional resources for current use and	Alberta Transportation, through the Indigenous Engagement Program for the Project, has sought feedback on the Project and has taken Indigenous traditional knowledge into consideration in developing mitigation planning.
		access to traditional resources or areas for current use are not anticipated to critically reduce or eliminate current use from the RAA, except where permanent structures are erected, such as in the PDA.	In an effort to minimize potential effects on culture and sense of place, Alberta Transportation invites input from SNN on specific mitigation measures that could be considered to address cultural or spiritual impacts associated with the Project. Alberta Transportation will maintain access to identified current use sites located outside the designated construction and Project site limits during construction and operations.
			The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites SNN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.
			Mitigation measures identified in Alberta Transportation's response to Round 1 CEAA Package 2, IR2-01 will be implemented to reduce potential adverse effects of the Project on current use sites and areas. Alberta Transportation commits to offering to hold workshops with SNN to discuss mitigation measures.
			Alberta Transportation is committed to ongoing consultation with SNN to try to resolve any disparity in views that may remain.



Table 41-1 Indigenous Group Views on Cumulative Effects of the Project on Hydrology, Surface Water Quality and Aquatic Ecology and how They Interact with Wildlife Use Patterns and Culture/Sense of Place

Views related to Potential Effects on TLRU	Source	Alberta Transportation's Response	Efforts to Consult/Engage/ Reconcile and Next Steps
Tsuut'ina Nation (TN)			
 Tsuut'ina Nation (TN) TN is concerned that the Project will compound cumulative effects from ongoing development, including impacts to water flow through the reserve, plant and animal loss, and barriers to access. TN expressed concerns about cumulative effects on the environment and on the TN reserve. TN expressed concerns that ongoing cumulative effects will result in TN harvesters needing to travel greater distances to hunt. TN members have observed fluctuations in water quality in the Project area over time; TN also explained that a sewage smell has been present in the past, as a result of effluent discharge from Bragg Creek, which has had an effect on TLRU. TN expressed concerns that the availability to "pursue traditional land use practices is threatened by cavalier [attitudes] towards development with foreseeable impacts on Tsuut'ina reserve lands and water." TN members stated that land use is culturally connected to rivers, including Elbow River, noting that buffalo were 	• TN TUS 2018 • TN 2018 (CEAR #50) ative he TN rvesters to hunt. ions in r time; ell has of , which lability ces is wards cts on	Alberta Transportation acknowledges TN's stated views that there are culturally important lands and resources within the PDA. Alberta Transportation has been engaged with TN since 2014 to understand how the Project potentially impacts rights and traditional uses including offering and funding site visits and TUS studies in addition to workshops and other meetings. Volume 3C, Section 1.2.9.2 concludes that no pathways for cumulative effects on surface water quality or hydrogeology have been identified as a result of construction and dry operations; therefore, cumulative effects on the traditional use of water are not anticipated. As discussed in Volume 3C, Section 1.2.7, cumulative effects on wildlife and biodiversity during construction and dry operations are limited because most of the lands affected do not contain high suitability habitat, have been previously disturbed or are primarily agricultural, and are relatively small compared to the availability of habitat in the RAA. Cumulative effects of the Project are not anticipated to threaten the long-term sustainability of wildlife in the RAA. Overall, the Project is not expected to limit the availability of or access to traditional lands and resources in the RAA (see the EIA, Volume 3A, Section 8.4.4 and Section 14.8.1). The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha)	On November 23, 2018, Alberta Transportation provided its report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table. In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA for cumulative effects. Alberta Transportation also met with TN on December 6, 2018 to discuss the response and mitigation table. At the morning meeting held on February 21, 2019, Alberta Transportation detailed the additional work that has been done with the hydrogeological model. Results of the updated modelling will be provided to TN. At the afternoon meeting held on February 21, 2019, Wim Veldman presented on to present his review of Aquatic Resource Management Ltd.'s proposal for flood protection at Redwood Meadows. In December 2019, Alberta Transportation provided written responses to the TN Technical Review (May 2018), which included these concerns as Questions 1-7 and 2-1. Alberta Transportation will offer to meet with TN regarding the written responses. Alberta Transportation has provided multiple opportunities for TN to provide information about potential impacts to TLRU. Alberta Transportation provided drafts of the updated TLRU Effects Assessment sections of the EIA (Volumes 3A and 3B), which were provided February 5, 2018, for TN review and input. Alberta Transportation offered a TLRU workshop in January 2018 with TN to obtain input and feedback on the draft TLRU Effects Assessments, including PN's perspectives on assessment methodology, proposed mitigation, Project- Specific Concerns and how the Project may affect the exercise of Section 35 rights. Alberta Transportation has held 18 meetings with TN to share Project information and
dependent on the water.		disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see the EIA, Volume 3A, Section 11.4.2 of the EIA). Future projects and activities combined with the Project's predicted cumulative effects on availability of traditional resources for current use and access to traditional resources or areas for current use are not anticipated to critically reduce or eliminate current use from the RAA, except where permanent structures are erected, such as in the PDA and the other future Project footprints. More detail regarding Indigenous engagement activities with TN is provided in Alberta Transportation's response to Round 1 CEAA Package 2, IR2-01.	obtain TN's views on the Project, including cumulative effects related to water management. On six (6) of those occasions, flooding concerns at Redwood Meadows were discussed. In addition, mitigation measures, long term monitoring of the Project and TN's opportunities for involvement were also discussed. TN Elders and knowledge holders participated in 22 days of site visits facilitated by Alberta Transportation. Results of the site visits were reported in the TN TUS study submitted to Alberta Transportation on April 3, 2018. Alberta Transportation has provided a written response to TN addressing the concerns and issues raised in the TUS and met with TN in December 2018 to discuss the response. Alberta Transportation sent a letter dated January 28, 2019 that requested the TN provide its views and perspectives on its Aboriginal and Treaty rights, cultural and experiential values, and country foods. The letter listed four specific topics that Alberta Transportation was requesting input on to help answer CEAA IRs. TN provided a response and elected to not provide their views on their Section 35 rights in relation to the Project. The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be



Table 41-1 Indigenous Group Views on Cumulative Effects of the Project on Hydrology, Surface Water Quality and Aquatic Ecology and how They Interact with Wildlife Use Patterns and Culture/Sense of Place

Views related to Potential Effects on TLRU	Source	Alberta Transportation's Response	Efforts to Consult/Engage/ Reconcile and Next Steps
			an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites TN to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.
			Mitigation measures identified in Alberta Transportation's response to Round 1 CEAA Package 2, IR2-01 will be implemented to reduce potential adverse effects of the Project on current use sites and areas. Alberta Transportation commits to offering to hold workshops with TN to discuss mitigation measures.
Ermineskin Cree Nation (ECN)			
ECN is concerned that the cumulative effects assessment carried out by Alberta Transportation is inadequate. ECN does not accept assessments of cumulative effects to the Nation's traditional way of life,	ECN TUS 2018 (CEAR #46) (cited in ECN SR1 SCRT Aug 2014 – Sept 2019; Specific	Alberta Transportation has been engaged with ECN since 2016 to understand how the Project potentially impacts rights and traditional uses including offering and funding site visits and TUS studies in addition to workshops and other meetings. The EIA submitted in March 2018 considered best available TLRU	Alberta Transportation has provided multiple opportunities for ECN to provide information and feedback. Alberta Transportation notes that opportunities were offered to each Indigenous group engaged on the Project, including ECN, to participate in a TLRU workshop, facilitated by the CEAA (see the EIA, Volume 3A, Section 14.2 and Volume 3B, Section 14.2.2).
culture, traditional use, and traditional knowledge that are carried out within the confines of Project-specific assessments, with the Nation's temporal, geographic, and resource constraints. • ECN requests that Alberta Transportation	Concern #26)	information, including information about the assessment methodology. The EIA, Volume 3A, Section 14.3.2.1 concludes, given the scope and location of the Project, that effects there will not result in a long-term threat to the persistence and viability of lands and resources in the RAA. Overall, Alberta Transportation is of the position that the cumulative effects assessment was conducted following standard, widely accepted methodology, appropriate for the extent and nature of the Project. This methodology is based on precedent, having been previously accepted by federal and provincial regulatory agencies, including CEAA, on a considerable number of projects. Wildlife use patterns are not affected by Project effects to hydrology, surface water quality, and aquatic ecology because there is no effects pathway between those VCs and wildlife movement. Volume 3C, Section 1.2.9.2 concludes that no pathways for cumulative effects on surface water quality or hydrogeology have been identified as a result of construction and dry operations; therefore, cumulative effects on the traditional use of water are not anticipated. As discussed in Volume 3C, Section 1.2.7, cumulative effects on wildlife and biodiversity during construction and dry operations are limited because most of the lands affected do not contain high suitability habitat, have been previously disturbed or are primarily agricultural, and are relatively small compared to	These workshops were designed to obtain feedback on the draft TLRU sections (EIA, Sections 14 of Volumes 3A and 3B), to obtain input on proposed mitigation measures, and to discuss how Project- Specific Concerns have been addressed in the EIA, including Indigenous groups' perspectives on assessment methodology, proposed mitigation, Project- Specific Concerns and Indigenous groups' perspectives on how the Project may affect TLRU including the persistence and viability of lands and resources in the RAA.
revise and make available for review its modelling inputs to identify and account for changes to Elbow River hydrology; from this ECN requests that Alberta			Prior to filing the EIAS, Alberta Transportation provided drafts of the EIA, Volume 3A, Section 14.2 and Volume 3B, Section 14.2.2 (TLRU Effects Assessment for Construction and Dry Operations and TLRU Effects and Assessment for Flood and Post-flood Operations, respectively) to ECN for review and comment.
Transportation "use these revised inputs to assess effects to hydrology and fluvial morphology under the construction/dry scenario and reassess effects to hydrology and fluvial morphology under flood postflood scenarios." ECN also requests that			In addition, Alberta Transportation has provided TUS funding to ECN. The ECN TUS study was submitted to Alberta Transportation on June 25, 2018. Alberta Transportation provided a written response to ECN addressing the concerns and issues raised in the TUS and met with ECN on September 16, 2019 to receive comment and feedback on the response (see CEAA Conformity Package 2, IR2-01, Appendix 1-1).
Alberta Transportation "indicate how the assessment/reassessment alter(s) the effects assessments of VCs that depend on the outcome of the hydrology assessment. Specific attention must be paid to interactions between hydrology and:	cortation "indicate how the assessment alter(s) the ments of VCs that depend on of the hydrology assessment. tion must be paid to		Alberta Transportation has also facilitated 4 meetings and 1 day of site visits to Project site with ECN Elders and knowledge holders. These site visits provided an opportunity for ECN to see where the Project will be located, how the Project would be operated, identify traditional use sites, areas, activities and practices that might be intersected by the Project, consider potential mitigation measures, and identify potential impacts to cultural experience and practice.
hydrogeology; fluvial morphology; wildlife use patterns, and culture/sense of place."		the availability of habitat in the RAA. Cumulative effects of the Project are not anticipated to threaten the long-term sustainability of wildlife in the RAA.	In December 2019, Alberta Transportation provided written responses to the ECN Technical Review dated June 2018, which included these concerns as Annex F Cumulative Effects, Question 1. Alberta Transportation will offer to meet with ECN
		A discussion of potential Project effects on culture, which includes sense of place, was provided in Alberta Transportation's response to Round 1 CEAA Package 2, IR2-02.	regarding the written responses.
		The general flood mitigation that forms the basis for this Project is proposed to reduce impacts of extreme flood events. This may include a reduction in impacts on hydrology and surface water quality.	



Table 41-1 Indigenous Group Views on Cumulative Effects of the Project on Hydrology, Surface Water Quality and Aquatic Ecology and how They Interact with Wildlife Use Patterns and Culture/Sense of Place

Views related to Potential Effects on TLRU	Source	Alberta Transportation's Response	Efforts to Consult/Engage/ Reconcile and Next Steps
Louis Bull Tribe (LBT)			
LBT expressed concerns about cumulative effects and incremental impacts to the	• LBT 2018 (CEAR #49)	Alberta Transportation acknowledges LBT's views that there are culturally important lands and resources within the PDA.	Alberta Transportation has provided multiple opportunities for LBT to provide information about potential impacts to rights.
health and abundance of resources provided under LBT's Aboriginal and Treaty rights.		Alberta Transportation has been engaged with LBT since 2016 to understand how the Project potentially impacts rights and traditional uses including offering and funding site visits and TUS studies in addition to workshops and other meetings.	Alberta Transportation provided drafts of the updated TLRU Effects Assessment sections of the EIA (Volumes 3A and 3B), which were provided February 5, 2018, for LBT review and input.
		The EIA submitted in March 2018 considered best available TLRU information, including information about the assessment methodology. Volume 3A, Section 14.3.2.1 concludes, given the scope and location of the	Alberta Transportation offered a TLRU workshop in January 2018 with LBT to obtain input and feedback on the draft TLRU Effects Assessments, including LBT's perspectives on assessment methodology, proposed mitigation, Project-Specific Concerns and how the Project may affect the exercise of Section 35 rights.
		Project, that effects there will not result in a long-term threat to the persistence and viability of lands and resources in the RAA.	LBT Elders and knowledge holders participated in 1 day of site visits facilitated by Alberta Transportation. Results of the site visits were reported in the LBT TUS study submitted to
		Future projects and activities combined with the Project's predicted cumulative effects on availability of traditional resources for current use and access to traditional resources or areas for current use are not anticipated to critically reduce or eliminate current use from the RAA, except where permanent structures are erected, such as in the PDA. Volume 3C, Section 1.2.9.2 concludes that no pathways for cumulative effects on surface water quality or hydrogeology have been identified as a result of construction and dry operations; therefore, cumulative effects on the traditional use of water are not anticipated. As discussed in Volume 3C, Section 1.2.7, cumulative effects on wildlife and biodiversity during construction and dry operations are limited because most of the lands affected do not contain high suitability habitat, have been previously	Alberta Transportation on November 22, 2018. Alberta Transportation has provided a written response to LBT addressing the concerns and issues raised in the TUS and will men with LBT on November 14, 2019 to discuss the response. Alberta Transportation sent a letter dated January 28, 2019 that requested the LBT provisits views and perspectives on its Aboriginal and Treaty rights, cultural and experiential values, and country foods. The letter listed four specific topics that Alberta Transportation was requesting input on to help answer CEAA IRs. LBT provided a response on March 4, 2019 outlining their views and perspectives on their Section 35 rights in relation to the Project. These have been reviewed by Alberta Transportation and will be considered in Project planning and the regulatory process.
			Alberta Transportation responded to LBT's TUS report on August 8, 2019 with mitigation measures and responses and met on November 14, 2019 to discuss the written response.
	disturbed or are primarily agricultural, and are relatively small compared to the availability of habitat in the RAA. Cumulative effects of the Project are not anticipated to threaten the long-term sustainability of wildlife in the RAA. More detail regarding Indigenous engagement activities with LBT is provided in Alberta Transportation's response to Round 1 CEAA Package 2, IR2-01.	The construction and management of the off-stream reservoir presents a unique opportunity because it requires the acquisition of private land by Crown. The GoA will be engaging with First Nations and stakeholders to finalize principles for future land use for a portion of the PDA known as the LUA. The primary use of all lands within the PDA is flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites LBT to participate in the engagement process for the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights.	
			Mitigation measures identified in Alberta Transportation's response to Round 1 CEAA Package 2, IR2-01 will be implemented to reduce potential adverse effects of the Project on current use sites and areas. Alberta Transportation commits to offering to hold workshops with LBT to discuss mitigation measures.



Table 41-1 Indigenous Group Views on Cumulative Effects of the Project on Hydrology, Surface Water Quality and Aquatic Ecology and how They Interact with Wildlife Use Patterns and Culture/Sense of Place

Views related to Potential Effects on TLRU	Source	Alberta Transportation's Response	Efforts to Consult/Engage/ Reconcile and Next Steps
Métis Nation of Alberta, Region 3 (MNAR3)			
MNAR3 have hunted and trapped in the Project area. MNAR3 expressed concern that the Project will alter the landscape which may potentially disrupt the	• MNAR3 TUS 2019, p. 7, 10, 20.	Alberta Transportation has been engaged with MNAR3 since 2016 to understand how the Project potentially impacts rights and traditional uses including offering and funding site visits and TUS studies in addition to workshops and other meetings.	Alberta Transportation acknowledges MNAR3's view that there are culturally important lands and resources within the PDA. Alberta Transportation has provided multiple opportunities for MNAR3 to provide information about potential impacts to TLRU.
connections of MNAR3 to the lands and waters in the Project area.		The EIA submitted in March 2018 considered best available TLRU information, including information about the assessment methodology. Volume 3A, Section 14.3.2.1 concludes, given the scope and location of the Project, that effects there will not result in a long-term threat to the	Alberta Transportation provided drafts of the updated TLRU Effects Assessment sections of the EIA (Volumes 3A and 3B), which were provided February 5, 2018, for MNAR3 review and input.
		persistence and viability of lands and resources in the RAA. Future projects and activities combined with the Project's predicted cumulative effects on availability of traditional resources for current use and access to traditional resources or areas for current use are not anticipated to critically reduce or eliminate current use from the RAA, except where permanent structures are erected, such as in the PDA. Volume 3C, Section 1.2.9.2 concludes that no pathways for cumulative effects on surface water quality or hydrogeology have been identified as a result of construction and dry operations; therefore, cumulative effects on the traditional use of water are not anticipated. As discussed in Volume 3C, Section 1.2.7, cumulative effects on wildlife and biodiversity during construction and dry operations are limited because most of the lands affected do not contain high suitability habitat, have been previously disturbed or are primarily agricultural, and are relatively small compared to the availability of habitat in the RAA. Cumulative effects of the Project are not anticipated to threaten the long-term sustainability of wildlife in the RAA. More detail regarding Indigenous engagement activities with MNAR3 is provided in Alberta Transportation's response to Round 1 CEAA Package 2, IR2-01.	Alberta Transportation offered a TLRU workshop in January 2018 with MNAR3 to obtain input and feedback on the draft TLRU Effects Assessments, including MNAR3's perspectives on assessment methodology, proposed mitigation, Project- Specific Concerns and how the Project may affect the exercise of Section 35 rights. MNAR3 participated in a TLRU workshop on February 22, 2018. In addition, Alberta Transportation has provided TUS funding to MNAR3. No requirements, restrictions or requests were placed on the conduct of TUS by Indigenous groups, but it has been Alberta Transportation's expectation that the TUS would include a description of traditional use activities and views on cultural practices in relation to the Project. A TUS report was submitted by MNAR3 in August 2019 and Alberta Transportation is preparing a written response to MNAR3 addressing the concerns and issues raised in the TUS. Alberta Transportation sent a letter dated January 28, 2019 that requested the MNAR3 provide its views and perspectives on its Aboriginal and Treaty rights, cultural and experiential values, and country foods. The letter listed four specific topics that Alberta Transportation was requesting input on to help answer CEAA IRs. Mitigation measures identified in Alberta Transportation's response to Round 1 CEAA Package 2, IR2-01 will be implemented to reduce potential adverse effects of the Project on current use sites and areas. Alberta Transportation commits to offering to hold workshops with MNAR3 to discuss mitigation measures.



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REFERENCE

CEAA (Canadian Environmental Assessment Agency). 2016. Guidelines for the Preparation of an Environmental Impact Statement pursuant to the Canadian Environmental Assessment Act, 2012, Springbank Off-Stream Reservoir Project

Conformity IR3-42

Topic: Cumulative Effects – Water Management

Sources:

EIS Guidelines Part 2, Section 6.6.3

EIS Volume 1, Section 2

EIS Volume 3B, Section 18

EIS Volume 3C, Section 1

Tsuut'ina First Nation, Ermineskin Cree Nation, and Káínai First Nation – Technical Review of the EIS - Annexes - Combined (CEAR # 46, 47, 50)

Context and Rationale

In CEAA information Requests Related to the Environmental Impact Statement Round 1 Part 3, IR3-42, the Agency required additional information to support the its understanding of Tsuut'ina Nation's interest in developing flood mitigation infrastructure, including for the protection of Redwood Meadows, on its reserve lands, considering the scope of flood mitigation activities in the region.

As noted in the information request, The EIS Guidelines require the proponent to identify and assess the Project's cumulative effects, taking into consideration regional flood mitigation works and strategies. The cover letter to the information requests and the EIS Guidelines further direct the proponent to present points of disagreement between the views of Alberta Transportation and Indigenous groups, along with a description of efforts undertaken to reconcile these differences and a rationale for conclusions.

Alberta Transportation's response to IR3-42 indicates that potential and reasonably foreseeable flood mitigation measures contemplated for Tsuut'ina Nation Reserve lands were not considered in the cumulative effects assessment because information was not available describing any such project prior to filing of the EIA. Additionally, Alberta Transportation notes that based on currently available information, a potential cumulative effect between the Project and flood mitigation proposed for Redwood Meadows is unlikely. The response does not demonstrate



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consideration of Tsuut'ina Nation's concerns regarding water management, governance, and decision making.

Additional information is required to understand cumulative effects and the effects of changes to the environment on Indigenous peoples.

<u>Information Requests:</u>

- a) Describe how potential and reasonably foreseeable flood mitigation measures contemplated for Tsuut'ina Nation reserve lands were considered in the cumulative effects assessment.
- b) Identify how the Project may interact with or restrict the flood mitigation options available to Tsuut'ina Nation and how this impacts Tsuut'ina Nation's ability to exercise its governance and decision-making regarding its lands.
- c) Identify and discuss areas of disparity between Indigenous groups' and Alberta Transportation's views regarding cumulative effects, water management, governance, and decision-making, efforts made to reconcile these, and rationale for conclusions on matters for which disparity in views remains.

Response

 a) This response provides additional information on the potential cumulative effects of potential and reasonably foreseeable flood mitigation measures contemplated for Tsuut'ina Nation Reserve.

Alberta Transportation is aware of two potential or reasonably foreseeable flood mitigation measures on the Elbow River relevant to the Tsuut'ina Nation Reserve: flood mitigation at Bragg Creek and flood mitigation at Redwood Meadows. In looking at potential cumulative effects, consideration was given to:

- potential effects from the proposed Bragg Creek and Redwood Meadows flood mitigation measures downstream to the Project and beyond
- potential effects from the Project upstream to Redwood Meadows and beyond, referred to as backwater effects

The proposed flood mitigation for Bragg Creek (AFW 2017) and Redwood Meadows (ARM 2018), both based on a bermed design, result in local hydrology (flow dynamic) changes along bermed portions of Elbow River and downstream. The proposed berming of these portions of the Elbow River will result in increased water levels (or elevations) and water velocities in the Elbow River generally, with the greatest change occurring within the bermed portion, then attenuating downstream in the existing natural channel. By the time water influenced by the potential Bragg Creek and Redwood Meadows mitigation projects



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reaches the diversion channel for the Project, the water levels in Elbow River will have returned to existing conditions.

The Project does not provide flood mitigation to the Tsuut'ina Nation Reserve lands upstream of the Project; but it does not impact those lands either. The maximum spatial area of backwater effect (i.e., heightened water elevation in Elbow River upstream of the diversion structure) is within the PDA. The proposed flood mitigation project at Redwood Meadows (ARM 2018) is upstream of the Project and at a higher elevation (EIA, Volume 4, Appendix J, Figure 3-3). There is no interaction between the backwater effect created by the Project and effects from the proposed flood mitigation project at Redwood Meadows. As a consequence, the Project is not expected to contribute to any cumulative effects. Figure 42-1 and Table 42-1 provide the distances of the backwater to both Redwood Meadows and the Tsuut'ina Nation Reserve.

Table 42-1 Various Distances Between Project Components and Tsuut'ina Nation Reserve Lands

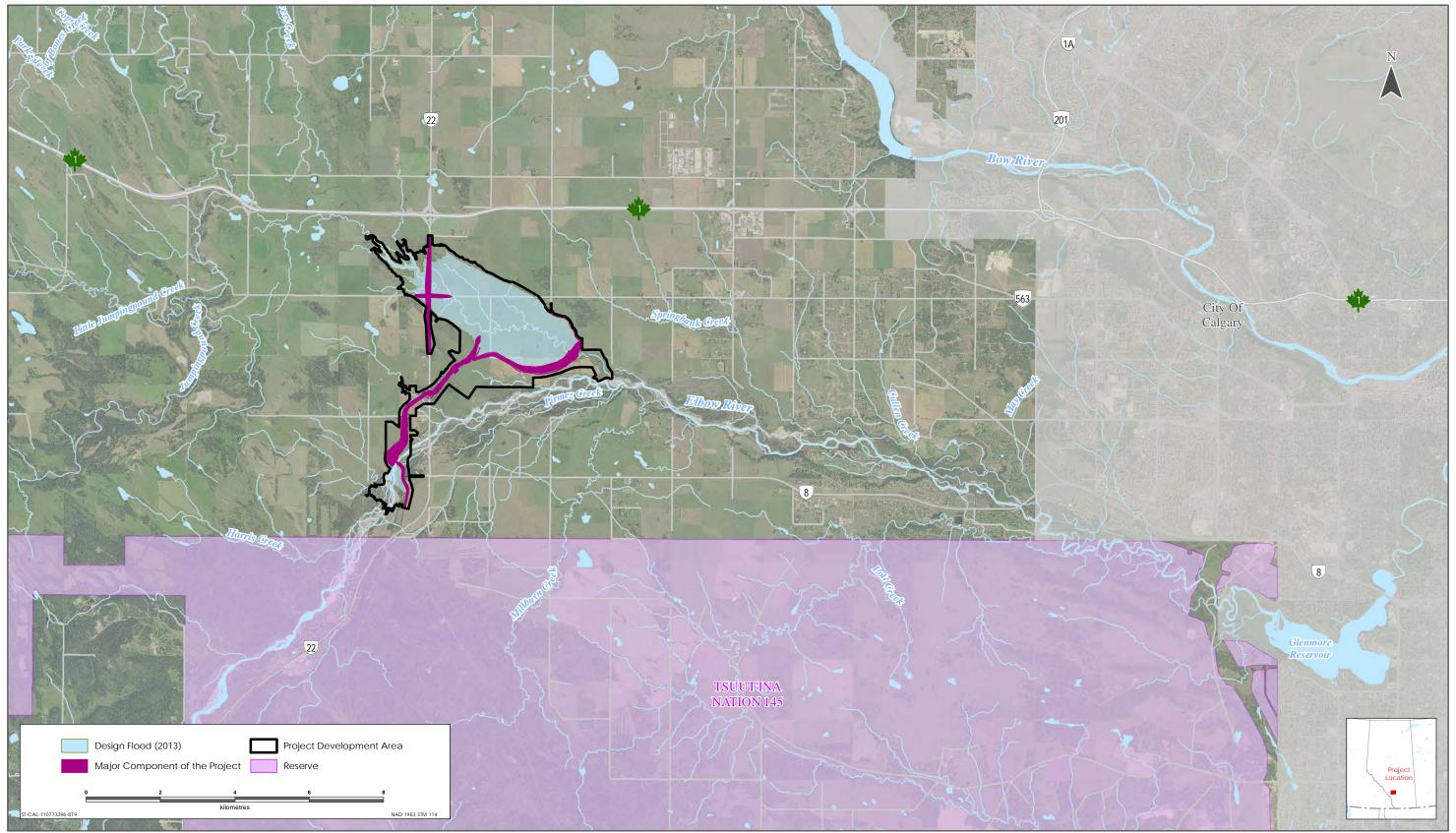
Project Component	Tsuut'ina Nation	Distance (m)
Backwater boundary within the Elbow River valley	Tsuut'ina Nation Boundary	1,680
Backwater boundary	Redwood Meadows	2,603
Backwater boundary along floodplain berm	Redwood Meadows	2,523
Backwater boundary along floodplain berm	Tsuut'ina Nation Boundary	1,130
PDA boundary	Tsuut'ina Nation Boundary	619
PDA boundary	Redwood Meadows	1,827

b) The Project does not restrict flood mitigation options that are available to Tsuut'ina Nation nor does it affect Tsuut'ina Nation's ability to exercise its governance and decision-making regarding flood risk and flood mitigation on its lands. The Project provides a reduction in flood risk to all low-lying lands that abut the Elbow River downstream of the Project's diversion structure. Tsuut'ina Nation Reserve lands in relation to the Elbow River, and the Project's diversion structure are shown in Figure 42-2.

The Project provides a reduction in flood risk to the Tsuut'ina Nation Reserve lands downstream of the Project by its ability to divert flood flows of up to 600 m³/s, while maintaining a flow of 160 m³/s in the river up until the capacity of the reservoir is reached. Downstream, the low-lying land is undeveloped on both sides of the river with the exception of the Grey Eagle Drive Bridge, which is the only crossing of the river within Tsuut'ina Nation Reserve lands.







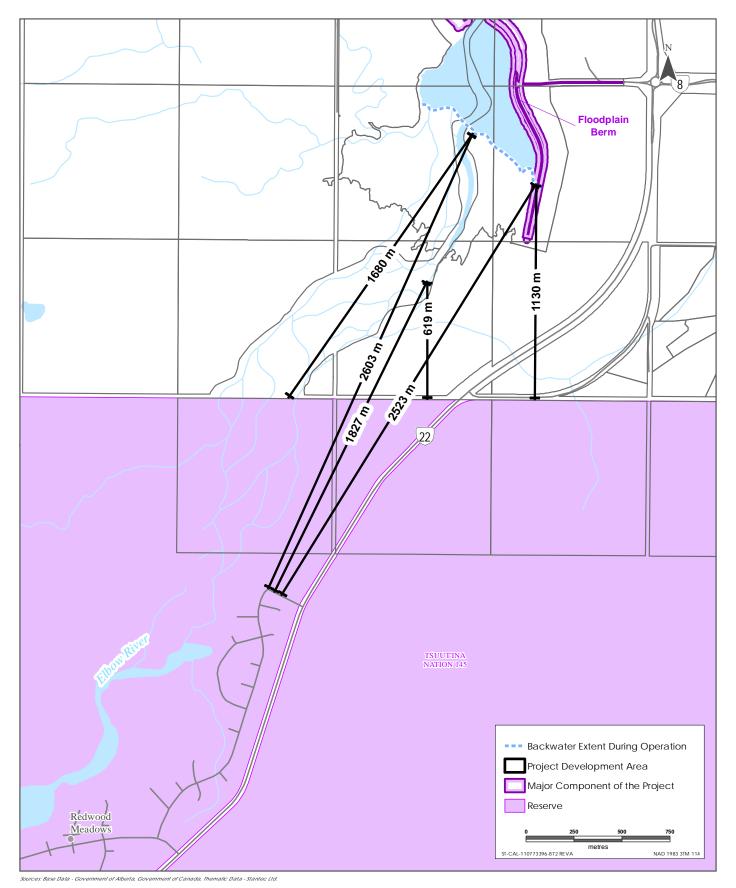
Sources: Base Data- Government of Alberta, Government of Canada. Thematic Data - Stantec Ltd.



Project Location in relation to Tsuut'ina Nation Reserve lands

 $ALBERTA\ TRANSPORTATION\ SPRINGBANK\ OF F-STREAM\ RESERVOIR\ PROJECT\ ENVIRONMENTAL\ IMPACT\ ASSESSMENT$





Distances of Tsuut'ina and Redwood Meadows from Project Features and Backwater Limit



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The Project does not provide a reduction in flood risk to lands upstream of the diversion structure. Here the GoA is working with communities to mitigate flood risk with local berming. The Community of Redwood Meadows is approximately 1.8 km upstream of the Project.

The GoA has been supporting Tsuut'ina Nation by informing it on flood risk through the Bow and Elbow River Hazards Study (AEP 2019) and have been supporting Tsuut'ina Nation's mitigation of that risk to current provincial standards by funding studies and designs of flood mitigations on the Tsuut'ina Nation's lands (including Redwood Meadows). The province's supportive role does not affect Tsuut'ina Nation's ability to exercise its governance and decision-making regarding flood risk and flood mitigation on its own lands.

c) Alberta Transportation acknowledges Tsuut'ina Nation's concerns regarding cumulative effects of the Project, including flood mitigation measures contemplated on Tsuut'ina Nation's reserve lands. As discussed above in parts a) and b), the Project will not interact with the proposed flood mitigation project at Redwood Meadows on Tsuut'ina Nation reserve lands.

Alberta Transportation has reviewed relevant information from sources, including CEAA submissions, Statements of Concern, engagement meetings, correspondence, and TUS reports. This information has been compiled into s SCRTs (see CEAA Conformity Package 2, IR2-01, Appendix 1-2). Information received to date from Tsuut'ina Nation related to the Project's cumulative effects, including flood mitigation activities around Tsuut'ina Nation Reserve lands are provided below in Table 42-2.

Specific Concerns and issues regarding cumulative effects, water management, governance, and decision-making brought forward by Tsuut'ina Nation to Alberta Transportation are listed in Table 42-2. Areas of disparity between Alberta Transportation and the views of Tsuut'ina Nation include:

- views that the assessment methodology is not adequate (i.e., the integrated effects assessment of Bragg Creek and Redwood Meadows mitigation was not included)
- concerns regarding flood mitigation efforts around Tsuut'ina Nation Reserve and potential effects these may have on Tsuut'ina Nation's traditional territory and reserve lands

With respect to the EIA assessment methodology, Alberta Transportation has been engaged with Tsuut'ina Nation since 2014 to understand how the Project potentially impacts rights and traditional uses, including offering and funding site visits and multiple TUS in addition to workshops and other meetings. More detail regarding Alberta Transportation's engagement activities with Tsuut'ina Nation is provided in Alberta Transportation's response to Round 1 CEAA Package 2, IR2-01. The EIA considered best available TLRU information, including information about potential cumulative effects related to water management. Tsuut'ina Nation submitted a TUS report in April 2018 and Alberta Transportation has reviewed and analyzed this report in the context of the EIA, confirming that no new effects were identified



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that had not been considered in the EIA. Given the scope and location of the Project, potential cumulative effects between the Project and foreseeable flood mitigation measures for Tsuut'ina Nation Reserve are unlikely.

With respect to disparities regarding flood mitigation efforts and their potential effects on Tsuut'ina Nation's reserve and asserted traditional territory, to date, Alberta Transportation has discussed flooding concerns at Redwood Meadows with Tsuut'ina Nation on 6 occasions (meeting dates: May 14 and 15, 2018, August 8, 2018, September 21, 2018, December 6, 2018, February 21, 2019 and September 17, 2019). In addition, mitigation measures, long term monitoring of the Project and Tsuut'ina Nation's opportunities for involvement were also discussed. Alberta Transportation has provided funding for Tsuut'ina Nation to conduct 2 TUS and funded a ceremony and feast on the Project lands (privately held) Alberta Transportation also facilitated 21 days of site visits by Tsuut'ina Nation within the private lands of the PDA over the period between the fall of 2016 to the late summer of 2017. On July 21, 2018, Alberta Transportation funded Tsuut'ina Nation to conduct an assessment of mitigation options for flood protection at Redwood Meadows.

With respect to the selection of the Project, following the 2013 flood, the GoA hired AMEC to prepare a report on options to mitigate damage due to flooding on Elbow River, including the SR1 and the Mclean Creek options. The report was completed in early 2014 and recommended the SR1 flood mitigation option. In 2015, Deltares reviewed AMEC's report and agreed with the recommendation. The GoA chose to proceed with the currently designed Project. Alberta Transportation provided these reports to Tsuut'ina Nation as part of the current ongoing engagement process.

Overall, the Project is designed to maintain the natural processes and characteristics of the Elbow River, while mitigating against extreme flood events that can negatively affect river function and pose a public safety and human health risk. Alberta Transportation's overall flood protection measures help reduce the impacts of extreme flood events. The Project does not provide any flood mitigation to the Tsuut'ina Nation Reserve lands upstream of the diversion structure; but it does not impact those lands either.

Despite Alberta Transportation's conclusion that the Project is the preferred design, Alberta Transportation acknowledges that Tsuut'ina Nation has ongoing concerns about flood mitigation options and potential effects on reserve lands and the asserted traditional territory.

Alberta Transportation's efforts to reconcile areas of disparity that may occur, generally, through the provision of Project information, the incorporation of feedback that results in changes to Project planning or through commitment to further exploring an issue, concern or recommendation. Alberta Transportation has provided the TUS mitigation tables found in the response to CEAA Conformity Package 2, IR 2-01, Appendix 1-1 to Indigenous groups that have submitted a TUS to date, including Tsuut'ina Nation. Alberta Transportation has met with Tsuut'ina Nation to review and discuss its responses. Alberta Transportation is committed



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to Indigenous participation in the Project including through potential training and contracting opportunities. As such, Alberta Transportation is preparing an IPP for the Project. The goal of this IPP is to create contracting, employment and training opportunities, such as monitoring with Indigenous groups including Tsuut'ina Nation. Additionally, Alberta Transportation has committed to offering to have ongoing discussions with Tsuut'ina Nation regarding flood issues and concerns at Redwood Meadows.

Alberta Transportation is committed to working with Tsuut'ina Nation to try to seek mutually acceptable solutions to the issues, concerns or recommendations identified and those that remain unresolved will be tracked through Alberta Transportation's ongoing consultation.

REFERENCES

- AEP (Alberta Environment and Parks). 2019. Bow and Elbow River Hazard Study. Available at: https://www.alberta.ca/assets/documents/ep-bow-elbow-river-hazard-study.pdf. Last accessed on October 25, 2019.
- AFW (Amec Foster Wheeler). 2017. Bragg Creek Flood Design Mitigation Report. Submitted to Rocky View County by AFW.
- ARM (Aquatic Resource Management Ltd.). 2018. A Risk and Data Gap Analysis and Template of Mitigation Requirements and Costs Associated with Providing Protection for the TsuuT'ina Lands Adjacent to the Elbow River Upstream of the Proposed Springbank Dry Dam (SR-1). Prepared for TsuuT'ina Nation by ARM, Cochrane, Alberta.



Table 42-2 Tsuut'ina Nation's Concerns Regarding Cumulative Effects, Water Management, Governance, and Decision-Making

Views related to cumulative effects, water management, Governance, and Decision-Making	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
Tsuut'ina Nation (TN)			
 TN expressed concerns about Elbow River and how the Project would impact the TN's traditional territory and reserve lands. TN is concerned that the Project will compound cumulative effects from ongoing development, including impacts to water flow through the reserve, plant and animal loss, barriers to access, etc. TN recommended that a work plan be established to consider resource revenue sharing, cumulative effects, climate change, construction monitoring, and long-term monitoring (for the life of the Project). TN stated that it should be a decision maker and requests that the Project require TN's "Consent" as part of the current process. 	 Meeting between TN and Alberta Transportation, November 13, 2014 Meeting between TN and Alberta Transportation (August 23, 2017 & May 14-15, 2018) TN 2018 (CEAR # 50) TN TUS 2018 (cited in TN SR1 SCRT Aug 2014 – Aug 2019; Specific Concern #3, 79, 88, 97) 	Alberta Transportation has been engaged with TN since 2014 to understand how the Project potentially impacts rights, and traditional uses, including offering and funding site visits and multiple TUS in addition to workshops and other meetings. More detail regarding Alberta Transportation's engagement activities with TN is provided in Alberta Transportation's response to Round 1 CEAA Package 2, IR2-01. The EIA considered best available TLRU information, including information about potential cumulative effects related to water management. TN submitted a TUS report in April 2018 and Alberta Transportation has reviewed and analyzed this report in the context of the EIA, confirming that no new effects were identified that had not been considered in the EIA. Given the scope and location of the Project, potential cumulative effects between the Project and foreseeable flood mitigation measures for TN Reserve are unlikely.	Alberta Transportation has held 18 meetings with TN to share Project information and obtain TN's views on the Project, including cumulative effects related to water management. On March 23, 2018, Alberta Transportation sent detailed responses to Specific Concerns raised to date by providing a copy of Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation from the March 2018 EIA. A final TUS was submitted to Alberta Transportation in April 2018. Alberta Transportation has provided a written response to TN addressing the concerns and issues raised in the TUS and met with TN in December 2018 to discuss the response. On November 23, 2018, Alberta Transportation provided its report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table. Alberta Transportation will participate in discussions regarding possible monitoring opportunities. Alberta Transportation also met with TN on December 6, 2018 to discuss the response and mitigation table.
 TN expressed concerns about flood issues, referencing effects that TN experienced in the past at Redwood Meadows. TN expressed concern that the current EIA dismisses any interaction with the upstream mitigation planning, i.e., Redwood Meadows and Bragg Creek. The Project is not being looked at holistically or considering cumulative effects. Integrated effects assessment that included Bragg Creek and Redwood Meadows mitigation was not included. TN stated that the current EIA does not capture upstream mitigation planning (including Bragg Creek and Redwood Meadows mitigation) and therefore the EIA does not take a comprehensive view of the Project in order to understand potential cumulative effects. Cumulative effects for hydrology under construction and dry conditions should be assessed, including the proposed mitigation at Bragg Creek. TN stated that currently it is not understood what will happen between Bragg Creek and the Project in the event of a flood, including effects on TN reserve lands and Redwood Meadows. 	 Meeting between TN and Alberta Transportation, August 23, 2017 Meeting between TN and Alberta Transportation, May 14-15 Meeting between TN and Alberta Transportation, September 21, 2018 TN 2018 (CEAR #50); (cited in TN SR1 SCRT Aug 2014 – Aug 2019; Specific Concern #81, 88, 97, 102, 106, 116) 	The Project is designed to facilitate natural river flow patterns, while mitigating against extreme flood events that can negatively affect river function. Alberta Transportation's overall flood protection measures help reduce the impacts of extreme flood events. The Project does not provide any flood mitigation to the TN Reserve lands upstream of the diversion structure; but it does not impact those lands either. By the time water influenced by the potential Bragg Creek and Redwood Meadows mitigation projects reaches the diversion channel for the Project, the water levels in Elbow River will have returned to existing conditions. During construction and dry operations, lands and resources outside the PDA are not anticipated to be directly affected by the Project (EIA, Volume 3A, Section 14.3.4.3). Alberta Transportation is committed to Indigenous participation in the Project including through potential contracting employment and training opportunities. As such, Alberta Transportation is preparing an IPP for the Project. The goal of this IPP is to create provide Indigenous participation on the Project. These opportunities may include monitoring.	Alberta Transportation has discussed flooding concerns at Redwood Meadows with TN on six occasions. In addition, mitigation measures, long term monitoring of the Project and TN's opportunities for involvement were also discussed. In December 2019, Alberta Transportation provided written responses to Tsuut'ina Nation Technical Review dated July 2018, which included concerns regarding flood issues and dam safety. Alberta Transportation will offer to meet with TN regarding the written responses.



Table 42-2 Tsuut'ina Nation's Concerns Regarding Cumulative Effects, Water Management, Governance, and Decision-Making

٧	/iews related to cumulative effects, water management, Governance, and Decision-Making	Source	Alberta Transportation's Response	Efforts to Consult/Engage/Reconcile and Next Steps
•	TN expressed concern regarding flood mitigation in and around the TN Reserve, including the Springbank Off-Stream Reservoir program, and how none will protect the reserve from flooding but could increase vulnerability.			
•	TN expressed concern about how the Project will interact with other flood mitigation projects in the area.			
•	TN expressed concerns that the Bragg Creek Project was not designated for environmental assessment under CEAA 2012 and expressed concerns that the potential interaction between the Bragg Creek Project and SR1 would not be studied. TN proposed multiple studies that they would like to be done.			
•	TN noted that with a proposed Bragg Creek emergency exit access road, even though it's being managed through Rocky View Country, road changes need to be considered cumulatively and cohesively. It will open a corridor and have a regional impact and causes security concerns.			



Appendix 1-1 Project Engagement Records: TUS Mitigation Tables December 2019

APPENDIX 1-1 PROJECT ENGAGEMENT RECORDS: TUS MITIGATION TABLES



Appendix 1-1 Project Engagement Records: TUS Mitigation Tables December 2019





SPRINGBANK OFF-STREAM RESERVOIR PROJECT Response to Blood Tribe/Kainai Traditional Land and Resource Use Information including Mitigation Table

August 2019

Prepared by:

Alberta Transportation

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Information and Mitigation Table





Terms of Use

This draft response is intended to inform the regulatory process, including consultation, and project planning of the Springbank Off-stream Reservoir Project (SR1; the Project). Alberta Transportation has prepared this draft response to the *Blood Tribe/Kainai Traditional Knowledge, Land, and Resource Use Study for the Springbank Off-Stream Reservoir Project* (TLRU Report). Subject to the conditions below, the final copy of this response will be filed with the Canadian Environmental Assessment Agency (CEA Agency), becoming part of the public record, and with other regulators, as required. Alberta Transportation will also use this response, and the information in the TLRU Report, as part of the record of the consultation process for the Project.

As outlined on page i of the TLRU Report, Kainai First Nation (KFN) has put the following conditions on the use of the information in the TLRU Report:

- The TLRU Report is intended for use by KFN, Alberta Transportation, the Canadian Environmental Assessment Agency (CEA Agency), and the Natural Resources Conservation Board to identify, assess, mitigate and avoid potential Project effects.
- Use of this information, including in the assessment of the effects of any future project on KFN traditional land and resource use is strictly prohibited without the written consent of KFN.



i

Acronyms

AEP Alberta Environment and Parks

Alberta Culture Multiculturalism and Status of Women

CEA Agency Canadian Environmental Assessment Agency

EIA environmental impact assessment

GPS Global Positioning System

KFN Kainai First Nation

KWBZ key wildlife and biodiversity zone

LAA local assessment area

LUA land use area

NWMP North West Mounted Police

PDA Project development area

PDA and the immediately adjacent LAA (within 400 m)

RAA regional assessment area

RAP restricted activity period

TEK traditional ecological knowledge

SR1; the Project Springbank Off-stream Reservoir Project

TLRU traditional land and resource use

TSS total suspended sediment



Traditional Land and Resource Use Information and Mitigation August 2019

1.0 TRADITIONAL LAND AND RESOURCE USE INFORMATION AND MITIGATION

1.1 OVERVIEW

Blood Tribe/Kainai (Kainai First Nation/KFN) provided Alberta Transportation with the TLRU Report on June 25, 2018. Alberta Transportation committed to review the TLRU Report and provide KFN with a response in relation to the results of the *Springbank Off-stream Reservoir Project Environmental Impact Assessment* (EIA) filed March 2018. Because the TLRU Report was provided after the filing of the March 2018 EIA, TLRU information, concerns, and recommendations will be used for project planning, consultation and regulatory purposes, where applicable.

1.2 INFORMATION SOURCES

The information contained in the mitigation table response (Appendix I, Table 1) has been compiled using two sources:

- Blood Tribe/Kainai Traditional Knowledge, Land, and Resource Use Study for the Springbank
 Off-Stream Reservoir Project (2018), prepared by Dermot O'Connor of Oak Road Concepts Inc.
- Springbank Off-stream Reservoir Project Environmental Impact Assessment, filed March 2018

In June 2018, KFN submitted the TLRU Report to Alberta Transportation to be considered in the planning and regulatory process for the Project. KFN also submitted the TLRU Report separately to the Canadian Environmental Assessment Agency (CEA Agency) and it appears on the CEA Agency project registry (CEA Agency, 2018). The report is composed of TLRU and traditional ecological knowledge (TEK) information as well as recommended mitigation measures presented by KFN.

The TLRU Report contains both Project-specific information shared by KFN Elders, harvesters, and other land users during interviews, field surveys, and a focus group, as well as information identified through a literature review. Project-specific information was shared by five individuals from KFN who participated in interviews and field surveys and three hunters from KFN who participated in a focus group. Preliminary field observations were made in June and July of 2016, which were documented in the draft TLRU Report (KCO & SCO, 2017). These field observations were then verified and supplemented with additional information in May 2018. Information gathered during the literature review was obtained through publicly available sources related to KFN and Blackfoot Confederacy history, culture and traditional land use. While each statement in the KFN TLRU Report has been attributed with its original source, for the purposes of Table 1 (Appendix I) all TLRU and TEK information and recommendations are attributed to KFN and have not been separated by information source or individual participant.

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1.1

Traditional Land and Resource Use Information and Mitigation August 2019

1.3 METHODOLOGY

Following a thorough review of the KFN TLRU Report, data were summarized into related topics that represent the information, concerns, and recommendations shared by KFN and placed into the context of the March 2018 EIA. This information has been compiled into the Kainai First Nation Traditional Land and Resource Use Information and Mitigation Table 1, which appears in Appendix I.

The Kainai First Nation Traditional Land and Resource Use Information and Mitigation Table 1 utilizes the following organizational structure:

<u>Column 1:</u> The "Traditional Land and Resource Use Information (TLRU)" column includes information shared by KFN regarding existing conditions followed by potential Project effects. The information has been organized under the following March 2018 EIA categories:

- traditional ecological knowledge (TEK)
 - hydrogeology (groundwater)
 - hydrology
 - surface water quality
 - fish and fish habitat
 - vegetation and wetlands
 - wildlife and biodiversity
- traditional land and resource use (TLRU)
 - hunting
 - fishing
 - trapping
 - plant harvesting
 - travel
 - cultural, spiritual, and ceremonial practices or areas
- project design

<u>Column 2:</u> The information included in the "Location of Sites or Areas" column demonstrates where the specific sites or areas identified by KFN are in relation to the Project, including Project development area (PDA), local assessment area (LAA), or regional assessment area (RAA), and in geographical reference to specific project components such as the diversion channel, diversion outlet, off-stream dam, and floodplain berm.

<u>Column 3:</u> Information included in the "Kainai First Nation (KFN) Recommendations and Requests" column outlines all recommendations or requests proposed by KFN mitigating potential effects from the Project. They have been included once or multiple times, depending on the relevant topics.

<u>Column 4:</u> Information included in the "Relevant March 2018 Environmental Impact Assessment (EIA) Section(s)" column identifies the section(s) of the March 2018 EIA where KFN's information, concerns, or recommendations have been considered.



Traditional Land and Resource Use Information and Mitigation August 2019

<u>Column 5:</u> Information included in the "Mitigation Measures Proposed in the Environmental Impact Assessment (EIA)" column identifies the relevant mitigation measures that have been proposed in the March 2018 EIA to mitigate potential effects from the Project.

<u>Column 6:</u> Information included in the "Additional Alberta Transportation Response" column provides Alberta Transportation's additional responses to KFN's recommendations and requests outlined in Column 5.



1.3

Traditional Land and Resource Use Information and Mitigation August 2019



Traditional Land and Resource Use Information and Mitigation Table August 2019

2.0 TRADITIONAL LAND AND RESOURCE USE INFORMATION AND MITIGATION TABLE

2.1 OVERVIEW OF THE KAINAI FIRST NATION TLRU REPORT

According to the TLRU Report, hunting, fishing, plant gathering, travel, and cultural, spiritual and ceremonial practices, have been and continue to be important traditional use activities for KFN. The TLRU report states that the KFN traditional territory "extends from the Rocky Mountains to the West; to the Sand Hills to the East; to the North Saskatchewan River in the North, and the Yellowstone in the South" and includes the PDA and Elbow River valley (Kainai First Nation, 2018, p. 1). The TLRU Report states that the Project is located in the vicinity of a historical Blackfoot seasonal travel route, as well as the site of the first Catholic Mission among Blackfoot in Southern Alberta (Kainai First Nation, 2018, p. 11).

According to the TLRU Report, traditional activities occur throughout the KFN traditional territory, including in the PDA. The TLRU Report identified the presence of traditional trails, winter camps (including tipi rings and fire broken rocks), and traditionally harvested wildlife, plants and fish within the PDA. KFN stated that "agreements [are in place] with private landowners in the PDA to provide access to ... hunt, gather, fish and use the land for ceremonial purposes" (Kainai First Nation, 2018, p. 50, 57). The Elbow River valley continues to be used by KFN for fishing, hunting and gathering plants.

KFN expressed concerns about potential Project effects on:

- groundwater in the event of a flood
- surface water (including springs and drinking water)
- fish spawning
- native grasslands, wetlands and riparian areas
- wildlife habitat
- availability of traditionally harvested plants and animals
- access to current use sites and areas
- loss of current use sites or areas (including historic trails, traditional camps and associated historic resources)
- · exercise of KFN rights

In response to these concerns, KFN has proposed a series of recommendations and requests in order to help mitigate potential effects from the Project (see Appendix I, Table 1 Column 3).

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2.1

Traditional Land and Resource Use Information and Mitigation Table August 2019

2.2 KAINAI FIRST NATION TLRU ASSOCIATED WITH THE PROJECT

Appendix I, Table 1 Column 1 provides an overview of KFN's TLRU within and in the vicinity of the PDA, LAA, and RAA, as provided in the TLRU Report. Alberta Transportation has reviewed the information, considered it in reference to the March 2018 EIA, and provided additional responses, where applicable.



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3.0 CONCLUSION

Overall, the information provided by KFN in the TLRU Report serves to confirm the assumptions made in the EIA regarding the nature and extent of KFN current use in the PDA.

The conclusion of the TLRU assessment in Volume 3A and Volume 3B, Section 14 of the March 2018 EIA that the effects of the Project on TLRU will not result in the long-term loss of availability of traditional use resources or access to lands currently relied on for traditional use practices or the permanent loss of traditional use sites and areas in the RAA remains unchanged. Alberta Transportation is committed to working with KFN in order to discuss mitigation strategies to avoid, reduce, or otherwise manage potential effects of the Project and to address or respond to identified concerns. The information shared by KFN will continue to be used for project planning, consultation and regulatory purposes, where applicable.

The construction and management of the off-stream reservoir presents a unique opportunity with the conversion of private land to Crown land for future use by First Nations and stakeholders. Through the engagement process that included feedback from Indigenous groups, a draft principles of future land use for the Project has been developed. The primary use of all lands within the PDA is for flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses for traditional activities, including the exercise of treaty rights such as hunting will be allowed to occur within the designated land use area (LUA). Alberta Transportation invites KFN participate in the engagement process for the LUA.



3.1

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References August 2019

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Appendix I Table 1: Kainai First Nation Traditional Land and Resource Use Information and Mitigation Table
August 2019

Appendix I TABLE 1: KAINAI FIRST NATION TRADITIONAL LAND AND RESOURCE USE INFORMATION AND MITIGATION TABLE





Appendix I Table 1: Kainai First Nation Traditional Land and Resource Use Information and Mitigation Table August 2019

Table 1 Kainai First Nation Traditional Land and Resource Use Information and Mitigation Table

1	2	3	4	5	6
Traditional Land and Resource Use Information	Location of Sites or Areas Relative to the Project ¹	Kainai First Nation Recommendations and Requests	Relevant March 2018 Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the March 2018 Environmental Impact Assessment	Additional Alberta Transportation Response
Traditional Ecological Knowledge					
Hydrogeology (Groundwater)					
Potential Project Effects Kainai First Nation (KFN) expressed concerns regarding the potential for interactions between flood water and groundwater in the PDA as a result of Project construction and in the event of a flood.	No specific location given.	Hold at least two workshops with KFN where Elders, hunters and KFN consultation personnel have the opportunity to discuss proposed mitigation with Alberta Transportation and develop mutually agreeable mitigation measures for the effects identified in this report and for any additional effects to sites of interest that have yet to be discovered.	Volume 3A, Section 5.4.2.2 and Volume 3B, Section 5.2: Hydrogeology Volume 3A and Volume 3B, Section 14: Traditional Land and Resource Use Volume 1, Attachment A: Water Management Plan Volume 4, Supporting Documentation, Document 12)	 During construction, the water management plan, which complies with regulatory requirements, will be used to manage dewatering and discharge of water on the construction site. A Care of Water Plan will be developed by the contractor to manage dewatering and discharge of water on the construction site. At locations where flows from care of water operations are discharged into waterbodies, test the water quality at discharge locations and monitor the total suspended sediment (TSS) to ensure the water quality is made equal to or better than the initial water source. Existing water wells within the reservoir footprint will be decommissioned and plugged off to prevent groundwater contamination and to prevent flood waters from infiltrating nearby water wells. Water will be discharged in a manner to avoid erosion using turbidity barriers, containment berms and settling ponds. Dewatering will be in accordance with the terms and conditions of the <i>Environmental Protection and Enhancement Act</i> approval conditions, and <i>Water Act</i> approval and the federal <i>Fisheries Act and Navigable Waters Protection Act</i>. Regional-scale effects on groundwater quantity will be mitigated by allowing seepage in the dry diversion channel to infiltrate back into the subsurface, or flow back into Elbow River via surface water drainage pathways. During construction, silt fences and turbidity barriers will be used to control TSS and to ensure the water quality from care of water system discharges is made equal to or better than the initial water quality by carrying out frequent water quality testing. 	Groundwater interactions with floodwater were examined in Volume 3B, Section 5. Groundwater in the wetted area of the offstream reservoir will interact with flood water during operations. Effects on groundwater are expected to be localized and short term in duration. Given the low permeability of the underlying sediments, the expected seepage out of the reservoir area is relatively low compared to flow rates in the Elbow River. Additionally, seepage out of the reservoir area will be toward the Elbow River, from where the flood water originated. Alberta Transportation commits to holding the requested workshops with KFN to discuss mitigation measures.

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¹ Includes sites described in the TLRU Report with associated geographic coordinates, as well as sites mapped on the figures. Where geographic coordinates described in the TLRU Report align with sites mapped on the figures, these sites have been conflated.

Appendix I Table 1: Kainai First Nation Traditional Land and Resource Use Information and Mitigation Table August 2019

Table 1 Kainai First Nation Traditional Land and Resource Use Information and Mitigation Table

1	2	3	4	5	6
Traditional Land and Resource Use Information	Location of Sites or Areas Relative to the Project ¹	Kainai First Nation Recommendations and Requests	Relevant March 2018 Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the March 2018 Environmental Impact Assessment	Additional Alberta Transportation Response
Hydrology	-		1		
Existing Conditions Springs were identified by KFN as an important resource in terms of subsistence water consumption. Potential Project Effects KFN expressed concerns regarding disruptions to natural springs.	KFN identified three spring/water features: 1 is within the PDA ² 2 are within the LAA	Hold at least two workshops with KFN where Elders, hunters and KFN consultation personnel have the opportunity to discuss proposed mitigation with Alberta Transportation and develop mutually agreeable mitigation measures for the effects identified in this report and for any additional effects to sites of interest that have yet to be discovered.	Volume 3A and Volume 3B, Section 5: Hydrogeology Volume 3A and Volume 3B, Section 6: Hydrology Volume 3B Section 7: Surface Water Quality Volume 3A and Volume 3B, Section 14: Traditional Land and Resource Use	 Transport of hazardous materials to and from the Project site, storage, use and disposal will be in accordance with regulatory requirements. Use of construction equipment that is mechanically sound with no oil leaks, fuel or fluid leaks. Inspect equipment daily and immediately repair any leaks. Potential contaminant-related effects to the Elbow River and its tributaries will be mitigated through project design (e.g., road water runoff management), implementing a spill containment and response plan, using appropriate sediment and erosion control measures, limiting the use of and following best management practices for herbicides and fertilizers in the dry reservoir or near waterbodies, and using non-toxic biodegradable hydraulic fluids in equipment for any required instream works. Bank and riparian areas disturbed during construction will be rehabilitated and re-vegetated. Silt fences, turbidity barriers and riprap materials will be used to prevent future bank erosion. Stored flood waters will be released through the low-level outlet gated structure back into Elbow River in a controlled manner to avoid downstream flood damage. 	Springs within the Elbow River valley, including the sites identified by KFN, could interact with floodwater under natural conditions, but these interactions are attributable to the flood event, not to the Project. Springs in the off-stream reservoir area could interact with flood water that is retained during flood operations. Effects on springs in the off-stream reservoir area would be short term in duration. Mapped springs are situated near the outer edge of the reservoir and, as a result, any interactions between flood water and these springs are only expected during a design flood. Alberta Transportation commits to holding the requested workshops with KFN to discuss mitigation measures.
Surface Water Quality					
Existing Conditions The Elbow River and its tributaries were identified by KFN as a source of drinking water.	The Elbow River and its tributaries is within the PDA.	Hold at least two workshops with KFN where Elders, hunters and KFN consultation personnel have the opportunity to discuss proposed mitigation with Alberta Transportation and develop mutually agreeable mitigation measures for the effects identified in this report and for any additional effects to sites of interest that have yet to be discovered.	Volume 3A and Volume 3B, Section 7: Surface Water Quality Volume 3A and Volume 3B, Section 15: Public Health	 Potential contaminant-related effects to the Elbow River and its tributaries will be mitigated through project design (e.g., road water runoff management), implementing a spill containment and response plan, using appropriate sediment and erosion control measures, limiting the use of and following best management practices for herbicides and fertilizers in the dry reservoir or near waterbodies, and using non-toxic biodegradable hydraulic fluids in equipment for any required instream works. Instream work areas will be isolated from the main river flow by using cofferdams, silt fences and turbidity barriers. TSS will be monitored and measured for conformance with Alberta Transportation's Turbidity and Monitoring specifications. Clean granular fill with less than 5% fines passing the 80um sieve size will be used for instream work such as cofferdams, causeways, access ramps, Bailey bridges, river channel diversions. Fine grained soils may be used, provided only clean granular fill is exposed to the river at any time during construction and restoration operations. Bank and riparian areas disturbed during construction will be rehabilitated and re-vegetated. Silt fences, turbidity barriers and riprap materials will be used to prevent future bank erosion. 	Alberta Transportation commits to holding workshops with KFN to discuss mitigation measures.

Alberta

² Sites located within the PDA are not intersected by permanent Project infrastructure unless otherwise specified.

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Traditional Land and Resource Use Information	Location of Sites or Areas Relative to the Project ¹	Kainai First Nation Recommendations and Requests	Relevant March 2018 Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the March 2018 Environmental Impact Assessment	Additional Alberta Transportation Response
Fish and Fish Habitat			l		
Existing Conditions KFN stated that the Elbow River provides habitat for rainbow trout, cutthroat trout, brook trout, bull trout and rocky mountain whitefish. KFN identified a spawning area in a tributary of the Elbow River and mapped an area of the Elbow River as bull trout and cutthroat trout habitat. Potential Project Effects KFN explained that trout return to the same tributaries of the Elbow River to spawn and in some cases, where water flow changes and the streams are inaccessible, the trout are unable to come back to spawn.	The Elbow River is within the PDA. The fish spawning area identified by KFN is within the LAA. The bull trout and cutthroat trout habitat identified by KFN is within the PDA, and is intersected by the diversion channel, diversion structure, floodplain berm, and gravel road.	Hold at least two workshops with KFN where Elders, hunters and KFN consultation personnel have the opportunity to discuss proposed mitigation with Alberta Transportation and develop mutually agreeable mitigation measures for the effects identified in this report and for any additional effects to sites of interest that have yet to be discovered.	Volume 3A and Volume 3B, Section 8: Aquatic Ecology	 Structures will be designed so that storm water runoff and wash water from the access roads, decks, side slopes, and approaches are directed into a retention pond or vegetated area to remove suspended solids, dissipate velocity, and prevent sediment and other deleterious substances from entering watercourses. Works in water will be timed with respect to the restricted activity periods (RAPs) wherever possible. For Elbow River, the RAP is May 01 – July 15 and September 16 – April 15. Condition and use of restricted activity periods will be provided within further project permitting and authorization under the <i>Fisheries Act</i>. For planning purposes, the Elbow River RAP will be applied as an avoidance and mitigation measure. To allow for fish passage and construction of the structures within the Elbow River, the Elbow River will be diverted, and flows will be maintained downstream by the construction of a temporary bypass channel. Drainage areas within the reservoir will be graded to reduce stranding of fish during release of stored flood water from the reservoir. Boulders will be added to increase the bed roughness of the channel immediately downstream of the diversion structure, which will increase water depths and reduce velocities. Boulder v-weir structures will be constructed in the channel downstream of the gates to provide slower velocity and deeper resting zones. A monitoring program will be undertaken to identify if fish passage is impeded for migratory salmonids or other fish species, including bull or cutthroat trout. Maintenance, debris removal on the structure, and on the fish passage structures will occur to accommodate fish passage. Debris will be cleaned from the structure gates after a flood recedes to allow unimpeded fish passage upstream over the structure. 	Modelling for fish passage velocities was completed up to the expected maximum 3-day delay of a 1:10 year magnitude flood. Modelled results for water depth and velocities (see Volume 4, Appendix M, Attachment 8A) indicate that the water velocities and flow patterns in Elbow River post-construction are similar to the preconstruction state. Mitigation for fish passage, including boulder clusters and v-weirs, would be constructed downstream of the structure gates and include features that mimic natural fish habitats in cobble bed rivers, such as those altered during the construction of the diversion structure. With mitigation, fish migrations past the structure would not be impeded in a manner that would affect the sustainability of the fish populations, the distribution, or abundance of fish, including fish that support a commercial, recreational or Aboriginal fishery, as defined by the <i>Fisheries Act</i> , in the LAA (see Volume 3A, Section 8.4.4.2). During construction of the diversion channel, the unnamed tributary to the Elbow River would be diverted into the diversion channel.
				 Isolated pools will be identified, marked, and a determination by a Qualified Aquatic Environmental Specialist will be made as to whether there are stranded fish in the pool that require rescue and relocation to secure habitats in Elbow River. When the water has been fully drained, the low-level outlet canal will also be surveyed to identify isolated pools where fish might be stranded. Where debris removal from the structures is required, debris removal will be timed to avoid disruption to sensitive fish life stages (i.e., outside the RAP), unless the debris and its accumulation is immediately threatening to the integrity of the structure or relates to an emergency (i.e., risk of structure failure). During post-flood reservoir maintenance, areas that had isolated pools may be graded to prevent the isolation of fish in successive flood events. 	Approximately 1,200 m of the tributary would be removed, with the lowest 300 m (less than 1 m wide channel) being fish habitat that would be lost. The loss of the 300 m² of habitat in the tributary could be offset by the enhancement or construction of side channel habitat on Elbow River that could provide rearing habitat for salmonids and cover for small-bodied fish (see Volume 3A, Section 8.4.4.2). Alberta Transportation commits to holding workshops with KFN to discuss mitigation measures.



Appendix I Table 1: Kainai First Nation Traditional Land and Resource Use Information and Mitigation Table August 2019

Table 1 Kainai First Nation Traditional Land and Resource Use Information and Mitigation Table

1	2	3	4	5	6
Traditional Land and Resource Use Information	Location of Sites or Areas Relative to the Project ¹	Kainai First Nation Recommendations and Requests	Relevant March 2018 Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the March 2018 Environmental Impa Assessment	Additional Alberta Transportation Response
Vegetation and Wetlands					
Existing Conditions KFN stated that the PDA encompasses several landscape types, including natural fescue grassland, aspen forests, mixedwood forests and groves of coniferous trees. KFN identified wetlands in the native grassland on the Val Vista Ranch. This type of natural wetland is referred to as Omhkskimooki in Blackfoot, which translates to English as "Tall Grass Lake." (Kainai First Nation, 2018, p. 87) KFN identified an old growth stand of cottonwood poplar trees within the Val Vista Creek³ bed and surrounding area. Potential Project Effects The presence of natural wetlands and natural meadows on the proposed reservoir site was identified as a concern by KFN. In the event of a flood, KFN stated that flood waters will damage the existing habitat for plants, including plants that KFN value as medicines.	The wetland and old growth stand identified by KFN are within the PDA. The old growth stand is intersected by permanent project infrastructure, including the off-stream reservoir dam.	Hold at least two workshops with KFN where Elders, hunters and KFN consultation personnel have the opportunity to discuss proposed mitigation with Alberta Transportation and develop mutually agreeable mitigation measures for the effects identified in this report and for any additional effects to sites of interest that have yet to be discovered.	Volume 3A and Volume 3B, Section 10: Vegetation and Wetlands Volume 3A and Volume 3B, Section 11: Wildlife and Biodiversity Volume 3A and Volume 3B, Section 14: Traditional Land and Resource Use	Alberta Transportation will notify Indigenous groups regarding project activi and schedules, including provision of Project maps and design components discuss key traditional harvesting periods. Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction. Restrict construction activities to the approved construction footprint. Reduce the removal of vegetation in wetlands to the extent possible. Where possible, conduct ground level cutting/mowing/mulching of wetland vegetation instead of grubbing. Where applicable, in areas not impacted by the permanent Project footprint ground conditions are encountered that create potential for rutting, admixin compaction, minimize ground disturbance by using a protective layer such matting or biodegradable geotextile and clay ramps or other approved mate between wetland root/seed bed and construction equipment. Native areas disturbed by the Project would be reseeded using an Alberta Transportation native custom seed mix. Alberta Transportation will not apply herbicide within 30 m of plant species ecological communities of management concern, wetland or waterbody. Sp spraying, wicking, mowing, or hand picking are acceptable measures for cof regulated weeds in this area. A licensed industrial pesticide applicator would be contracted to select and all herbicide in compliance with the procedures as outlined in the Code of Practice for Pesticides (Government of Alberta 2010b)	and affected due to vegetation removal and grading associated with construction, affecting 168 ha associated with permanent project infrastructure and approximately 566 ha of temporary workspace. Although individual plants will be removed from the PDA, none of the traditionally used species identified will be lost in the LAA, nor will vegetation communities supporting traditionally used plants be lost from the PDA (see Volume 3A, Section 10.4). Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction. Following construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded with a native custom seed mix to meet AEP reclamation requirements. Native



³ Val Vista Creek referred to as Unnamed Creek in March 2018 EIA.

Appendix I Table 1: Kainai First Nation Traditional Land and Resource Use Information and Mitigation Table August 2019

Table 1 Kainai First Nation Traditional Land and Resource Use Information and Mitigation Table

	<u></u>	,			
1	2	3	4	5	6
Traditional Land and Resource Use Information	Location of Sites or Areas Relative to the Project ¹	Kainai First Nation Recommendations and Requests	Relevant March 2018 Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the March 2018 Environmental Impact Assessment	Additional Alberta Transportation Response
					Many of the potentially affected grassland and wetland plant communities have intrinsic adaptations to periodic flooding, while other species such as aspen and spruce would be less tolerant to flooding due to having a low anaerobic tolerance. Mortality of traditional use species found in upland plant communities is expected. However, these species are widespread and are expected to re-establish by natural recruitment; permanent loss of traditional use species is not predicted. Overall, residual effects on vegetation and wetlands post-flood would not result in the loss of native upland or wetland plant communities, nor would it result in the loss of wetland function from the LAA (see Volume 3B, Section 10.2). Alberta Transportation commits to holding workshops with KFN to discuss mitigation measures.
Wildlife and Biodiversity					
Existing Conditions KFN indicated that elk, moose, white-tailed deer, mule deer, grizzly bear, black bear, wolf, beaver, rabbit, skunk, ruffed grouse, sharp-tailed grouse, eagle, hawk, osprey, raven, Canada goose, trumpeter swan, heron, sandhill crane, mallard duck, merganser duck, pintail snipes, and magpie are present in the Project area ⁴ and are of interest to KFN. KFN explained the importance of the Elbow River to wildlife, noting that the river is the "blood in the veins of the earth and provides sustenance to the game." (Kainai First Nation, 2018, p. 65) The Elbow River was identified as a critical wildlife habitat and migration corridor.	The Elbow River and Elbow River valley are within the PDA. KFN identified 24 ungulate habitat areas: 21 are within the PDA 3 are within the LAA Of the ungulate habitat areas within the PDA, 11 are intersected by permanent project infrastructure, including the highway right-of-way, gravel road, new bridge, offstream dam, outlet channel, outlet structure, diversion	Hold at least two workshops with KFN where Elders, hunters and KFN consultation personnel have the opportunity to discuss proposed mitigation with Alberta Transportation and develop mutually agreeable mitigation measures for the effects identified in this report and for any additional effects to sites of interest that have yet to be discovered.	Volume 3A and Volume 3B, Section 10: Vegetation and Wetlands Volume 3A and Volume 3B, Section 11: Wildlife and Biodiversity Volume 3A and Volume 3B, Section 14: Traditional Land and Resource Use	 In addition to the measures proposed to mitigate potential effects on vegetation and wetlands described above, Alberta Transportation will implement the following measures to mitigate potential effects on wildlife and biodiversity: Pre-construction surveys will be conducted to identify wildlife features (e.g., nests, dens) and appropriate site-specific mitigation developed. Where possible, construction activities during the RAP for the Key Wildlife Diversity Zone (KWBZ) identified along Elbow River (December 15 to April 30) will be avoided or reduced. This will limit potential sensory disturbance to wintering ungulates (ESRD 2015, Government of Alberta 2017). If construction activities must occur during this time period, a wildlife mitigation and monitoring plan will be developed in consultation with regulators, which will include monitoring ungulate habitat use and response to human disturbance. Restrict all construction activities to the approved construction footprint. Where possible, temporary workspaces and access roads will be in areas that avoid wildlife features and native vegetation (e.g., shrubland, treed areas, wetlands). Existing access roads and previously disturbed areas will be used, where feasible. Where fencing is proposed to restrict livestock access to project structures (e.g., diversion channel), wildlife-friendly fencing will be installed to allow ungulate passage. 	The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see Volume 3A, Section 11.4.2). The mitigation measures outlined in Column 5, including revegetating the floodplain berm and installing wildlife friendly fencing, will be implemented to maintain wildlife movement through the Project area. The diversion channel has potential to fragment habitat in the LAA and reduce landscape connectivity if wildlife do not cross; however, wildlife species richness and abundance are not expected to be influenced by habitat fragmentation from the Project in the RAA (see Volume 3A, Section 11.4.5).

⁴ Based on the figures in the Kainai First Nation TLRU Report, the Project area is assumed to encompass the PDA, LAA and a portion of the RAA in the immediate vicinity (within approximately 3 km).

Alberta

Table 1 Kainai First Nation Traditional Land and Resource Use Information and Mitigation Table

1	2	3	1	5	6
Traditional Land and Resource Use Information	Location of Sites or Areas Relative to the Project ¹	Kainai First Nation Recommendations and Requests	Relevant March 2018 Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the March 2018 Environmental Impact Assessment	Additional Alberta Transportation Response
KFN identified areas of high quality habitat for elk, moose, white-tailed deer, and mule deer, as well as signs of ungulates, including scat, tracks and marks on trees. KFN identified areas of furbearer habitat, including a beaver dam in a tributary of the Elbow River and beaver habitat on Val Vista Ranch. KFN identified grizzly bear habitat and signs of grizzly bear and black bear, including scat, claw marks, digs, and torn trees. KFN noted that the local landowners shared photographic evidence from a wildlife trail camera of grizzly bears in the area. Signs of black bear, wolf, cougar and fox were identified by KFN. Coyote tracks were also observed. KFN stated that there are many species of birds that nest and live in the Project area, including eagle, owl, crow, magpies, Sitisaisi, and Omahkaasittipimakinnaman. KFN identified a wetland within natural grassland on the Val Vista Ranch that provides ideal habitat for nesting birds and a stopping place for migratory birds. Another wetland was identified that is a stopping place for trumpeter swans, herons, sandhill cranes, Canada goose, mallard ducks, and pintail snipes. KFN also observed ruffed grouse, merganser ducks, Canada geese, and several other bird habitat features. KFN emphasized the interconnectedness of the environment, explaining that the Project area provides habitat for bird, animal and plant species that all support one another.	channel, floodplain berm, and emergency spillway Four furbearer habitat areas were identified by KFN within the PDA. One of the furbearer habitat areas within the PDA is intersected by permanent project infrastructure, including the gravel road, off-stream dam, outlet channel and outlet structure. KFN identified 6 bear habitat areas: 3 are within the PDA 3 are within the LAA The signs of black bear, wolf, cougar, fox and coyote (including tracks) identified by KFN are within the PDA. 11 bird habitat areas were identified by KFN: 10 bird habitat areas (including the wetland on the Val Vista Ranch) are within the PDA 1 is within the LAA Of the bird habitat areas within the PDA, 1 is intersected by permanent project infrastructure, including the gravel road, off-stream dam, outlet channel and outlet structure.			 If an active nest or den is found, it will be subject to a provincial or federal disturbance setback buffer and site-specific mitigation. The diversion channel will be built with 3H:1V side slopes, which is within the range that most large mammals (e.g., elk,) are known to traverse (McCorquodale 2003; Frair et al. 2005; Mao et al. 2005; The Bow Corridor Ecosystem Advisory Group 2012). The side slopes and bottom of the diversion channel will be vegetated, except under the proposed bridges and at Pirmez Creek. Vegetated areas will provide a more conducive wildlife passage across the channel. To maintain ungulate movement within the KWBZ, the floodplain berm will be revegetated with materials conducive for ungulate movement. The section of reinforced concrete (approximately 250 m) closest to Elbow River will be covered with top soil and seeded with native grasses. The central portion of the floodplain berm includes approximately 550 m of exposed riprap, where sections will be filled with substrate finer than riprap, such as sand, gravel and vegetation to allow for more walkable sections (Austin and Garland 2001; Huijser et al. 2008; Clevenger 2011). The south portion, farthest from Elbow River, will be a 450 m earthen embankment vegetated with native grasses. A remote camera program will be designed with Alberta Environment and Parks (AEP), to identify whether the diversion channel acts as a barrier to wildlife movement during dry operations, especially for ungulates, and determine the effectiveness of mitigation implemented throughout the diversion channel. This will include monitoring along Elbow River to determine if wildlife use of the KWBZ has been affected by the construction and operation of the Project. Although the specific details and design of the remote camera program will be deployed in the wildlife LAA and monitor wildlife movement for at least one-year post-construction. The six remote cameras along the Elbow River will remain at the same locations as pre	There were no beaver dams or lodges identified within the construction footprint for the Project during the baseline wildlife surveys completed within the LAA and, as a result, Alberta Transportation is not expecting to remove any dams or lodges. If an active beaver dam is identified within the construction footprint at a later date, mitigation for dam removal will be developed with the appropriate agencies (e.g., AEP) and the relevant permit(s) obtained, as required. At the end of construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded to meet AEP reclamation requirements. Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important A remote camera program will be designed with AEP, to identify whether the diversion channel acts as a barrier to wildlife movement during dry operations, especially for ungulates, and determine the effectiveness of mitigation implemented throughout the diversion channel. Alberta Transportation commits to holding workshops with KFN to discuss mitigation measures.



Table 1 Kainai First Nation Traditional Land and Resource Use Information and Mitigation Table

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Traditional Land and Resource Use Information	Location of Sites or Areas Relative to the Project ¹	Kainai First Nation Recommendations and Requests	Relevant March 2018 Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the March 2018 Environmental Impact Assessment	Additional Alberta Transportation Response
Potential Project Effects KFN stated, "This place is pristine and it should remain that way it is untouched by human development but once the dam is built the landscape will be forever altered and the animal and birds will lose their habitat." (Kainai First Nation, 2018, p. 70) KFN expressed concerns that elk will be affected by the construction of the Project.				During dry operations, monitoring of wildlife movement using remote cameras would occur for at least one year following construction.	
Potential Project Effects KFN expressed concerns about the removal of a beaver dam on the Elbow River and effects on beaver habitat in the event of a flood.	The beaver dam identified by KFN on the Elbow River is within the PDA.				
Traditional Land and Resource Us	е				
Hunting					
Existing Conditions Species hunted by KFN and identified as species of interest in relation to the Project include elk, moose, white-tailed deer, mule deer, rabbit, ruffed grouse, sharp-tailed grouse, Canada goose, mallard duck, and merganser duck. KFN stated that hunting big game species such as moose, elk and white-tailed deer generally occurs in the fall and early winter and is "a pillar of the Blood Tribe/Kainai traditional food provisioning system." KFN hunters feed dozens of community members on a regular basis from their hunting, food processing, and sharing practices. (Kainai First Nation, 2018, p. 61).	KFN identified 6 current hunting areas that are within the PDA. Of these, 4 are intersected by permanent project infrastructure, including the gravel, off-stream dam, diversion channel, emergency spillway, outlet channel and outlet structure. The Elbow River and Elbow River valley are within the PDA.	Hold at least two workshops with KFN where Elders, hunters and KFN consultation personnel have the opportunity to discuss proposed mitigation with Alberta Transportation and develop mutually agreeable mitigation measures for the effects identified in this report and for any additional effects to sites of interest that have yet to be discovered. Negotiate access to Areas B and C during dry operations for traditional gathering, hunting, ceremonial use and for traditional cultural and heritage camps involving both Elders and youth.	Volume 3A and Volume 3B, Section 10: Vegetation and Wetlands Volume 3A and Volume 3B, Section 11: Wildlife and Biodiversity Volume 3A and Volume 3B, Section 14: Traditional Land and Resource Use	In addition to the measures proposed to mitigate potential effects on wildlife and biodiversity, and on vegetation and wetlands, as described above, Alberta Transportation will implement the following measures to mitigate potential effects on hunting: • Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods. • Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction land access management.	The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see Volume 3A, Section 11.4.2). Portions of the hunting areas identified by KFN that are located within the designated construction footprint will be directly affected by construction activities and fencing of infrastructure will restrict access to certain areas of the Project. Mitigation measures outlined in column 5 will be implemented to reduce potential adverse effects of the Project on current use sites and areas.



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Traditional Land and Resource Use Information	Location of Sites or Areas Relative to the Project ¹	Kainai First Nation Recommendations and Requests	Relevant March 2018 Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the March 2018 Environmental Impact Assessment	Additional Alberta Transportation Response
The Elbow River valley is habitat for many species of game that KFN members hunt for subsistence and ceremonial purposes. KFN stated there is good potential to hunt ruffed grouse and other game birds along the wooded portions of the banks of the Elbow River.					The construction and management of the off- stream reservoir presents a unique opportunity with the conversion of private land to Crown land for future use by First Nations and stakeholders. Through the engagement process that included feedback from Indigenous groups, a draft principles of future land use for the Project has been developed.
Should the Project be approved, and Conservation Area A be made accessible, KFN indicated they intend to use the area to exercise their rights to hunt, particularly for elk, moose, white-tailed deer, mule deer, and grouse.					The primary use of all lands within the PDA is for flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses include traditional activities, including the exercise of treaty rights such as hunting will be allowed to occur within the designated land
KFN indicated that agreements are in place with local landowners in the PDA to provide access to KFN members for					use area (LUA). Alberta Transportation invites KFN to participate in the engagement process for the LUA.
the purposes of subsistence hunting. In March 2018, two KFN hunters scouted the PDA for several hours and					Alberta Transportation commits to holding workshops with KFN to discuss mitigation measures.
identified a moose and deer. KFN decided against harvesting the moose due to the location of the animal, number of hunters, and time of day.					
KFN explained that "normally they hunt in a group of four to six men so they can assist one another with processing					
and packing out meat after a kill." KFN indicated they will return in the fall to hunt because the terrain and quality of habitat make chances of success likely.					
(Kainai First Nation, 2018, p. 60)					



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Fishing		•			-
Existing Conditions Species fished by KFN include rainbow trout, rocky mountain whitefish, and cutthroat trout. KFN noted that portions of the PDA that intersect the Elbow River are currently used to fish for trout and rocky mountain whitefish. KFN explained that the Elbow River is accessible near the bridge on Highway 22 by anglers on foot. Fishing in that area occurs regularly in the summer and fall. Another access point for KFN fishers is near the mouth of Val Vista Creek where it flows into the Elbow River. KFN mapped several locations that would be suitable for angling along the Elbow River. These locations include areas that are accessible by the public and with negotiated access through private lands. KFN explained that the Elbow River has changed dramatically since the 2013 floods, making it less predictable for anglers, but it is still a good potential source of fish.	The Elbow River is within the PDA. KFN identified 5 fishing areas: • 3 are within the PDA • 2 are within the LAA	Hold at least two workshops with KFN where Elders, hunters and KFN consultation personnel have the opportunity to discuss proposed mitigation with Alberta Transportation and develop mutually agreeable mitigation measures for the effects identified in this report and for any additional effects to sites of interest that have yet to be discovered.	Volume 3A and Volume 3B, Section 6: Hydrology Volume 3A and Volume 3B, Section 7: Surface Water Quality Volume 3A and Volume 3B, Section 8: Aquatic Ecology Volume 3A and Volume 3B, Section 12: Land Use and Management Volume 3A and Volume 3B, Section 14: Traditional Land and Resource Use	In addition to the measures proposed to mitigate potential effects on fish and fish habitat, as described above, Alberta Transportation will implement the following measures to mitigate potential effects on fishing: • Alberta Transportation will notify Indigenous groups regarding project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods. • AEP will avoid substantial interference with public navigation of Elbow River through the following design practices: - As part of construction, a permanent portage will be developed around the in-stream water intake components. - Signs diffecting traffic to detours will be installed during construction of road realignments and modifications. - Signs will be installed along the existing Elbow River channel and on the dam. Multiple signs will be placed upstream and downstream of the water intake components on both banks of Elbow River. These signs will warn users on Elbow River that they are approaching in-stream water intake components and of the associated danger with this infrastructure and to direct them to a portage location. • Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction access management.	The Project is expected to result in restricted access to areas within the PDA and development of a permanent portage for the Elbow River. Fencing of infrastructure would restrict KFN's access to traditional resources or current use sites or areas for a small portion of Elbow River. Current use sites and areas located outside the PDA (as indicated in column 2) are not anticipated to be directly affected by the Project. Mitigation measures outlined in column 5 will be implemented to reduce potential adverse effects of the Project on current use sites and areas. The construction and management of the offstream reservoir presents a unique opportunity with the conversion of private land to Crown land for future use by First Nations and stakeholders. Through the engagement process that included feedback from Indigenous groups, a draft principles of future land use for the Project has been developed. The primary use of all lands within the PDA is for flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites KFN to participate in the engagement process for the LUA. Alberta Transportation commits to holding workshops with KFN to discuss mitigation measures.



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Traditional Land and Resource Use Information	Location of Sites or Areas Relative to the Project ¹	Kainai First Nation Recommendations and Requests	Relevant March 2018 Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the March 2018 Environmental Impact Assessment	Additional Alberta Transportation Response
Trapping	,				
Existing Conditions KFN indicated that they do not currently trap for food in the PDA or exercise commercial trapping rights. KFN observed the presence of fur bearing animals including beaver, muskrat, rabbit, coyote, fox, weasel and wolf in the PDA.	No specific locations of TLRU sites or areas were provided.	Hold at least two workshops with KFN where Elders, hunters and KFN consultation personnel have the opportunity to discuss proposed mitigation with Alberta Transportation and develop mutually agreeable mitigation measures for the effects identified in this report and for any additional effects to sites of interest that have yet to be discovered.	Volume 3A and Volume 3B, Section 11: Wildlife and Biodiversity Volume 3A and Volume 3B, Section 14: Traditional Land and Resource Use	In addition to the measures proposed to mitigate potential effects on wildlife and biodiversity, and on vegetation and wetlands, as described above, Alberta Transportation will implement the following measures to mitigate potential effects on trapping: • Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods. • Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction land access management.	The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see Volume 3A, Section 11.4.2). The construction and management of the offstream reservoir presents a unique opportunity with the conversion of private land to Crown land for future use by First Nations and stakeholders. Through the engagement process that included feedback from Indigenous groups, a draft principles of future land use for the Project has been developed. The primary use of all lands within the PDA is for flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses include traditional activities will be allowed to occur within the designated land use area (LUA). Alberta Transportation invites KFN to participate in the engagement process for the LUA. Alberta Transportation commits to holding workshops with KFN to discuss mitigation measures.



Appendix I Table 1: Kainai First Nation Traditional Land and Resource Use Information and Mitigation Table August 2019

Table 1 Kainai First Nation Traditional Land and Resource Use Information and Mitigation Table

1	2	3	4	5	6
Traditional Land and Resource Use Information	Location of Sites or Areas Relative to the Project ¹	Kainai First Nation Recommendations and Requests	Relevant March 2018 Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the March 2018 Environmental Impact Assessment	Additional Alberta Transportation Response
Plant Harvesting		-			
Existing Conditions KFN indicated that the ecological setting of the Project area is conducive to the growth of a wide variety of trees, shrubs and grasses that are used for subsistence, medicinal, ceremonial, construction, artisanal, and fuel use. Culturally important plants observed by KFN include bull berry, chokecherry, saskatoon berry, gooseberry, wild strawberry, blueberry, aapinaakinaman, otsipiis (willow), sage, sweetgrass, lodgepole pine, pine, spruce, aspen, cottonwood, black birch, diamond willow, sooyootispiskoo, aaakitooyisi, sooyaistaa, bachelor root, rose bush (rose hips), yarrow, porcupine plant, shooting star plant, and several undisclosed medicinal plants ⁵ . Plants are typically harvested in the summer and fall, but some plants are used year-round, such as wood for fuel in winter and spring. KFN value deciduous trees for traditional construction and for fuel, particularly if they produce fewer sparks such as willow, cottonwood, and aspen. These species were observed by KFN. KFN identified otsipiis (willow) and explained that it is used for medicinal purposes and to construct sweat lodges because the wood is flexible and strong. KFN stated that willow is becoming less common in the region due to agricultural development, but is still prevalent in the PDA.	20 culturally important plant areas were identified by KFN: • 15 are within the PDA • 5 are within the LAA • Of the culturally important plant areas within the PDA, 2 are intersected by permanent project infrastructure, including the gravel road, off-stream dam, outlet structure and floodplain berm.	Hold at least two workshops with KFN where Elders, hunters and KFN consultation personnel have the opportunity to discuss proposed mitigation with Alberta Transportation and develop mutually agreeable mitigation measures for the effects identified in this report and for any additional effects to sites of interest that have yet to be discovered. Negotiate access to Areas B and C during dry operations for traditional gathering, hunting, ceremonial use and for traditional cultural and heritage camps involving both Elders and youth.	Volume 3A and Volume 3B, Section 10: Vegetation and Wetlands Volume 3A and Volume 3B, Section 14: Traditional Land and Resource Use Volume 3A and Volume 3B, Section 15: Public Health	In addition to the measures proposed to mitigate potential effects on wildlife and biodiversity, and on vegetation and wetlands, as described above, Alberta Transportation will implement the following measures to mitigate potential effects on plant harvesting: • Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods. • Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction. • Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction access management.	Traditionally used plant species within the PDA will be directly affected due to vegetation removal and grading associated with construction, affecting 168 ha associated with permanent Project infrastructure and approximately 566 ha of temporary workspace. Although individual plants will be removed from the PDA, none of the traditionally used species identified will be lost in the LAA, nor will vegetation communities supporting traditionally used plants be lost from the PDA (see Volume 3A, Section 10.4). At the end of construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded to meet AEP reclamation requirements. Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important The construction and management of the off-stream reservoir presents a unique opportunity with the conversion of private land to Crown land for future use by First Nations and stakeholders. Through the engagement process that included feedback from Indigenous groups, a draft principles of future land use for the Project has been developed. The primary use of all lands within the PDA is for flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be

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⁵ To protect the intellectual property rights of KFN, few details are provided in the TLRU report about the specific use of medicinal plant species.

Appendix I Table 1: Kainai First Nation Traditional Land and Resource Use Information and Mitigation Table August 2019

Table 1 Kainai First Nation Traditional Land and Resource Use Information and Mitigation Table

	T			_	T
1	2	3	4	5	6
Traditional Land and Resource Use Information	Location of Sites or Areas Relative to the Project ¹	Kainai First Nation Recommendations and Requests	Relevant March 2018 Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the March 2018 Environmental Impact Assessment	Additional Alberta Transportation Response
Potential Project Effects KFN expressed concerns about the loss of traditionally used plants. "We have identified many medicinal plants and food that grow here [that] we ate and still eat All that we have seen today will be destroyed and some of it will be underwater when the dam project is completed." (Kainai First Nation, 2018, p. 71). Of concern to KFN are areas that remain uncultivated native grassland, particularly in the southwestern portion of the PDA where the diversion structure and berm would be built. KFN stated that the "traditional use potential of this area has been maintained, preserved and enhanced by the efforts of local landowners to protect native grasslands, wetlands and riparian areas." (Kainai First Nation, 2018, p. 2)	-				allowed to occur within the designated LUA. Alberta Transportation invites KFN to participate in the engagement process for the LUA. Alberta Transportation commits to holding workshops with KFN to discuss mitigation measures.
Travel					
Existing Conditions KFN identified a traditional Blackfoot travel route, referred to as the North-South Trail, that passes through the Elbow River valley just west of what is now Highway 22. KFN stated that the land bears evidence of the horse and travois that were used in the past by Blackfoot to travel to other encampments. Oral history accounts suggest that this trail was used within living memory. KFN identified a traditional east-west travel route between Fort Calgary and Morley and referred to it as the North West Mounted Police (NWMP) Trail, although the trail was said to predate the arrival of the NWMP to southern Alberta. Portions of the trail are still	The North-South Trail ⁶ as identified by KFN is within the PDA. The North-South Trail is within the Project construction area to the west of the floodplain berm. The NWMP Trail as identified by KFN is within the PDA; it is located within the off-stream reservoir. The hunting access/route identified by KFN is within the PDA and is intersected by the permanent project infrastructure of the gravel road, highway right-of-	Develop avoidance or preservation measures to ensure the integrity of the portions of the traditional trails (i.e., NWMP Trail and North-South Trail) or conduct additional archaeological field visits in the company of KFN Elders to further and more comprehensively identify sites of interest for preservation. Hold at least two workshops with KFN where Elders, hunters and KFN consultation personnel have the opportunity to discuss proposed mitigation with Alberta Transportation and develop mutually agreeable mitigation measures for the effects identified in this report and for any additional	Volume 3A and Volume 3B, Section 13: Historical Resources Volume 3A and Volume 3B, Section 12: Land Use and Management Volume 3A and Volume 3B, Section 14: Traditional Land and Resource Use	 Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction access management. In the event an unanticipated cultural resource is discovered during construction of the Project a historical resources chance find protocol would be enacted, as required by Alberta Culture Multiculturalism and Status of Women (Alberta Culture) during construction. Alberta Transportation will follow current industry best practices and comply with all provincial and federal legislation. Should additional historical resources be encountered during construction, Alberta Transportation will follow current Alberta Culture policies and guidelines. 	A portion of the North-South Trail is located within the Project construction area and it is anticipated that this site will be affected by construction of the floodplain berm. The NWMP Trail is located within the offstream reservoir and it is not anticipated to be affected by Project construction activities. The trail will be affected in the flood and post-flood operation phase due to direct physical disturbance associated with reservoir filling or draining, damage from sediment deposition or debris, or cleanup. Construction of the Project and fencing of infrastructure will restrict access to certain areas of the Project, including portions of the hunting access/route identified by KFN.

⁶ The TLRU Report figure refers to this trail as the Old Blackfoot Trail.

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Appendix I Table 1: Kainai First Nation Traditional Land and Resource Use Information and Mitigation Table August 2019

Table 1 Kainai First Nation Traditional Land and Resource Use Information and Mitigation Table

	T				
1 Traditional Land and Resource Use Information	Location of Sites or Areas Relative to the Project ¹	3 Kainai First Nation Recommendations and Requests	Relevant March 2018 Environmental Impact Assessment Section(s)	5 Mitigation Measures Proposed in the March 2018 Environmental Impact Assessment	6 Additional Alberta Transportation Response
visible on preserved heritage rangeland within the Val Vista Ranch. A hunting access/route was mapped by KFN. Potential Project Effects KFN expressed concerns that construction of the floodplain berm would result in partial or complete destruction of the North-South Trail. KFN expressed concerns that the NWMP Trail is located within what would be the reservoir should the Project be approved.	way, diversion channel, off-stream dam and outlet channel.	effects to sites of interest that have yet to be discovered.			Alberta Transportation commits to holding workshops with KFN to discuss mitigation measures.
Cultural, Spiritual and Ceremonial	Practices or Areas				
Existing Conditions KFN noted the site of the first Catholic Mission among the Blackfoot in southern Alberta.	The Our Lady of Peace Roman Catholic Mission is within the LAA.	during dry operations for traditional gathering, hunting, ceremonial use and for traditional cultural and W	Volume 3A and Volume 3B, Section 10: Vegetation and Wetlands	 Alberta Transportation will notify Indigenous groups regarding project activities and schedules, including provision of project maps and design components. At the request of Indigenous groups, Alberta Transportation will participate in ceremonies (if invited) prior to the start of construction, including making 	The traditional camp associated with the North-South Trail is located within the Project construction area and it is anticipated that this site will be affected by construction of the
Existing Conditions KFN noted that at least four main areas of historical occupancy are located in the Project area. KFN explained that these areas are currently used for traditional ceremonies and feature cultural artifacts that are of historical significance to KFN. KFN identified a traditional Blackfoot camp and explained that this site would have been a suitable area for a winter camp because it has a good supply of wood, is located near a river and trees that would have provided shelter during the winter season and is not far from a steep hill that was used as a buffalo jump. Numerous tipi rings were identified at this site. Oral history accounts suggest that this area was more recently occupied (i.e., within living memory) and is associated with use of the North-South Trail. KFN	The traditional camp ⁷ identified by KFN that is associated with the North-South Trail is within the PDA. The traditional camp is within the Project construction area to the west of the floodplain berm. Numerous tipi rings were identified at this site. The traditional camp identified by KFN in the area to the east of the Our Lady of Peace Mission site is within the LAA. The traditional camp identified by KFN that is associated with the NWMP Trail is within the PDA; it is located within the off-stream reservoir.	heritage camps involving both Elders and youth. Develop avoidance or redesign measures to ensure that KFN cultural properties, ceremonial sites and identified traditional camping areas and associated material features (tipi rings, stone circles, campfires, artifacts, etc.) remain intact and the areas remain accessible to KFN. Develop additional avoidance or redesign measures to ensure the integrity of KFN traditional areas and cultural properties in the Val Vista Creek area. Ensure that the integrity of the site and material evidence of KFN ancestral use is preserved and the site remains accessible. Hold at least two workshops with KFN where Elders, hunters and KFN consultation personnel have	Volume 3A and Volume 3B, Section 12: Land Use and Management Volume 3A and Volume 3B, Section 13: Historical Resources Volume 3A and Volume 3B, Section 14: Traditional Land and Resource Use	 Alberta Transportation will participate in discussions with Alberta Culture and Indigenous groups regarding further investigation of identified sites located within the designated construction site boundary. The disposition of artifacts and provision of Global Positioning System (GPS) coordinates are under the jurisdiction of Alberta Culture and not Alberta Transportation. Alberta Transportation will limit disturbance, to the extent possible and practical, of cultural and spiritual sites and subsurface impacts. Alberta Transportation will follow heritage resource protection methods as mandated by the <i>Historical Resources Act</i>. Alberta Transportation will minimize disturbance to cultural and spiritual sites and subsurface impacts, and develop a protocol for recovery, collection, reporting on, and possible repatriation of artifacts found in consultation with Indigenous groups, which could include flagging, fencing, or providing signage of sites to prevent disturbance during construction. Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction access management. Alberta Transportation will follow current industry best practices and comply with all provincial and federal legislation. Should additional historical resources be encountered during construction, Alberta Transportation will follow current Alberta Culture policies and guidelines. 	floodplain berm. The Our Lady of Peace Mission site and the traditional camp identified to the east are located outside the PDA and are not anticipated to be directly affected by the Project. The traditional camp associated with the NWMP Trail is located within the off-stream reservoir and is not anticipated to be affected by Project construction activities. Flood and post-flood operation will affect the site due to direct physical disturbance associated with reservoir filling or draining, damage from sediment deposition or debris, or cleanup. The traditional winter camp and associated features identified along the banks of Val Vista Creek is anticipated to be affected by construction of the off-stream dam. Alberta Transportation commits to holding workshops with KFN to discuss mitigation measures.

⁷ The TLRU Report figure also referred to this location as a Ceremonial Place.

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Table 1 Kainai First Nation Traditional Land and Resource Use Information and Mitigation Table

1	2	3	4	5	6
Traditional Land and Resource Use Information	Location of Sites or Areas Relative to the Project ¹	Kainai First Nation Recommendations and Requests	Relevant March 2018 Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the March 2018 Environmental Impact Assessment	Additional Alberta Transportation Response
stated that the location of this camp and its unique features give it special significance and that KFN members intend to return to the site to pray, make an offering, and give the area a traditional Kainai name. A traditional camp was identified by KFN in an area to the east of the Our Lady of Peace Mission site. KFN indicated that it was likely the location of the Blood Chief's winter camp. The camping area featured trees for shelter, a spring-fed stream available yearround, and was close to meadows yet sheltered from winds. Another traditional camp was identified by KFN that is both a historic camp and a place of more recent occupancy (i.e., within living memory) and is associated with the NWMP Trail. KFN stated that the site is with a portion of a larger ranch that has been preserved as heritage ranchland and has not been ploughed. Blackfoot workers who came to the ranch on a seasonal basis would reside in a camp in the area; this practice continued until the 1950s. KFN identified the location of a traditional winter camp along the banks of Val Vista Creek. Features associated with this site include several tipi rings, fireplaces, fire broken rocks, a possible medicine wheel or other stone effigy, and arrowheads/artifact scatters. KFN stated it is likely that this site also contains additional features such as effigies, pottery, bones, and potential human remains. Materials associated with traditional painting, arts and crafts were found at the mouth of the Val Vista Creek. These include surface minerals and rocks from the banks of the Elbow River that are used for baking, grinding and mixing with oils to make traditional paints.	The traditional winter camp identified by KFN along the banks of Val Vista Creek is within the PDA and is intersected by the permanent project infrastructure of the offstream dam. Features associated with this traditional camp include numerous tipi rings, fireplaces, fire-broken rocks, a possible medicine wheel or other stone effigy, and arrowheads/artifact scatters. The historic materials identified by KFN at the mouth of Val Vista Creek are within the PDA.	the opportunity to discuss proposed mitigation with Alberta Transportation and develop mutually agreeable mitigation measures for the effects identified in this report and for any additional effects to sites of interest that have yet to be discovered.		Alberta Transportation will commit to adhering to any conditions Alberta Culture applies to these sites.	



Table 1 Kainai First Nation Traditional Land and Resource Use Information and Mitigation Table

1	2	3	4	5	6
Traditional Land and Resource Use Information	Location of Sites or Areas Relative to the Project ¹	Kainai First Nation Recommendations and Requests	Relevant March 2018 Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the March 2018 Environmental Impact Assessment	Additional Alberta Transportation Response
Potential Project Effects KFN expressed concerns that the traditional Blackfoot camp associated with the North-South Trail would be partially or completely destroyed by construction of the floodplain berm. Further, in the event of a flood, any remaining portions of the site would be covered in sediment. KFN stated that loss of use of this site due to access restrictions or the destruction of the site during construction would "constitute a significant, adverse effect on the Blood Tribe." (Kainai First Nation, 2018, p. 79) KFN expressed concerns that the traditional winter camp along the banks of Val Vista Creek would be at risk of partial or complete destruction from construction of the dam, berm and low-level outlet works. Further, in the event of a flood, any remaining portions of the site would be covered in sediment. KFN stated that loss of use of this site due to access restrictions or the destruction of the site during construction would "constitute a significant, adverse effect" on KFN cultural heritage. (Kainai First Nation, 2018, p. 81) KFN noted the potential for additional heritage resources to be uncovered during construction of the Project.	The traditional camp identified by KFN that is associated with the North-South Trail is within the PDA. The traditional camp is within the Project construction area to the west of the floodplain berm. The traditional winter camp identified by KFN along the banks of Val Vista Creek is within the PDA and is intersected by the permanent project infrastructure of the offstream dam.				
Project Design		I =	I		I
Existing Conditions KFN stated that it would be ideal if an alternative to the Project could be proposed.	PDA	Provide additional rationale to KFN over the choice of location for flood mitigation measures and discuss and clarify alternatives such as McLean Creek.	Volume 1, Section 2: Project Justification and Alternatives Considered	The main objective of the Project is to divert and retain a portion of Elbow River flows during a flood and release the water in a controlled manner after the threat of flood has subsided. The reservoir will not hold a permanent pool of water.	As noted in the Volume 1, Section 2.2.1, following the floods of June 2013, the Government of Alberta set up the Southern Alberta Flood Recovery Task Force. Five potential locations for flood mitigation measures on the Elbow River were identified, as follows: • a dry dam on Quirk Creek near the upper reaches of the Elbow River: The Quirk Creek option was dismissed due to slope stability concerns.



Table 1 Kainai First Nation Traditional Land and Resource Use Information and Mitigation Table

1	2	3	4	5	6
Traditional Land and Resource Use Information	Location of Sites or Areas Relative to the Project ¹	Kainai First Nation Recommendations and Requests	Relevant March 2018 Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the March 2018 Environmental Impact Assessment	Additional Alberta Transportation Response
Information	Project ¹	Recommendations and Requests	Section(s)	Assessment	 a dry dam on Canyon Creek, also near the upper reaches of the Elbow River: The Canyon Creek option was dismissed because the volume was too small for the amount required for flood mitigation. an underground diversion tunnel running east from Glenmore Reservoir and discharging into the Bow River. The Glenmore Reservoir diversion tunnel has a positive benefit/cost ratio in only two of the four scenarios considered, and it has a lower benefit/cost ratio than either the Project or the MC1 Option in all four of the scenarios. Consequently, the diversion tunnel was rejected from further consideration. an earth fill dam built on the main channel of the Elbow River near its confluence with McLean Creek and spanning the Elbow River valley (MC1 Option). This was dismissed, due to a variety of concerns, described in Volume 1, Table 2-2. an off-stream reservoir at Springbank Road was recommended in combination with local mitigation for Bragg Creek and Redwood Meadows. An assessment of the MC1 Option is in Volume 1, Section 3 and Volume 4, Supporting Documentation). SR1 has gone through a rigorous selection process and is the preferred option for a variety of environmental, technical, economic and timing reasons. Alberta Transportation's response to information request CEAA, Package 3, IR3-45
					provides additional information on the comparison of the MC1 Option, the Tri-River Joint Reservoir and the Micro-Watershed Impounding Concept. Alberta Transportation will provide this response to KFN and, if requested, will discuss the response.





SPRINGBANK OFF-STREAM RESERVOIR PROJECT Response to Ermineskin Cree Nation Traditional Land and Resource Use Information including Mitigation Table

August 2019

Prepared by:

Alberta Transportation

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Appendix I Table 1: Ermineskin Cree Nation Traditional Land and Resource Use Information and Mitigation Table





Terms of Use

This draft response is intended to inform the regulatory process, including engagement, and project planning of the Springbank Off-stream Reservoir Project (SR1; the Project). Alberta Transportation has prepared this draft response to the *Ermineskin Cree Nation Traditional Knowledge and Use Study:* Springbank Off-Stream Reservoir Project (Traditional Land and Resource Use [TLRU] Report). Subject to the conditions below, the final copy of this response will be filed with the Canadian Environmental Assessment Agency and become part of the public record. Alberta Transportation will also use this response, and the information in the TLRU Report, as part of the record of the engagement process for the Project.

As described on page i of the TLRU Report, Ermineskin Cree Nation has put the following conditions on the use of the information in the TLRU Report:

- The TLRU Report is the exclusive property of Ermineskin Cree Nation. The information contained in this report are solely for use by Alberta Transportation, the Alberta Natural Resources Conservation Board, and the Canadian Environmental Assessment Agency in making decisions related to the Springbank Off-Stream Reservoir Project.
- The TLRU Report, extracts of the report, and/or original information from the report may not be used, reproduced, or disseminated by any party without written permission from Ermineskin Cree Nation.
- Nothing in this report should be construed so as to define, limit, or otherwise constrain the Treaty,
 Constitutional, or legislative rights and interests of Ermineskin Cree Nation and its members.



i

Acronyms

AEP Alberta Environment and Parks

Alberta Culture Multiculturalism and Status of Women

CEA Agency Canadian Environmental Assessment Agency

ECN Ermineskin Cree Nation

EIA environmental impact assessment

KWBZ key wildlife and biodiversity zone

LAA local assessment area

LUA land use area

PDA Project development area

RAA regional assessment area

RAP restricted activity period

TLRU Traditional Land and Resource Use

TLRU Report Ermineskin Cree Nation Traditional Knowledge and Use Study:

Springbank Off-Stream Reservoir Project

the Project; SR1 Springbank Off-stream Reservoir Project

VC valued component



Traditional Land and Resource Use Information and Mitigation August 2019

1.0 TRADITIONAL LAND AND RESOURCE USE INFORMATION AND MITIGATION

1.1 OVERVIEW

Ermineskin Cree Nation provided Alberta Transportation with the TLRU Report on June 26, 2018. Alberta Transportation committed to review the TLRU Report and provide Ermineskin Cree Nation with a response in relation to the results of the *Springbank Off-stream Reservoir Project Environmental Impact Assessment* filed March 2018 (March 2018 EIA). Because the TLRU Report was provided after the filing of the March 2018 EIA, TLRU information, concerns, and recommendations will be used for project planning, engagement and regulatory purposes, where applicable.

1.2 INFORMATION SOURCES

The information contained in the mitigation table response (Appendix I, Table 1; page 2.3) has been compiled using two sources:

- Ermineskin Cree Nation Traditional Knowledge and Use Study: Springbank Off-Stream Reservoir Project (2018), prepared by Willow Springs Strategic Solutions
- Springbank Off-stream Reservoir Project Environmental Impact Assessment, filed March 2018.

In June 2018, Ermineskin Cree Nation submitted the TLRU Report to Alberta, to be considered in the planning and regulatory process for the Project. Ermineskin Cree Nation also submitted the TLRU Report separately to the Canadian Environmental Assessment Agency (CEA Agency) and it appears on the CEA Agency project registry (CEA Agency 2018).

The report is composed of TLRU and traditional ecological knowledge (TEK) information as well as recommended mitigation measures presented by Ermineskin Cree Nation. The TLRU Report contains Project-specific information shared by eight Ermineskin Cree Nation Elders and harvesters who participated in interviews and field verification visits for the Project. Field verification visits were completed to sites in and around the Project area in May 2018. Sites mapped in the TLRU Report were kept confidential through the use of 1 km buffers around a randomized center point and were presented in the form of a concentration or 'heat' map identifying areas of low to high intensity of use.

Ermineskin Cree Nation states that the TLRU Report does not represent the full extent of Ermineskin Cree Nation knowledge and use of the Project area and, therefore, the study should not be considered adequate to assess the potential effects of the Project on the knowledge, use, and Aboriginal and treaty rights of Ermineskin Cree Nation and its members, or to develop adequate mitigation measures (Willow Springs Strategic Solutions 2018, page 2).

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Traditional Land and Resource Use Information and Mitigation August 2019

1.3 METHODOLOGY

Following a thorough review of the Ermineskin Cree Nation TLRU Report, data were summarized into related topics that represent the information, concerns, and recommendations shared by Ermineskin Cree Nation and placed into the context of the March 2018 EIA. This information has been compiled into the Ermineskin Cree Nation Traditional Land Use Information and Mitigation Table, which appears on Appendix I.

The Ermineskin Cree Nation Traditional Land Use Information and Mitigation Table utilizes the following organizational structure:

<u>Column 1:</u> The "Traditional Land and Resource Use Information" column includes information shared by Ermineskin Cree Nation regarding existing conditions followed by potential Project effects. The information has been organized under the following March 2018 EIA categories:

- traditional ecological knowledge
 - fish and fish habitat
 - vegetation and wetlands
 - wildlife and biodiversity
- · traditional land and resource use
 - hunting
 - fishing
 - plant harvesting
 - travel
 - habitation
 - cultural, spiritual, and ceremonial practices or areas
- community health and wellbeing
- project design
- · employment and livelihood
- cumulative effects
- engagement

<u>Column 2:</u> Information included in the "Location of Sites or Areas" column demonstrates where the specific sites or areas identified by Ermineskin Cree Nation are in relation to the Project, including Project development area (PDA), local assessment area (LAA), or regional assessment area (RAA), and in geographical reference to specific project components such as the diversion channel, diversion outlet, off-stream dam, and floodplain berm.

<u>Column 3:</u> Information included in the "Ermineskin Cree Nation Recommendations and Requests" column outlines all recommendations or requests proposed by Ermineskin Cree Nation for mitigating potential effects from the Project. They have been included once or multiple times, depending on the relevant topics.

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Traditional Land and Resource Use Information and Mitigation August 2019

<u>Column 4:</u> Information included in the "Relevant March 2018 Filing Environmental Impact Assessment Section(s)" column identifies the section(s) of the March 2018 EIA where Ermineskin Cree Nation's information, concerns, or recommendations have been considered.

<u>Column 5:</u> Information included in the "Mitigation Measures Proposed in the Environmental Impact Assessment" column identifies the relevant mitigation measures that have been proposed in the March 2018 EIA to mitigate potential effects from the Project.

<u>Column 6:</u> Information included in the "Additional Alberta Transportation Response" column provides Alberta Transportation's additional responses to Ermineskin Cree Nation's recommendations and requests in Column 5.



Traditional Land and Resource Use Information and Mitigation August 2019



Traditional Land and Resource Use Information and Mitigation Table August 2019

2.0 TRADITIONAL LAND AND RESOURCE USE INFORMATION AND MITIGATION TABLE

2.1 OVERVIEW OF THE ERMINESKIN CREE NATION TLRU REPORT

According to the TLRU Report, hunting, fishing, plant gathering, camping, travel, and other traditional activities, such as ceremonial practices, continue to be important traditional activities for Ermineskin Cree Nation. The TLRU Report states that the Project is located within the traditional territory of Ermineskin Cree Nation, and Ermineskin Cree Nation members continue to travel to areas within the PDA, LAA and RAA to undertake traditional activities, noting that several Ermineskin Cree Nation members have immediate and extended families that reside at the Stoney Reserves 142, 143, and 144, and Tsuut'ina Reserve 145.

According to the TLRU Report, hunting and fishing occur in the PDA along the Elbow River and where Ermineskin Cree Nation has obtained access from private landowners. The TLRU Report states that the Project area has become increasingly important to Ermineskin Cree Nation hunters and harvesters due to the cumulative effects of development, which have reduced the abundance of big game near the Ermineskin Cree Nation reserve and other accessible areas of Crown land. Ermineskin Cree Nation reported an increased reliance upon accessing private lands to practice their Aboriginal and treaty rights and noted that "the Project area represents one of the least disturbed and accessible areas for Ermineskin Cree Nation (ECN) land users" (Willow Springs Strategic Solutions 2018, page 5).

Historically and spiritually important sites as well as important wildlife and plant habitat were also identified by Ermineskin Cree Nation within the PDA.

Ermineskin Cree Nation expressed concerns about potential Project effects on:

- traditionally harvested plants
- wetlands
- wildlife habitat and migration routes
- wildlife abundance, distribution, health and behaviour
- · access to current use sites and areas
- current use sites or areas (including historical sites, traditional camps, and sites or spiritual importance)
- connection to land, sense of identity and place, cultural values and norms
- ability to transmit traditional way of life, culture and knowledge to future generations

In response to these concerns, Ermineskin Cree Nation has proposed recommendations and requests in order to help mitigate potential effects from the Project (see Appendix I, Table 1 Column 3).

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Traditional Land and Resource Use Information and Mitigation Table August 2019

2.2 ERMINESKIN CREE NATION TLRU ASSOCIATED WITH THE PROJECT

Appendix I, Table 1 Column 1 provides an overview of Ermineskin Cree Nation's TLRU within and in the vicinity of the PDA, LAA, and RAA, as provided in the TLRU Report. Alberta Transportation has reviewed the information considered it in reference to the March 2018 EIA, and provided additional responses, where applicable.



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3.0 CONCLUSION

In June 2018, Ermineskin Cree Nation submitted the *Ermineskin Cree Nation Traditional Knowledge and Use Study: Springbank Off-Stream Reservoir Project* to Alberta Transportation. Overall, the information provided by Ermineskin Cree Nation in the TLRU Report serves to confirm the assumptions made in the March 2018 EIA regarding the nature and extent of Ermineskin Cree Nation current use in the PDA.

Alberta Transportation reviewed the TLRU Report in relation to the results of the March 2018 EIA and prepared a mitigation table (Appendix I) in response to the information, concerns and recommendations raised by Ermineskin Cree Nation. The conclusion of the TLRU assessment in Section 14 of the March 2018 EIA that the effects of the Project on TLRU will not result in the long-term loss of availability of traditional use resources or access to lands currently relied on for traditional use practices or the permanent loss of traditional use sites and areas in the RAA remains unchanged. Alberta Transportation is committed to working with Ermineskin Cree Nation in order to discuss mitigation strategies to avoid, reduce, or otherwise manage potential effects of the Project and to address or respond to identified concerns. The information shared by Ermineskin Cree Nation will continue to be used for project planning, engagement and regulatory purposes, where applicable.

The construction and management of the off-stream reservoir presents a unique opportunity with the conversion of private land to Crown land for future use by First Nations and stakeholders. Through the engagement process that included feedback from Indigenous groups, a draft principles of future land use for the Project has been developed. The primary use of all lands within the PDA is for flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses for traditional activities, including the exercise of treaty rights such as hunting will be allowed to occur within the designated Land Use Area (LUA). Alberta Transportation invites Ermineskin Cree Nation to participate in the engagement process for the LUA.



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4.0 REFERENCES

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Appendix I Table 1: Ermineskin Cree Nation Traditional Land and Resource Use Information and Mitigation Table
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Appendix I TABLE 1: ERMINESKIN CREE NATION TRADITIONAL LAND AND RESOURCE USE INFORMATION AND MITIGATION TABLE





 Table 1
 Ermineskin Cree Nation Traditional Land and Resource Use Information and Mitigation Table

1	2	3	4	5	6
Traditional Land and Resource Use Information	Location of Sites or Areas Relative to the Project	Ermineskin Cree Nation Recommendations and Requests	Relevant March 2018 Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the March 2018 Environmental Impact Assessment	Additional Alberta Transportation Response
Traditional Ecological Knowledge					
Fish and Fish Habitat	,				
Existing Conditions Ermineskin Cree Nation (ECN) identified bull trout, rainbow trout, cutthroat trout, burbot, and mountain whitefish as being present in the Elbow River.	The Elbow River is within the PDA.	ECN recommends that the Proponent work with ECN in the design and implementation of environmental monitoring. As part of its environmental monitoring plan, the Proponent and ECN should develop a joint communications plan for the presentation of environmental monitoring results to the community and the incorporation of community feedback. In the event that the Project is to be decommissioned, ECN recommends that the Proponent consult with ECN regarding the design, implementation, and monitoring of a reclamation plan.	Volume 3A and Volume 3B, Section 8: Aquatic Ecology	 Structures will be designed so that storm water runoff and wash water from the access roads, decks, side slopes, and approaches are directed into a retention pond or vegetated area to remove suspended solids, dissipate velocity, and prevent sediment and other deleterious substances from entering watercourses. Works in water will be timed with respect to the restricted activity periods (RAPs) wherever possible. For Elbow River, the RAP is May 01 – July 15 and September 16 – April 15. Condition and use of restricted activity periods will be provided within further project permitting and authorization under the <i>Fisheries Act</i>. For planning purposes, the Elbow River RAP will be applied as an avoidance and mitigation measure. To allow for fish passage and construction of the structures within the Elbow River, the Elbow River will be diverted, and flows will be maintained downstream by the construction of a temporary bypass channel. Drainage areas within the reservoir will be graded to reduce stranding of fish during release of stored flood water from the reservoir. A monitoring program will be undertaken to identify if fish passage is impeded for migratory salmonids or other fish species. Maintenance, debris removal on the structure, and on the fish passage structures will occur to accommodate fish passage. Debris will be cleaned from the structure gates after a flood recedes to allow unimpeded fish passage upstream over the structure. Isolated pools will be identified, marked, and a determination by a Qualified Aquatic Environmental Specialist (QAES) will be made as to whether there are stranded fish in the pool that require rescue and relocation to secure habitats in Elbow River. When the water has been fully drained, the low-level outlet canal will also be surveyed to identify isolated pools where fish might be stranded. Where debris removal from the structures is required, debris removal will be timed to avoid disruption to sensiti	At the end of construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded to meet AEP reclamation requirements. Construction of the diversion channel will result in the loss of 1,854 m² of fish habitat on the bed and banks of Elbow River and 300 m² of fish habitat at the interception of the tributary ID1350. With the implementation of mitigation, the Project is unlikely to reduce the productivity or sustainability of a commercial, recreational or Aboriginal fishery as defined by the <i>Fisheries Act</i> . During dry operations, there will be no changes to flow in Elbow River, and therefore no alterations to the quality of fish habitat. Overall, the Project is not expected to limit the availability of traditional resources for current use in the RAA (see Volume 3A, Section 8.4.4 and Section 14.8.1). The draft Surface Water Quality Monitoring Plan also outlines opportunities for Indigenous involvement in monitoring during construction, dry operations and post-flood operation (see Alberta Transportation's response to information request CEAA Package 1, IR2, AppendixIR2-1, Sections 3.1.2, 9.1.4, 9.3.3, 9.5.7) Alberta Transportation will work with ECN to develop a process to share monitoring results. The Project is expected to operate in perpetuity and is not expected to be decommissioned. However, following construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded with a native custom seed mix to meet AEP reclamation requirements. Native trees and shrubs should re-establish over time. Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important.



Appendix I Table 1: Ermineskin Cree Nation Traditional Land and Resource Use Information and Mitigation Table August 2019

Table 1 Ermineskin Cree Nation Traditional Land and Resource Use Information and Mitigation Table

1	2	3	4	5	6
Traditional Land and Resource Use Information	Location of Sites or Areas Relative to the Project	Ermineskin Cree Nation Recommendations and Requests	Relevant March 2018 Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the March 2018 Environmental Impact Assessment	Additional Alberta Transportation Response
Vegetation and Wetlands					
Existing Conditions ECN identified a number of culturally-important plant species within the RAA, including sage, sweet grass, muskeg tea, raspberry, kinnikinnick, moss, wild mint, bunch berry, saskatoon berry, blueberry, cranberry, cloud berry, white poplar, black poplar, lodgepole pine, white spruce, red willow, white birch, sweet pine, cedar, pin cherry, cattail, bear root, tea leaves, and bluebell. Wetlands provide habitat for culturally important plants, which provide nutritional value for animals and ECN members. ECN identified areas that support a variety of traditional medicines and ceremonial plants: west of the PDA and south of Jumping Pound west of Redwood Meadows and north of Bragg Creek south of Redwood Meadows and east of Bragg Creek Potential Project Effects ECN expressed concerns about the potential destruction of plant species of medicinal and cultural value.	ECN mapped 7 medicinal plant areas: • 2 are within the PDA¹ • 3 are within the LAA • 2 are within the RAA • Of the medicinal plant areas within the PDA, 1 is intersected by permanent project infrastructure, including the gravel road and floodplain berm.	ECN recommends that the Proponent work with ECN in the design and implementation of environmental monitoring. As part of its environmental monitoring plan, the Proponent and ECN should develop a joint communications plan for the presentation of environmental monitoring results to the community and the incorporation of community feedback. In the event that the Project is to be decommissioned, ECN recommends that the Proponent consult with ECN regarding the design, implementation, and monitoring of a reclamation plan.	Volume 3A and Volume 3B, Section 10: Vegetation and Wetlands Volume 3A and Volume 3B, Section 11: Wildlife and Biodiversity Volume 3A and Volume 3B, Section 14: Traditional Land and Resource Use	 Alberta Transportation will notify Indigenous groups regarding project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods. Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction. Restrict construction activities to the approved construction footprint. Reduce the removal of vegetation in wetlands to the extent possible. Where possible, conduct ground level cutting/mowing/mulching of wetland vegetation instead of grubbing. Where applicable, in areas not impacted by the permanent Project footprint, if ground conditions are encountered that create potential for rutting, admixing or compaction, minimize ground disturbance by using a protective layer such as matting or biodegradable geotextile and clay ramps or other approved materials between wetland root/seed bed and construction equipment. Native areas disturbed by the Project would be reseeded using an Alberta Transportation native custom seed mix. 	Traditionally used plant species will be directly affected due to vegetation removal and grading associated with construction, affecting 168 ha associated with permanent project infrastructure and approximately 566 ha of temporary workspace. Although individual plants will be removed from the PDA, none of the traditionally used species identified will be lost in the LAA, nor will vegetation communities supporting traditionally used plants be lost from the PDA (see Volume 3A, Section 10.4). Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction. The Project is expected to operate in perpetuity and is not expected to be decommissioned. However, following construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded to meet Alberta Environment and Parks reclamation requirements. Native trees and shrubs should re-establish over time. Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important. Many of the potentially affected grassland and wetland plant communities have intrinsic adaptations to periodic flooding, while other species such as poplar and spruce would be less tolerant to flooding due to having a low anaerobic tolerance. Mortality of traditional use species found in upland plant communities is expected. However, these species are widespread and are expected to re-establish by natural recruitment; permanent loss of traditional use species is not predicted. Overall, residual effects on vegetation and wetlands post-flood would not result in the loss of native upland or wetland plant communities, nor would it result in the loss of wetland function from the LAA (see Volume 3B, Section 10.2). Alberta Transportation will work with ECN to develop a process to share monitoring results.

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¹ Sites located within the PDA are not intersected by permanent Project infrastructure unless otherwise specified.

 Table 1
 Ermineskin Cree Nation Traditional Land and Resource Use Information and Mitigation Table

1	2	3	4	5	6
Traditional Land and Resource Use Information	Location of Sites or Areas Relative to the Project	Ermineskin Cree Nation Recommendations and Requests	Relevant March 2018 Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the March 2018 Environmental Impact Assessment	Additional Alberta Transportation Response
Wildlife and Biodiversity			l		
Existing Conditions ECN noted that the following species are found within the RAA and are culturally significant to ECN: moose, grizzly bear, rabbit, coyote, cougar, muskrat, short-eared owl, elk, black bear, porcupine, weasel, lynx, bobcat, bald eagle, duck, white-tailed deer, mule deer, wolf, marten, beaver, and sharp-tailed grouse. ECN explained that the areas south of Jumping Pound, to the west of Redwood Meadows and north of Bragg Creek host an abundance of medicinal plants, and this in turn attracts large animals, such as bears. A bear was identified in an area containing medicinal plants to the east of Bragg Creek, on Tsuut'ina Reserve 145. Field visits conducted by ECN identified wildlife and wildlife corridors near the Project: • herds of elk were identified to the south of Springbank Road and east of Highway 22, and to the west of Highway 22 and to the north of Springbank Road • elk tracks and scat were noted in the southeastern portion of the PDA • mule deer, as well as their tracks and scat were identified in the southeastern and southwestern portions of the PDA • white-tailed deer were noted on Tsuut'ina Reserve 145 east of Bragg Creek A landowner in the southwestern portion of the PDA noted that her property contained an osprey nest. A bald eagle nest, with two eaglets, was identified in the southeastern portion of the PDA near the Elbow River and ECN expressed concern that it may be located where the outlet channel is proposed to be constructed. ECN noted that the bald eagle is culturally and spiritually important, and its	5 wildlife areas were mapped by ECN: • 4 are within the PDA • 1 is within the RAA • 2 of the wildlife areas within the PDA are intersected by permanent project infrastructure, including the gravel road and off-stream storage dam.	ECN recommends that the Proponent work with ECN in the design and implementation of environmental monitoring. As part of its environmental monitoring plan, the Proponent and ECN should develop a joint communications plan for the presentation of environmental monitoring results to the community and the incorporation of community feedback. In the event that the Project is to be decommissioned, ECN recommends that the Proponent consult with ECN regarding the design, implementation, and monitoring of a reclamation plan.	Volume 3A and Volume 3B, Section 10: Vegetation and Wetlands Volume 3A and Volume 3B, Section 11: Wildlife and Biodiversity	 In addition to the measures proposed to mitigate potential effects on vegetation and wetlands described above, Alberta Transportation will implement the following measures to mitigate potential effects on wildlife and biodiversity: Pre-construction surveys will be conducted to identify wildlife features (e.g., nests, dens) and appropriate site-specific mitigation developed. Where possible, construction activities during the RAP for the key wildlife and biodiversity zone (KWBZ) identified along Elbow River (December 15 to April 30) will be avoided or reduced. This will limit potential sensory disturbance to wintering ungulates (ESRD 2015, Government of Alberta 2017). If construction activities must occur during this time period, a wildlife mitigation and monitoring plan will be developed in consultation with regulators, which will include monitoring ungulate habitat use and response to human disturbance. Restrict all construction activities to the approved construction footprint. Where possible, temporary workspaces and access roads will be in areas that avoid wildlife features and native vegetation (e.g., shrubland, treed areas, wetlands). Existing access roads and previously disturbed areas will be used, where feasible. Where fencing is proposed to restrict livestock access to project structures (e.g., diversion channel), wildlife-friendly fencing will be installed to allow ungulate passage. Vegetation removal will be avoided during the RAP for nesting migratory birds and raptors. The recommended RAP to avoid destruction and disturbance to raptor nests is from February 15 to August 15. If vegetation removal is scheduled to occur within the RAP for migratory birds and raptors, a qualified wildlife biologist will inspect the site for active nests within seven days of the start of the proposed construction activity (e.g., vegetation removal, blasting). If an active nest or den is found, it will be subject to a provincial or federal disturbanc	The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see Volume 3A, Section 11.4.2). Construction activities associated with the diversion channel, floodplain berm and off-stream dam have the potential to create physical or sensory barriers to ungulate movement, including elk. Mitigation measures listed in column 5 will be implemented to reduce the potential adverse effects of the Project on wildlife movement. A measurable change in the abundance and distribution of ungulates in the LAA during construction is possible, but a measurable change in the abundance of ungulates in the RAA is unlikely post-construction (see Volume 3A, Section 11.4.3). During construction, vegetation removal has potential to result in direct habitat loss for migratory birds and fragmentation of migratory bird habitat, which can cause displacement of birds into other, less suitable habitat. Construction activities also have potential to result in indirect effects caused by increased disturbance (e.g., noise and artificial light, presence of workers), which can reduce habitat effectiveness in the LAA. For non-migratory birds, such as bald eagle, changes to terrestrial habitat (e.g., upland cover types) during construction would be similar as described for migratory birds for each habitat association. A measurable change in the abundance and distribution of migratory and non-migratory birds in the LAA during construction is possible, but a measurable change in the abundance of migratory and non-migratory birds in the RAA is unlikely post-construction (see Volume 3A, Section 11.4.7.2).



Table 1 Ermineskin Cree Nation Traditional Land and Resource Use Information and Mitigation Table

1	2	3	4	5	6
Traditional Land and Resource Use Information	Location of Sites or Areas Relative to the Project	Ermineskin Cree Nation Recommendations and Requests	Relevant March 2018 Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the March 2018 Environmental Impact Assessment	Additional Alberta Transportation Response
Potential Project Effects ECN expressed concerns about potential effects on wildlife migration routes and wildlife abundance and availability in the area. ECN noted the Project may have an effect on the health of the elk herd that migrates through the Project area. ECN expressed concerns about potential impacts on sensitive species of cultural importance, such as bald eagle. ECN noted the potential for reduction of wetland habitat for breeding and nesting, which would affect wildlife species that rely on wetlands.				 The side slopes and bottom of the diversion channel will be vegetated, except under the proposed bridges and at Pirmez Creek. Vegetated areas will provide a more conducive wildlife passage across the channel. To maintain ungulate movement within the KWBZ, the floodplain berm will be revegetated with materials conducive for ungulate movement. The section of reinforced concrete (~250 m) closest to Elbow River will be covered with topsoil and seeded with native grasses. The central portion of the floodplain berm includes approximately 550 m of exposed riprap, where sections will be filled with substrate finer than riprap, such as sand, gravel and vegetation to allow for more walkable sections (Austin and Garland 2001; Huijser et al. 2008; Clevenger 2011). The south portion, furthest from Elbow River, will be a 450 m earthen embankment vegetated with native grasses. A remote camera program will be designed with Alberta Environment and Parks, to identify whether the diversion channel acts as a barrier to wildlife movement during dry operations, especially for ungulates, and determine the effectiveness of mitigation implemented throughout the diversion channel. This will include monitoring along Elbow River to determine if wildlife use of the KWBZ has been affected by the construction and operation of the Project. Alberta Transportation will respond to monitoring data as needed. Although the specific details and design of the remote camera program will be determined with AEP prior to construction, the following describes the basis of a preliminary approach. During the Project dry operation phase, a total of 14 remote cameras will be deployed in the wildlife LAA and monitor wildlife movement for at least one-year post-construction. The six remote cameras along the Elbow River will remain at the same locations as preconstruction baseline surveys near Highway 22 (i.e., near the raised portion of the highway at the north end of the wildlife LAA). An additional four remo	Approximately 29.5 ha of wetland will be affected during construction. Although wetlands are not necessarily used as breeding habitat for raptors, wetlands are an important part of the landscape that can provide potential prey opportunities (see Volume 3A, Section 11.4.2.3). At the end of construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded to meet Alberta Environment and Parks reclamation requirements. Alberta Transportation will work with ECN to develop a process to share monitoring results. The Project is expected to operate in perpetuity and is not expected to be decommissioned.



 Table 1
 Ermineskin Cree Nation Traditional Land and Resource Use Information and Mitigation Table

1	2	3	4	5	6
Traditional Land and Resource Use Information	Location of Sites or Areas Relative to the Project	Ermineskin Cree Nation Recommendations and Requests	Relevant March 2018 Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the March 2018 Environmental Impact Assessment	Additional Alberta Transportation Response
Traditional Land and Resource Use					
Hunting			,		
Existing Conditions ECN members hunt year-round, including for big game such as moose, elk, mule- and white-tailed deer, game birds such as prairie chicken and wild turkey, and waterfowl, including geese and ducks. The main species hunted are moose, elk and deer. Specific protocols are followed when hunting, such as giving thanks after a successful kill. ECN noted that some landowners allow ECN members to access private lands to hunt. Hunting on private lands has become the preferred method owing to increased displacement of wildlife from Crown lands closer to the ECN reserve due to development and recreation activities. ECN noted that the increase in recreational hunters on Crown lands is a "source of cultural stress." ECN stated the Project area represents one of the least disturbed and accessible areas for ECN hunters. A group of hunters travelled to the PDA in 2018 to hunt moose and elk on private lands. ECN estimated that community members have harvested more than 20 large ungulates from the PDA and the areas to the northeast. Other hunting areas were identified by ECN: private lands east of Highway 22 and to the south of Highway 1, towards Calaway Park to the east and Highway 8 to the south south of Jumping Pound south of Redwood Meadows and east of Bragg Creek on Tsuut'ina Reserve 145	Hunting areas were mapped by ECN within the PDA, LAA and RAA. Of the hunting areas within the PDA, some intersect permanent project infrastructure, including the gravel road, diversion channel, diversion structure, floodplain berm, emergency spillway, outlet channel, outlet structure, off-stream reservoir dam, and highway right-of-way.	Prior to the construction of the Project, the Proponent should invite ECN land users to hunt in the PDA, particularly for big game such as moose, elk, and deer. ECN recommends that the Proponent attempt to ensure that Areas B and C of the PDA are accessible to ECN members for TU purposes, subject to safety considerations related to flooding. If Area C will contain grazing options that are privately managed, the Proponent should work with private managers to ensure maximum access for ECN hunters. The Proponent should work with ECN to design an access management plan for Areas B and C. Such a plan could support ECN access to the area for hunting and other traditional purposes.	Volume 3A and Volume 3B, Section 11: Wildlife and Biodiversity Volume 3A and Volume 3B, Section 12: Land Use and Management Volume 3A and Volume 3B, Section 14: Traditional Land and Resource Use	 In addition to the measures proposed to mitigate potential effects on wildlife and biodiversity, and on vegetation and wetlands, as described above, Alberta Transportation will implement the following measures to mitigate potential effects on hunting: Alberta Transportation will notify Indigenous groups regarding project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods. Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction land access management. 	The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see Volume 3A, Section 11.4.2). Portions of the hunting areas identified by ECN that are located within the designated construction footprint will be directly affected by construction activities and fencing of infrastructure will restrict access to certain areas of the Project. Mitigation measures listed in column 5 will be implemented to reduce potential adverse effects of the Project on current use sites and areas. The construction and management of the off-stream reservoir presents a unique opportunity with the conversion of private land to Crown land for future use by First Nations and stakeholders. Through the engagement process that included feedback from Indigenous groups, a draft principles of future land use for the Project has been developed. The primary use of all lands within the PDA is for flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses include traditional activities, including the exercise of treaty rights such as hunting will be allowed to occur within the designated land use area (LUA). Alberta Transportation invites ECN to participate in the engagement process for the LUA.



Appendix I Table 1: Ermineskin Cree Nation Traditional Land and Resource Use Information and Mitigation Table August 2019

 Table 1
 Ermineskin Cree Nation Traditional Land and Resource Use Information and Mitigation Table

	1				
1	2	3	4	5	6
Traditional Land and Resource Use Information	Location of Sites or Areas Relative to the Project	Ermineskin Cree Nation Recommendations and Requests	Relevant March 2018 Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the March 2018 Environmental Impact Assessment	Additional Alberta Transportation Response
Potential Project Effects					
ECN expressed concerns about effects on hunting, including barriers to access hunting areas and habitat loss, as well as changes in wildlife abundance, behaviour, health, and distribution.					
ECN noted that changes in habitat and animal distribution that occur as a result of development and increased recreational hunting also impact ECN traditional knowledge, including ecological knowledge, and the knowledge of values, norms, and protocols related to hunting.					
Fishing					
Existing Conditions ECN identified bull trout, rainbow trout, and cutthroat trout as being the main species fished in the Elbow River. These are pursued primarily in the summer and fall and often occurs alongside medicinal plant harvesting. ECN reported fishing on private lands within the PDA, including along the Elbow River. Fishing activities were also reported to take place: • south of Redwood Meadows and to the east of Bragg Creek within Tsuut'ina Reserve 145 • west of Redwood Meadows • northwest of Bragg Creek • southwest of Elbow River Recreational Area	The Elbow River is within the PDA. 5 fishing areas were mapped by ECN: • 2 are within the PDA • 3 are within the LAA • Of the fishing areas within the PDA, 1 is intersected by permanent project infrastructure, including the diversion channel and gravel road.	The Proponent should attempt to ensure that Areas B and C of the PDA are accessible to ECN for traditional purposes, subject to safety considerations related to flooding. The Proponent should work with ECN to design an access management plan for Areas B and C. Such a plan could support ECN access to the area for hunting and other traditional purposes.	Volume 3A and Volume 3B, Section 8: Aquatic Ecology Volume 3A and Volume 3B, Section 12: Land Use and Management Volume 3A and Volume 3B, Section 14: Traditional Land and Resource Use	 In addition to the measures proposed to mitigate potential effects on fish and fish habitat, as described above, Alberta Transportation will implement the following measures to mitigate potential effects on fishing: Alberta Transportation will notify Indigenous groups regarding project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods. AEP will avoid substantial interference with public navigation of Elbow River through the following design practices:	The Project is expected to result in restricted access to areas within the PDA and development of a permanent portage for the Elbow River. Fencing around the diversion structure would restrict ECN's access to traditional resources or current use sites or areas for a small portion of the Elbow River. Current use sites and areas located outside the PDA are not anticipated to be directly affected by the Project. Mitigation measures listed in column 5 will be implemented to reduce potential adverse effects of the Project on current use sites and areas. The construction and management of the off-stream reservoir presents a unique opportunity with the conversion of private land to Crown land for future use by First Nations and stakeholders. Through the engagement process that included feedback from Indigenous groups, a draft principles of future land use for the Project has been developed. The primary use of all lands within the PDA is for flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites ECN to participate in the engagement process for the LUA.

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Table 1 Ermineskin Cree Nation Traditional Land and Resource Use Information and Mitigation Table

1	2	3	4	5	6
Traditional Land and Resource Use Information	Location of Sites or Areas Relative to the Project	Ermineskin Cree Nation Recommendations and Requests	Relevant March 2018 Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the March 2018 Environmental Impact Assessment	Additional Alberta Transportation Response
Plant Harvesting					
Existing Conditions ECN identified a number of culturally-important plant species within the RAA, including sage, sweet grass, muskeg tea, raspberry, kinnikinnick, moss, wild mint, bunch berry, saskatoon berry, blueberry, cranberry, cloud berry, white poplar, black poplar, lodge pole pine, white spruce, red willow, white birch, sweet pine, cedar, pin cherry, cattail, bear root, tea leaves, and bluebell. ECN reported harvesting sweet grass, kinnikinnick, wild mint, bear root, tea leaves, sweet pint and white poplar near the Project. Wild mint and sweet pine are difficult for ECN members to obtain. Plant gathering typically takes place from mid-summer to fall. Plant gathering areas were identified by ECN: south of Jumping Pound towards the northern border of Tsuut'ina Reserve 145 south of Redwood Meadows and to the east of Bragg Creek within Tsuut'ina Reserve 145 west of Redwood Meadows and to the northwest of Bragg Creek area bordering the western extent of Tsuut'ina Reserve 145, east of the Elbow River, and extending in the reserve towards the east south of Highway 8 and east of Redwood Meadows. Potential Project Effects ECN expressed concern regarding the potential of the Project to destroy plant species of medicinal and cultural value.	5 gathering areas were mapped by ECN: • 3 are within the LAA • 2 are within the RAA A wood area was mapped by ECN within the RAA.	Prior to construction of the Project, the Proponent should invite ECN land users to harvest medicinal plants in the PDA, particularly along the Elbow River. The Proponent should attempt to ensure that Areas B and C of the PDA are accessible to ECN for traditional purposes, subject to safety considerations related to flooding. The Proponent should work with ECN to design an access management plan for Areas B and C. Such a plan could support ECN access to the area for hunting and other traditional purposes.	Volume 3A and Volume 3B, Section 10: Vegetation and Wetlands Volume 3A and Volume 3B, Section 14: Traditional Land and Resource Use Volume 3A and Volume 3B, Section 15: Public Health	In addition to the measures proposed to mitigate potential effects on wildlife and biodiversity, and on vegetation and wetlands, as described above, Alberta Transportation will implement the following measures to mitigate potential effects on plant harvesting: • Alberta Transportation will notify Indigenous groups regarding project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods. • Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction. • Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction access management.	The gathering areas identified by ECN are located outside the PDA and are not anticipated to be affected by the Project. The construction and management of the off-stream reservoir presents a unique opportunity with the conversion of private land to Crown land for future use by First Nations and stakeholders. Through the engagement process that included feedback from Indigenous groups, a draft principles of future land use for the Project has been developed. The primary use of all lands within the PDA is for flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites ECN to participate in the engagement process for the LUA.



 Table 1
 Ermineskin Cree Nation Traditional Land and Resource Use Information and Mitigation Table

1	2	3	4	5	6
Traditional Land and Resource Use Information	Location of Sites or Areas Relative to the Project	Ermineskin Cree Nation Recommendations and Requests	Relevant March 2018 Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the March 2018 Environmental Impact Assessment	Additional Alberta Transportation Response
Travel					
Existing Conditions ECN noted that community members continue to travel and use areas within the PDA, LAA and RAA for traditional purposes. Travel occurs via highways, roads and trails in all seasons. Potential Project Effects ECN expressed concerns about a loss of access to the PDA for the life of the Project.	16 access routes were mapped by ECN: • 5 are within the PDA • 7 are within the LAA • 4 are within the RAA • Of the access routes within the PDA, 4 are intersected by permanent project infrastructure, including the gravel road, diversion channel, offstream reservoir dam, and highway right-of-way	The Proponent should attempt to ensure that Areas B and C of the PDA are accessible to ECN for traditional purposes, subject to safety considerations related to flooding. The Proponent should work with ECN to design an access management plan for Areas B and C. Such a plan could support ECN access to the area for hunting and other traditional purposes.	Volume 3A and Volume 3B, Section 12: Land Use and Management Volume 3A and Volume 3B, Section 14: Traditional Land and Resource Use	Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction access management.	Portions of the access routes identified by ECN that are located within the designated construction footprint will be directly affected by construction activities and fencing of infrastructure will restrict access to certain areas of the Project. Highway 22 will be raised above the design flood level, and culverts installed to prevent the highway from flooding. Traffic will be maintained along Highway 22 by shifting the new lanes west. A new bridge will be required where Highway 22 crosses the diversion channel. Highway 22, Township Road 242 and Township Road 244 will not be affected by flood magnitudes up to and including the design flood. Springbank Road will remain above water for the 1:10 year flood and larger magnitudes up to approximately the 1:50 year flood. For floods larger than the 1:50 year flood, Springbank Road will be partially submerged, and traffic will be detoured to Highway 22 by means of Range Road 40 and Township Road 250. During construction, there will be no road closures with the exception of Range Road 41 which currently dead-ends south of Springbank Road; it will be permanently closed. The construction and management of the off-stream reservoir presents a unique opportunity with the conversion of private land to Crown land for future use by First Nations and stakeholders. Through the engagement process that included feedback from Indigenous groups, a draft principles of future land use for the Project has been developed. The primary use of all lands within the PDA is for flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites ECN to participate in the engagement process for the LUA.



Table 1 Ermineskin Cree Nation Traditional Land and Resource Use Information and Mitigation Table

1	2	3	4	5	6
Traditional Land and Resource Use Information	Location of Sites or Areas Relative to the Project	Ermineskin Cree Nation Recommendations and Requests	Relevant March 2018 Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the March 2018 Environmental Impact Assessment	Additional Alberta Transportation Response
Habitation					
Existing Conditions ECN identified a traditional camping ground for community members traveling through the Elbow River area, to the southwest of the intersection of Highway 22 and Highway 8. ECN noted that community members camp in the Bragg Creek area and the Elbow River Recreation Area while travelling to fish and gather medicinal plants. ECN identified three occupancy sites on the Tsuut'ina Reserve 145 where an ECN Elder stays with family while visiting.	6 occupancy areas were mapped by ECN: • 4 are within the LAA • 2 are within the RAA	The Proponent should attempt to ensure that Areas B and C of the PDA are accessible to ECN for traditional purposes, subject to safety considerations related to flooding. The Proponent should work with ECN to design an access management plan for Areas B and C. Such a plan could support ECN access to the area for hunting and other traditional purposes.	Volume 3A and Volume 3B, Section 13: Historical Resources Volume 3A and Volume 3B, Section 14: Traditional Land and Resource Use	 Alberta Transportation will notify Indigenous groups regarding project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods. Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction access management. 	The occupancy areas identified by ECN are located outside the PDA and are not anticipated to be affected by the Project. The construction and management of the off-stream reservoir presents a unique opportunity with the conversion of private land to Crown land for future use by First Nations and stakeholders. Through the engagement process that included feedback from Indigenous groups, a draft principles of future land use for the Project has been developed. The primary use of all lands within the PDA is for flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites ECN to participate in the engagement process for the LUA.



Appendix I Table 1: Ermineskin Cree Nation Traditional Land and Resource Use Information and Mitigation Table August 2019

 Table 1
 Ermineskin Cree Nation Traditional Land and Resource Use Information and Mitigation Table

1	2	3	4	5	6
Traditional Land and Resource Use Information	Location of Sites or Areas Relative to the Project	Ermineskin Cree Nation Recommendations and Requests	Relevant March 2018 Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the March 2018 Environmental Impact Assessment	Additional Alberta Transportation Response
Cultural, Spiritual and Ceremonial Practices	or Areas				
Existing Conditions ECN identified a potential tipi ring at the edge of a trail in a traditional camping area adjacent to the Elbow River in the southwestern portion of the PDA. ECN identified a possible burial site in the southeastern corner of the PDA near the Elbow River. The landowner stated there was an Indigenous burial site in the area, but the markings were washed away in the 2013 flood. A number of areas of spiritual and ceremonial significance were identified by ECN, including the Tsuut'ina powwow grounds to the southeast of Highway 22 between Redwood Meadows and Bragg Creek, as well as the Sun Dance grounds located on Tsuut'ina Reserve 145. There is also a cultural camp for youth to the east of the Sun Dance grounds. Potential Project Effects ECN noted concern about potential effects of the Project on sites of historical and spiritual significance, particularly in the southeastern and southwestern portions of the PDA.	2 historical areas were mapped by ECN within the PDA². 1 is intersected by permanent project infrastructure, including the gravel road, diversion channel, diversion structure and floodplain berm 5 spiritual areas were mapped by ECN: • 2 are within the LAA • 3 are within the RAA	ECN recommends that Alberta Culture Multiculturalism and the Status of Women (Alberta Culture) work with First Nations to determine whether the site is in fact a historical tipi ring. ECN recommends that Alberta Culture work with First Nations to determine whether there is in fact an Indigenous burial site in the area prior to construction of the Project. The Proponent should attempt to ensure that Areas B and C of the PDA are accessible to ECN for traditional purposes, subject to safety considerations related to flooding. The Proponent should work with ECN to design an access management plan for Areas B and C. Such a plan could support ECN access to the area for hunting and other traditional purposes.	Volume 3A and Volume 3B, Section 10: Vegetation and Wetlands Volume 3A and Volume 3B, Section 12: Land Use and Management Volume 3A and Volume 3B, Section 13: Historical Resources Volume 3A and Volume 3B, Section 14: Traditional Land and Resource Use	 Alberta Transportation will participate in discussions with Alberta Culture and Indigenous groups regarding further investigation of identified sites located within the designated construction site boundary. Alberta Transportation will commit to adhering to any conditions Alberta Culture applies to these sites. Alberta Transportation will notify Indigenous groups regarding project activities and schedules, including provision of project maps and design components. Alberta Transportation will minimize disturbance to cultural and spiritual sites and subsurface impacts, and develop a protocol for recovery, collection, reporting on, and possible repatriation of artifacts found in consultation with Indigenous groups, which could include flagging, fencing, or providing signage of sites to prevent disturbance during construction. Alberta Transportation will follow heritage resource protection methods as mandated by Alberta Culture and verify archaeological results with Indigenous groups. 	The historical site mapped by ECN has the potential to be affected by construction of the gravel road, diversion channel, diversion structure and floodplain berm. Alberta Transportation is committed to ongoing engagement ECN to better understand the potential effects and discuss mitigation measures, where warranted. Sites located outside the PDA are not anticipated to be affected by the Project. The construction and management of the off-stream reservoir presents a unique opportunity with the conversion of private land to Crown land for future use by First Nations and stakeholders. Through the engagement process that included feedback from Indigenous groups, a draft principles of future land use for the Project has been developed. The primary use of all lands within the PDA is for flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites ECN to participate in the engagement process for the LUA.

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² Sites mapped in the TLRU Report were buffered by 1 km around a randomized center point to maintain confidentiality. The specific location of the site relative to the Project is not known.

 Table 1
 Ermineskin Cree Nation Traditional Land and Resource Use Information and Mitigation Table

1	2	3	4	5	6
Traditional Land and Resource Use Information	Location of Sites or Areas Relative to the Project	Ermineskin Cree Nation Recommendations and Requests	Relevant March 2018 Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the March 2018 Environmental Impact Assessment	Additional Alberta Transportation Response
Community Health and Wellbeing					
Existing Conditions Wild meat and traditional foods are an essential part of ECN members' diet. Because big game eat plants that contain medicinal properties, ECN explained that wildlife meat likewise contains medicinal properties and is considered healthier than store-bought meat. ECN reported that harvested food, including moose and deer, is shared with community members, particularly Elders who are no longer able to hunt for themselves. Traditional use activities provide an opportunity for ECN members to connect with the land and pass on these practices to younger generations. Youth are taught by members of the community, engaging in activities including but not limited to hunting, fishing, plant gathering, and performing or participating in rituals. Traditional use activities connect ECN members to the land, help to foster a sense of identity and place, and teach younger generations the traditional values and spiritual beliefs of their Elders. Traditional use activities also support the role and status of Elders within the community. ECN stated that traditional use "represents an axis around which cultural and spirituality, identity, families, and communities are reproduced." (Willow Springs Strategic Solutions 2018, 15) Potential Project Effects ECN expressed concern that the loss of traditional use areas "represents a threat to the web of cultural norms, spiritual values, sense of self, place, and purpose, and knowledge that are invariably embedded within the physical act of land use and the connections between Indigenous peoples and their traditional territories." (Willow Springs Strategic Solutions 2018, 14) ECN expressed concern about potential impacts on the ability to transmit their traditional way of life, culture, and knowledge to future generations.		ECN further recommends that given the potential for negative effects to ECN generated by the Project, the Proponent should discuss ways to support programming within the community to strengthen the transmission of ECN way of life and culture to future generations.	Volume 3A and Volume 3B, Section 8: Aquatic Ecology Volume 3A and Volume 3B, Section 11: Wildlife and Biodiversity Volume 3A and Volume 3B, Section 14: Traditional Land and Resource Use	In addition to the measures proposed to mitigate potential effects on environmental resources that support the exercise of TLRU described above, Alberta Transportation will implement the following measures to mitigate potential effects on traditional land and resource use: • Alberta Transportation will notify Indigenous groups regarding project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods. • Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction access management. • Having AEP avoiding substantial interference with public navigation of Elbow River through the following design practices: – as part of construction, a permanent portage will be developed around the in-stream water intake components, – signs directing traffic to detours will be installed during construction of road realignments and modifications, and - signs will be installed along the existing Elbow River channel and on the dam and multiple signs will be placed upstream and downstream of the water intake components on both banks of Elbow River warning users on the Elbow River that they are approaching in stream water intake components and of the associated danger with this infrastructure and directing them to a portage location.	The construction and management of the off-stream reservoir presents a unique opportunity with the conversion of private land to Crown land for future use by First Nations and stakeholders. Through the engagement process that included feedback from Indigenous groups, a draft principles of future land use for the Project has been developed. The primary use of all lands within the PDA is for flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites ECN to participate in the engagement process for the LUA. Alberta anticipates building upon engagement efforts to date to continue to strengthen relationships with potentially affected Indigenous groups, including ECN.



Table 1 Ermineskin Cree Nation Traditional Land and Resource Use Information and Mitigation Table

1	2	3	4	5	6
Traditional Land and Resource Use Information	Location of Sites or Areas Relative to the Project	Ermineskin Cree Nation Recommendations and Requests	Relevant March 2018 Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the March 2018 Environmental Impact Assessment	Additional Alberta Transportation Response
Employment and Livelihood			<u>'</u>		
Potential Project Effects ECN stated that there is the potential for community members to suffer negative socioeconomic effects as a result of the Project. Concerns include the lack of clear targets for ECN employment and contracting, noting that without a clear work plan, ECN is likely to be excluded from potential socio-economic benefits that arise from the Project. ECN is also concerned with the obstacles that members face regarding employment, particularly with respect to education, experience, and culture, all of which can impede the ability of ECN members to benefit from the Project. ECN are further concerned that any ECN members employed on the Project could be subjected to discriminatory treatment and insensitive attitudes from supervisors and/or contractors.		The Proponent should work with ECN in the design and implementation of environmental monitoring. As part of environmental monitoring, the Proponent should consult with ECN to discuss the possibility of training, employment and contracting opportunities for ECN. ECN recommends the Proponent consult with ECN regarding the establishment of employment targets for community members and the development of said targets. ECN recommends that the Proponent consult with ECN regarding potential support for educational, training, and apprenticeship programs that could facilitate the employment of ECN members, especially youth. ECN also recommends that the Proponent consult with ECN regarding the design and implementation of a Cree cultural-sensitivity training program that is mandatory for all Project employees and contractors. ECN recommends that the Proponent consult with ECN regarding supporting businesses in the ECN community and potential business and contracting opportunities. Where possible, the Proponent and ECN should identify opportunities for Direct Negotiated Contracts with ECN businesses. In the event that the Project is to be decommissioned, ECN recommends that the Proponent consult ECN regarding the design, implementation, and monitoring of a reclamation plan to support ECN employment in the reclamation process.	Volume 3A and Volume 3B, Section 17: Employment and Economy Volume 3A and Volume 3B, Section 14: Traditional Land and Resource Use	Alberta Transportation will participate in discussions with Indigenous groups regarding possible monitoring opportunities. Alberta Transportation will adhere to government procurement policies and procedure with respect to labor, and goods and services.	Alberta Transportation is preparing an Indigenous Participation Plan for the Project. Alberta Transportation is committed to Indigenous participation in the Project including potential training and contracting opportunities. Alberta Transportation intends to obtain feedback on the draft Plan from ECN and other Indigenous groups.



 Table 1
 Ermineskin Cree Nation Traditional Land and Resource Use Information and Mitigation Table

1	2	3	4	5	6
Traditional Land and Resource Use Information	Location of Sites or Areas Relative to the Project	Ermineskin Cree Nation Recommendations and Requests	Relevant March 2018 Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the March 2018 Environmental Impact Assessment	Additional Alberta Transportation Response
Cumulative Effects					
Existing Conditions ECN noted that over the past century several factors including industrial development, recreational use, and restrictions on hunting and trapping have undermined the Treaty rights of ECN to harvest on Crown lands for subsistence purposes. ECN explained that industrial development, recreational use and tourism have reduced wildlife populations or otherwise driven away animals from accessible Crown lands in the foothills of the Rocky Mountains onto private lands to the east. These declines in wildlife abundance have resulted in a decreased likelihood of hunting success for ECN members. Combined with increased costs, particularly for gasoline for longer trips, has resulted in fewer ECN hunters getting out on the land. Potential Project Effects ECN is concerned that the cumulative effects assessment carried out by the Proponent is inadequate. ECN does not accept assessments of cumulative effects to their traditional way of life, culture, traditional use, and traditional knowledge that are carried out within the confines of project-specific assessments, with their attendant temporal, geographic, and resource constraints. For any discussion of the cumulative effects of a specific industrial project in Alberta to be meaningful to ECN, there must first be a cumulative effects baseline for the province that has been developed with the consent and full participation of Indigenous peoples.	No specific locations were provided.	No specific recommendations or requests were made by ECN regarding cumulative effects.	Volume 3A and Volume 3B, Section 6: Hydrology Volume 3A and Volume 3B, Section 7: Surface Water Quality Volume 3A and Volume 3B, Section 8: Aquatic Ecology Volume 3A and Volume 3B, Section 10: Vegetation and Wetlands Volume 3B, Section 11: Wildlife and Biodiversity Volume 3A and Volume 3B, Section 12: Land Use and Management Volume 3A and Volume 3B, Section 12: Land Use and Management Volume 3A and Volume 3B, Section 14: Traditional Land and Resource Use Volume 3A and Volume 3B, Section 15: Public Health Volume 3C, Section 1: Cumulative Effects	 The cumulative effects assessment conducted for the Project follows the AEP Terms of Reference and the CEA Agency's Operational Policy Statement entitled Addressing Cumulative Environmental Effects under the Canadian Environmental Assessment Act 2012 and the guide entitled Cumulative Effects Assessment Practitioners' Guide. The assessment of cumulative effects is presented consistent with the residual effects assessment: the assessment of effects is considered for the Project in two scenarios: construction and dry operations; and flood and post-flood operations. The cumulative effects assessment evaluates flood and post-flood operations that include consideration of overlapping infrastructure (pipelines, transmission lines, roads), other flood mitigation works, and considers the effects from reasonably foreseeable projects in regional and community development plans. Proposed mitigation for residual effects from the Project for all assessed VCs is described in Appendix C of Volume 4. 	The cumulative effects assessment considered the project effects that have the potential to act cumulatively with effects of other past, present and reasonably foreseeable future projects and activities in the RAAs for two scenarios: construction and dry operations and flood and post-flood operations. The assessment of potential cumulative effects of the Project was accomplished by recognizing the interactions table where such interactions may occur, and in consideration of the regional context. Proposed mitigation for residual effects from the Project for all assessed VCs described in Appendix C of Volume 4 was deemed adequate to mitigate potential Project contribution to cumulative effects.



 Table 1
 Ermineskin Cree Nation Traditional Land and Resource Use Information and Mitigation Table

1	2	3	4	5	6
Traditional Land and Resource Use Information	Location of Sites or Areas Relative to the Project	Ermineskin Cree Nation Recommendations and Requests	Relevant March 2018 Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the March 2018 Environmental Impact Assessment	Additional Alberta Transportation Response
Engagement					
ECN expressed concern that consultation for the Project began too late in the regulatory process and lacked the depth required for adequacy. ECN expressed concern that the TLRU study was conducted in a short period of time with limited budget that did not make it possible to complete a fulsome assessment of the potential effects of the Project on ECN traditional knowledge and use. Field visits were focused on a relatively small area close to the Elbow River in the southeastern portion of the PDA and the results of the study do not represent the full extent of Ermineskin Cree Nation use or knowledge of the Project area.		ECN recommends that CEA Agency suspend a decision on the proposed Project until the Proponent has engaged with ECN to carry out a comprehensive assessment of potential Project impacts to ECN traditional knowledge and use and determined the scale and scope of those potential impacts. ECN recommends that the Proponent negotiate with ECN to provide resources and reasonable timelines to gather an adequate baseline of ECN traditional knowledge and use in the Project areas and produce a comprehensive assessment of potential impacts and a determination of significance. ECN further recommends that upon completion of the community-based assessment of potential impacts to ECN traditional knowledge and use, the Proponent meet with ECN representatives to discuss concerns and address potential mitigation and compensation measures. ECN recommends that in the event of the Project being decommissioned, the Proponent should consult with ECN regarding the design, implementation, and monitoring of an appropriate reclamation plan. The Proponent should work with ECN in the development of a communications plan for flood and post-flood operations.			Alberta Transportation has met directly with ECN regarding the Project, facilitated a site visit to the Project site with Elders and knowledge holders, and has funded a Project-specific TLRU study. Alberta Transportation commits to working with ECN to discuss the concerns raised in the TLRU Report, including discussing mitigation measures if applicable. Alberta Transportation anticipates building upon engagement efforts to date to continue to strengthen relationships with potentially affected Indigenous groups. Information provided throughout the regulatory phase will be used to inform Project plans and mitigation, as appropriate. Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important. Alberta Transportation is preparing an Indigenous Participation Plan for the Project. Alberta Transportation is committed to Indigenous participation in the Project including potential training and contracting opportunities. Alberta Transportation intends to obtain feedback on the draft Plan from ECN and other Indigenous groups. The Project is expected to operate in perpetuity and is not expected to be decommissioned. However, following construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded to meet Alberta Environment and Parks reclamation requirements. Native trees and shrubs should re-establish over time.





SPRINGBANK OFF-STREAM RESERVOIR PROJECT Response to Louis Bull Tribe Traditional Land and Resource Use Information including Mitigation Table

August 2019

Prepared by:

Alberta Transportation

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Terms of Use

This draft response is intended to inform the regulatory process, including engagement, and project planning of the Springbank Off-stream Reservoir Project (SR1; the Project). Alberta Transportation has prepared this draft response to the *Louis Bull Tribe Traditional Land Use Assessment for the proposed Springbank Off-Stream Reservoir Project* (TLRU Report). The final copy of this response will be filed with the Canadian Environmental Assessment Agency and become part of the public record. Alberta Transportation will also use this response, and the information in the TLRU Report, as part of the record of the engagement process for the Project.



i

Acronyms

AEP Alberta Environment and Parks

CEA Agency Canadian Environmental Assessment Agency

EIA environmental impact assessment

GPS Global Positioning System

KWBZ key wildlife and biodiversity zone

LAA local assessment area

LBT Louis Bull Tribe

LUA land use area

PDA Project development area

RAA regional assessment area

RAP restricted activity period

TEK traditional ecological knowledge

the Project; SR1 Springbank Off-stream Reservoir Project

TLRU traditional land and resource use

TSS total suspended sediment



Traditional Land and Resource Use Information and Mitigation August 2019

1.0 TRADITIONAL LAND AND RESOURCE USE INFORMATION AND MITIGATION

1.1 OVERVIEW

Louis Bull Tribe (LBT) provided Alberta Transportation with the TLRU Report on November 22, 2018. Alberta Transportation committed to review the TLRU Report and provide LBT with a response in relation to the results of the *Springbank Off-stream Reservoir Project Environmental Impact Assessment* (EIA) filed March 2018. Because the TLRU Report was provided after the filing of the March 2018 EIA, TLRU information, concerns, and recommendations will be used for project planning, engagement and regulatory purposes, where applicable.

1.2 INFORMATION SOURCES

The information contained in the mitigation table response (Appendix I, Table 1; page 2.3) has been compiled using two sources:

- Louis Bull Tribe Traditional Land Use Assessment for the proposed Springbank Off-Stream Reservoir Project (2018)
- Springbank Off-stream Reservoir Project Environmental Impact Assessment, filed March 2018

In November 2018, LBT submitted the TLRU Report to Alberta Transportation, to be considered in the planning and regulatory process for the Project. LBT also submitted the TLRU Report separately to the Canadian Environmental Assessment Agency (CEA Agency) and it appears on the CEA Agency project registry (CEA Agency 2018). The report is composed of TLRU and traditional ecological knowledge (TEK) information as well as recommended mitigation measures presented by LBT.

The TLRU Report contains Project-specific information shared by LBT Elders and leadership during a map review, interviews, and field reconnaissance. A team of LBT Elders and leadership led by the LBT Consultation Office conducted a field reconnaissance on July 14, 2017 (Louis Bull Tribe 2018).

1.3 METHODOLOGY

Following a thorough review of the LBT TLRU Report, data were summarized into related topics that represent the information, concerns, and recommendations shared by LBT and placed into the context of the March 2018 EIA. This information has been compiled into the Louis Bull Tribe Traditional Land and Resource Use Information and Mitigation Table, which is in Appendix I.

The Louis Bull Tribe Traditional Land and Resource Use Information and Mitigation Table has the following organizational structure:

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Traditional Land and Resource Use Information and Mitigation August 2019

<u>Column 1:</u> The "Traditional Land and Resource Use (TLRU) Information" column includes information shared by Louis Bull Tribe regarding existing conditions followed by potential Project effects. The information has been organized under the following March 2018 EIA categories:

- traditional ecological knowledge (TEK)
 - fish and fish habitat
 - vegetation and wetlands
 - wildlife and biodiversity
- traditional land and resource use (TLRU)
 - hunting
 - trapping
 - plant harvesting
 - travel
- · cumulative effects
- employment and livelihood

<u>Column 2:</u> The information included in the "Location of Sites or Areas" column demonstrates where the specific sites or areas identified by LBT are in relation to the Project, including Project development area (PDA), local assessment area (LAA), or regional assessment area (RAA), and in geographical reference to specific Project components such as the diversion channel, diversion outlet, off-stream dam, and floodplain berm, where applicable.

<u>Column 3:</u> Information included in the "Louis Bull Tribe (LBT) Recommendations and Requests" column outlines all recommendations or requests proposed by LBT for mitigating potential effects from the Project. They have been included once or multiple times, depending on the relevant topics.

<u>Column 4:</u> Information included in the "Relevant March 2018 Environmental Impact Assessment (EIA) Section(s)" column identifies the section(s) of the March 2018 EIA where LBT's information, concerns, or recommendations have been considered.

<u>Column 5:</u> Information included in the "Mitigation Measures Proposed in the Environmental Impact Assessment (EIA)" column identifies the relevant mitigation measures that have been proposed in the March 2018 EIA to mitigate potential effects from the Project.

<u>Column 6:</u> Information included in the "Additional Alberta Transportation Response" column provides Alberta Transportation's additional responses to LBT's recommendations and requests outlined in Column 5.



Traditional Land and Resource Use Information and Mitigation Table August 2019

2.0 TRADITIONAL LAND AND RESOURCE USE INFORMATION AND MITIGATION TABLE

2.1 OVERVIEW OF THE LOUIS BULL TRIBE TLRU REPORT

According to the TLRU Report, the Project is located within LBT's asserted traditional territory. LBT stated that community members do not currently conduct traditional use activities in the Project area because of limited access to privately owned lands. LBT noted the presence of plant and animal species of cultural importance within the Project area. The TLRU Report state that LBT "encourages the Government of Alberta, upon converting the Project area to Crown lands to designate the area for Indigenous use only ... to reconcile loss of use and access to lands that has occurred during early settlement and development within Treaty 7" (Louis Bull Tribe 2018, p.9).

LBT expressed concerns about potential Project effects on:

- fish and fish habitat
- culturally important plants
- reduction or fragmentation of wildlife habitat
- availability of traditionally harvested plants and animals
- access to the Project area for the exercise of Aboriginal and treaty rights
- post-flood mitigation
- reclamation
- cumulative effects

In response to these concerns, LBT has proposed recommendations and requests in order to help mitigate potential effects from the Project (see Appendix I, Table 1 Column 3).

2.2 LOUIS BULL TRIBE TLRU ASSOCIATED WITH THE PROJECT

Appendix I, Table 1 Column 1 provides an overview of LBT's TLRU within and in the vicinity of the PDA, LAA, and RAA, as provided in the TLRU Report. Alberta Transportation has reviewed the information considered it in reference to the March 2018 EIA, and provided additional responses, where applicable.

Alberta

Traditional Land and Resource Use Information and Mitigation Table Traditional Land and Resource Use Information and Mitigation Table
August 2019



Conclusion August 2019

3.0 CONCLUSION

In November 2018, LBT submitted the *Louis Bull Tribe Traditional Land Use Assessment For the proposed Springbank Off-Stream Reservoir Project (2018)* to Alberta Transportation. Overall, the information provided by LBT in the TLRU Report indicates that community members do not currently conduct traditional use activities in the Project area because of limited access to privately owned lands.

Alberta Transportation reviewed the TLRU Report in relation to the results of the March 2018 EIA and prepared a mitigation table (Appendix I, Table 1) in response to the information, concerns and recommendations raised by LBT.

The conclusion of the TLRU assessment in Section 14 of the March 2018 EIA that the effects of the Project on TLRU will not result in the long-term loss of availability of traditional use resources or access to lands currently relied on for traditional use practices or the permanent loss of traditional use sites and areas in the RAA remains unchanged (Volume 3A and Volume 3B, Section 14). Alberta Transportation is committed to working with LBT for discussing mitigation strategies to avoid, reduce, or otherwise manage potential effects of the Project and to address or respond to identified concerns. The information shared by LBT will continue to be used for project planning, engagement and regulatory purposes, where applicable.

The construction and management of the off-stream reservoir presents a unique opportunity with the conversion of private land to Crown land for future use by First Nations and stakeholders. Through the engagement process that included feedback from Indigenous groups, a draft principles of future land use for the Project has been developed. The primary use of all lands within the PDA is for flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses for traditional activities, including the exercise of treaty rights such as hunting will be allowed to occur within the designated land use are (LUA). Alberta Transportation invites LBT to participate in the engagement process for the LUA.

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Conclusion Conclusion August 2019



References August 2019

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4.1

References References August 2019



Appendix I Table 1: Louis Bull Tribe Traditional Land and Resource Use Information and Mitigation Table August 2019

Appendix I TABLE 1: LOUIS BULL TRIBE TRADITIONAL LAND AND RESOURCE USE INFORMATION AND MITIGATION TABLE





Table 1 Louis Bull Tribe Traditional Land and Resource Use Information and Mitigation Table

1	2	3	4	5	6
Traditional Land and Resource Use Information	Location of Sites or Areas Relative to the Project	Louis Bull Tribe Recommendations and Requests	Relevant March 2018 Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the March 2018 Environmental Impact Assessment	Additional Alberta Transportation Response
Traditional Ecological Knowledge					
Fish and Fish Habitat					
Potential Project Effects Louis Bull Tribe (LBT) identified the potential for Project effects on fish, including loss of fish habitat in the Elbow River.	The Elbow River is within the PDA.	LBT requests an opportunity to conduct a site visit during and post-construction to ensure that prescribed mitigation measures are applied and that no culturally significant sites are adversely impacted.	Volume 3A and Volume 3B, Section 8: Aquatic Ecology	 Structures will be designed so that storm water runoff and wash water from the access roads, decks, side slopes, and approaches are directed into a retention pond or vegetated area to remove suspended solids, dissipate velocity, and prevent sediment and other deleterious substances from entering watercourses. Works in water will be timed with respect to the restricted activity periods (RAPs) wherever possible. For Elbow River, the RAP is May 01 – July 15 and September 16 – April 15. Condition and use of restricted activity periods will be provided within further project permitting and authorization under the <i>Fisheries Act</i>. For planning purposes, the Elbow River RAP will be applied as an avoidance and mitigation measure. To allow for fish passage and construction of the structures within the Elbow River, the Elbow River will be diverted, and flows will be maintained downstream by the construction of a temporary bypass channel. Drainage areas within the reservoir will be graded to reduce stranding of fish during release of stored flood water from the reservoir. A monitoring program will be undertaken to identify if fish passage is impeded for migratory salmonids or other fish species. Maintenance, debris removal on the structure, and on the fish passage structures will occur to accommodate fish passage. Debris will be cleaned from the structure gates after a flood recedes to allow unimpeded fish passage upstream over the structure. Isolated pools will be identified, marked, and a determination by a Qualified Aquatic Environmental Specialist will be made as to whether there are stranded fish in the pool that require rescue and relocation to secure habitats in Elbow River. When the water has been fully drained, the low-level outlet canal will also be surveyed to identify isolated pools where fish might be stranded. Where debris removal from the structures is required, debris removal will be timed to avoid disruption to sensitive fish	As no additional details or concerns were specifically reported by LBT for culturally significant sites, Alberta Transportation assumes that these sites are related to subsistence-based practices and, has therefore, assessed these values in the context of subsistence sites. Construction of the diversion channel will result in the loss of 1,854 m² of fish habitat on the bed and banks of Elbow River and 300 m² of fish habitat at the interception of tributary ID 1350. With the implementation of mitigation, the Project is unlikely to reduce the productivity or sustainability of a commercial, recreational or Aboriginal fishery as defined by the Fisheries Act. Alberta Transportation will provide LBT the opportunity for two site visits, one during construction and one post-construction to observe application of prescribed mitigation measures and provide feedback. During dry operations, there will be no changes to flow in Elbow River, and therefore no alterations to the quality of fish habitat. Overall, the Project is not expected to limit the availability of traditional resources for current use in the RAA (see Volume 3A, Section 8.4.4 and Section 14.8.1).



Table 1 Louis Bull Tribe Traditional Land and Resource Use Information and Mitigation Table

1	2	3	4	5	6
Traditional Land and Resource Use Information	Location of Sites or Areas Relative to the Project	Louis Bull Tribe Recommendations and Requests	Relevant March 2018 Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the March 2018 Environmental Impact Assessment	Additional Alberta Transportation Response
Vegetation and Wetlands					
Existing Conditions LBT identified several culturally important plants within the Project area, including but not limited to gooseberry, smooth blue aster, plantain, willow, giant golden rod, strawberry, and kinnikinnick. Potential Project Effects LBT expressed concerns about the loss or reduced abundance of culturally important plants. LBT noted the importance that native species are returned and that appropriate species are replanted during reclamation activities: "Certain plants need to be planted with specific companion species to ensure health of the plants and adequate growth." (Louis Bull 2018, 9)	No specific locations were provided.	LBT suggests the following mitigation measures be applied during construction to protect local plant populations: Reduce stripping where possible and retain roots of plants for rollback. Limit use of chemical application. Retain riparian species where possible. Allow LBT to harvest medicinal and culturally significant plants prior to construction. LBT requests an opportunity to conduct a site visit during and post-construction to ensure that prescribed mitigation measures are applied and that no culturally significant sites are adversely impacted. LBT requests an opportunity to be consulted on the reclamation activities along the banks of the Elbow River.	Volume 3A and Volume 3B, Section 10: Vegetation and Wetlands	 Alberta Transportation will notify Indigenous groups regarding project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods. Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction. Restrict construction activities to the approved construction footprint. Reduce the removal of vegetation in wetlands to the extent possible. Where possible, conduct ground level cutting/mowing/mulching of wetland vegetation instead of grubbing. Where applicable, in areas not impacted by the permanent Project footprint, if ground conditions are encountered that create potential for rutting, admixing or compaction, minimize ground disturbance by using a protective layer such as matting or biodegradable geotextile and clay ramps or other approved materials between wetland root/seed bed and construction equipment. Native areas disturbed by the Project would be reseeded using an Alberta Transportation mill not apply herbicide within 30 m of plant species or ecological communities of management concern, wetland or waterbody. Spot spraying, wicking, mowing, or hand picking are acceptable measures for control of regulated weeds in this area. A licensed industrial pesticide applicator would be contracted to select and apply all herbicide in compliance with the procedures as outlined in the Code of Practice for Pesticides (Government of Alberta 2010b) 	As no additional details or concerns were specifically reported by LBT for culturally significant sites, Alberta Transportation assumes that these sites are related to subsistence-based practices and, has therefore, assessed these values in the context of subsistence sites. Traditionally used plant species will be directly affected due to vegetation removal and grading associated with construction, affecting 168 ha associated with permanent project infrastructure and approximately 566 ha of temporary workspace. Although individual plants will be removed from the PDA, none of the traditionally used species identified will be lost in the LAA, nor will vegetation communities supporting traditionally used plants be lost from the PDA (see Volume 3A, Section 10.4). Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction. Alberta Transportation will provide LBT the opportunity for two site visits, one during construction and one post-construction to observe application of prescribed mitigation measures and provide feedback. Following construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded with a native custom seed mix to meet AEP reclamation requirements. Native trees and shrubs should re-establish over time. Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important. Many of the potentially affected grassland and wetland plant communities have intrinsic adaptations to periodic flooding, while other species such as poplar and spruce would be less tolerant to flooding due to having a low anaerobic tolerance. Mortality of traditional use species found in upland plant communities is expected. However, these species are widespread and are expected to re-establish by natural recruitment; permanent loss of tra



Table 1 Louis Bull Tribe Traditional Land and Resource Use Information and Mitigation Table

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Traditional Land and Resource Use Information	Location of Sites or Areas Relative to the Project	Louis Bull Tribe Recommendations and Requests	Relevant March 2018 Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the March 2018 Environmental Impact Assessment	Additional Alberta Transportation Response
Wildlife and Biodiversity					
Existing Conditions LBT indicated that moose, deer, cougar, coyote, wolf and grizzly bear are present within the Project area. LBT explained that the Project area provides valuable wildlife habitat including abundant berries, young herbaceaous leafy species, fresh water sources and shelter. Potential Project Effects LBT noted the potential for the Project to reduce or fragment wildlife habitat. LBT expressed concerns about potential alteration or destruction of beaver and muskrat habitat.	No specific locations were provided.	LBT suggests the following mitigation measures be applied during construction to protect local wildlife populations: • Adhere to species specific timing constraints. • Leave breaks in pipeline trench to allow for animal crossing. • Reduce Project footprint. • Limit use of chemicals. LBT requests an opportunity to conduct a site visit during and post-construction to ensure that prescribed mitigation measures are applied and that no culturally significant sites are adversely impacted.	Volume 3A and Volume 3B, Section 11: Wildlife and Biodiversity	In addition to the measures proposed to mitigate potential effects on vegetation and wetlands described above, Alberta Transportation will implement the following measures to mitigate potential effects on wildlife and biodiversity: Pre-construction surveys will be conducted to identify wildlife features (e.g., nests, dens) and appropriate site-specific mitigation developed. Where possible, construction activities during the RAP for the KWBZ identified along Elbow River (December 15 to April 30) will be avoided or reduced. This will limit potential sensory disturbance to wintering ungulates (ESRD 2015, Government of Alberta 2017). If construction activities must occur during this time period, a wildlife mitigation and monitoring plan will be developed in consultation with regulators, which will include monitoring ungulate habitat use and response to human disturbance. Restrict all construction activities to the approved construction footprint. Where possible, temporary workspaces and access roads will be in areas that avoid wildlife features and native vegetation (e.g., shrubland, treed areas, wetlands). Existing access roads and previously disturbed areas will be used, where feasible. Where fencing is proposed to restrict livestock access to project structures (e.g., diversion channel), wildlife-friendly fencing will be installed to allow ungulate passage. If an active nest or den is found, it will be subject to a provincial or federal disturbance setback buffer and site-specific mitigation. The diversion channel will be built with 3H:1V side slopes, which is within the range that most large mammals (e.g., elk,) are known to traverse (McCorquodale 2003; Frair et al. 2005; Mao et al. 2005; The Bow Corridor Ecosystem Advisory Group 2012). The side slopes and bottom of the diversion channel will be vegetated, except under the proposed bridges and at Pirmez Creek. Vegetated areas will provide a more conducive wildlife passage across the channel.	As no additional details or concerns were specifically reported by LBT for culturally significant sites, Alberta Transportation assumes that these sites are related to subsistence-based practices and, has therefore, assessed these values in the context of subsistence sites. The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see Volume 3A, Section 11.4.2). The mitigation measures outlined in Column 5, including revegetating the floodplain berm and installing wildlife friendly fencing, will be implemented to maintain wildlife movement through the Project area. The diversion channel has potential to fragment habitat in the LAA and reduce landscape connectivity if wildlife do not cross; however, wildlife species richness and abundance are not expected to be influenced by habitat fragmentation from the Project in the RAA (see Volume 3A, Section 11.4.5). There were no beaver dams or lodges identified within the construction footprint for the Project during the baseline wildlife surveys completed within the LAA and as a result, Alberta Transportation is not expecting to remove any dams or lodges. If an active beaver dam is identified within the construction footprint at a later date, mitigation for dam removal will be developed with the appropriate agencies (e.g., AEP) and the relevant permit(s) obtained, as required. Alberta Transportation will provide LBT the opportunity for two site visits, one during construction and one post-construction that are not required for operation and maintenance will be topsoiled and seeded to meet Alberta Environment and Parks (AEP) reclamation requirements.



Table 1 Louis Bull Tribe Traditional Land and Resource Use Information and Mitigation Table

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Traditional Land and Resource Use Information	Location of Sites or Areas Relative to the Project	Louis Bull Tribe Recommendations and Requests	Relevant March 2018 Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the March 2018 Environmental Impact Assessment	Additional Alberta Transportation Response
				 To maintain ungulate movement within the KWBZ, the floodplain berm will be revegetated with materials conducive for ungulate movement. The section of reinforced concrete (~250 m) closest to Elbow River will be covered with top soil and seeded with native grasses. The central portion of the floodplain berm includes approximately 550 m of exposed riprap, where sections will be filled with substrate finer than riprap, such as sand, gravel and vegetation to allow for more walkable sections (Austin and Garland 2001; Huijser et al. 2008; Clevenger 2011). The south portion, furthest from Elbow River, will be a 450 m earthen embankment vegetated with native grasses. A remote camera program will be designed with AEP to identify whether the diversion channel acts as a barrier to wildlife movement during dry operations, especially for ungulates, and determine the effectiveness of mitigation implemented throughout the diversion channel. This will include monitoring along Elbow River to determine if wildlife use of the KWBZ has been affected by the construction and operation of the Project. Although the specific details and design of the remote camera program will be determined with AEP prior to construction, the following describes the basis of a preliminary approach. During the Project dry operation phase, a total of 14 remote cameras will be deployed in the wildlife LAA and monitor wildlife movement for at least one-year post-construction. The six remote cameras along the Elbow River will remain at the same locations as during the construction phase. Four remote cameras will be deployed soon after completion of project construction baseline surveys near Highway 22 (i.e., near the raised portion of the highway at the north end of the wildlife LAA). An additional four remote cameras will be installed along wildlife friendly fencing at the edge of the diversion channel at crossable sections where there is vegetation. Remote cameras at the diversion channel will be spaced approximately	



Table 1 Louis Bull Tribe Traditional Land and Resource Use Information and Mitigation Table

1	2	3	4	5	6
Traditional Land and Resource Use Information	Location of Sites or Areas Relative to the Project	Louis Bull Tribe Recommendations and Requests	Relevant March 2018 Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the March 2018 Environmental Impact Assessment	Additional Alberta Transportation Response
Traditional Land and Resource Use					
Existing Conditions LBT stated that community members have not hunted, trapped, gathered plants or travelled extensively in the Project area because most of the lands are privately owned. LBT noted that moose, deer, cougar, coyote, wolf and grizzly bear are species of cultural importance and are harvested for sustenance, pelts and other uses. The area also provides habitat for furbearing species. LBT explained that community members gather plants throughout their traditional territory and will travel long distances to harvest plants. Plants are gathered in various ecological settings, including old growth forests, along watercourses and wetlands, as well as in clearings and meadows. Knowledge regarding medicinal plant uses is passed down through generations and is considered proprietary to LBT.	No specific locations of TLRU sites or areas were provided.	In the event that TLU sites within the proposed Project area are identified during ongoing TLU studies or during construction, LBT recommends that Alberta Transportation discuss all potential mitigation as soon as possible upon discovery. LBT requests that the Government of Alberta, upon converting the Project area to Crown lands, designate the area for Indigenous use only. "Treaty 6 & 7 First Nations have been restricted from occupied Crown lands for a century and are in need of an area within this eco-system to practice rights and carry out traditional uses upon the land. This presents a unique opportunity for the Government of Alberta to reconcile loss of use and access to lands that has occurred during early settlement and development within Treaty 7." (Louis Bull Tribe 2018) LBT requests an opportunity to conduct a site visit during and post-construction to ensure that prescribed mitigation measures are applied and that no culturally significant sites are adversely impacted. LBT requests involvement in post-flood activities to ensure practice of Aboriginal and Treaty rights can be continued following a flood event.	Volume 3A and Volume 3B, Section 10: Vegetation and Wetlands Volume 3B, Section 11: Wildlife and Biodiversity Volume 3A and Volume 3B, Section 14: Traditional Land and Resource Use	 In addition to the measures proposed to mitigate potential effects on wildlife and biodiversity, and on vegetation and wetlands, as described above, Alberta Transportation will implement the following measures to mitigate potential effects on traditional land and resource use: Alberta Transportation will notify Indigenous groups regarding project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods. Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction. Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and project site limits) during construction and operations, including for hunting and fishing and Alberta Transportation will advise Indigenous groups on post-construction land access management. Alberta Transportation notes that while no specific TLRU sites or areas were provided by LBT, in the event an unanticipated cultural resource is discovered during construction of the Project a historical resources chance find protocol would be enacted, as required by Alberta Culture during construction. 	The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction, affecting 168 ha associated with permanent Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see Volume 3A, Section 11.4.2). Alberta Transportation will provide LBT the opportunity for two site visits, one during construction and one post-construction to observe application of prescribed mitigation measures and provide feedback. The construction and management of the off-stream reservoir presents a unique opportunity with the conversion of private land to Crown land for future use by First Nations and stakeholders. Through the engagement process that included feedback from Indigenous groups, a draft principles of future land use for the Project has been developed. The primary use of all lands within the PDA is for flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses include traditional activities, including the exercise of treaty rights such as hunting will be allowed to occur within the designated land use area (LUA). Alberta Transportation invites LBT to participate in the engagement process for the LUA.



Table 1 Louis Bull Tribe Traditional Land and Resource Use Information and Mitigation Table

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Traditional Land and Resource Use Information	Location of Sites or Areas Relative to the Project	Louis Bull Tribe Recommendations and Requests	Relevant March 2018 Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the March 2018 Environmental Impact Assessment	Additional Alberta Transportation Response
Cumulative Effects					
Existing Conditions LBT stated "the Project, when considered in isolation of other projects, has limited impacts that are readily mitigated however, the cumulative effects of all of the development within the region are of great concern to LBT." (Louis Bull Tribe 2018 page 9)	No specific locations were provided.	No specific recommendations or requests were made by LBT regarding cumulative effects.	Volume 3A and Volume 3B, Section 6: Hydrology Volume 3A and Volume 3B, Section 7: Surface Water Quality Volume 3A and Volume 3B, Section 8: Aquatic Ecology Volume 3A and Volume 3B, Section 10: Vegetation and Wetlands Volume 3B, Section 11: Wildlife and Biodiversity Volume 3A and Volume 3B, Section 12: Land Use and Management Volume 3A and Volume 3A and Volume 3B, Section 14: Traditional Land and Resource Use Volume 3A and Volume 3B, Section 15: Public Health Volume 3C, Section 1: Cumulative Effects	 The cumulative effects assessment conducted for the Project follows the AEP Terms of Reference and the CEA Agency's Operational Policy Statement entitled Addressing Cumulative Environmental Effects under the Canadian Environmental Assessment Act 2012 and the guide entitled Cumulative Effects Assessment Practitioners' Guide. The assessment of cumulative effects is presented consistent with the residual effects assessment: the assessment of effects is considered for the Project in two scenarios: construction and dry operations; and flood and post-flood operations. The cumulative effects assessment evaluates flood and post-flood operations that include consideration of overlapping infrastructure (pipelines, transmission lines, roads), other flood mitigation works, and considers the effects from reasonably foreseeable projects in regional and community development plans. Proposed mitigation for residual effects from the Project for all assessed VCs is described in Appendix C of Volume 4. 	The cumulative effects assessment considered the Project effects that have the potential to act cumulatively with effects of other past, present and reasonably foreseeable future projects and activities in the RAAs for two scenarios: construction and dry operations and flood and post-flood operations. The assessment of potential cumulative effects of the Project was accomplished by recognizing the interactions table where such interactions may occur, and in consideration of the regional context. Proposed mitigation for residual effects from the Project for all assessed VCs described in Appendix C of Volume 4 was deemed adequate to mitigate potential Project contribution to cumulative effects.
Employment and Livelihood					
LBT expressed interest in training, employment and contracting opportunities for the Project.	N/A	LBT expressed interest in training, employment and contracting opportunities for the Project.	Volume 3A and Volume 3B, Section 12: Land Use and Management Volume 3A and Volume 3B, Section 14: Traditional Land and Resource Use Volume 3A and Volume 3B, Section 17: Employment and Economy	Alberta transportation will adhere to government procurement policies and procedure with respect to labour, and goods and services.	Alberta Transportation will discuss training, employment and contracting opportunities with LBT. Alberta Transportation is preparing an Indigenous Participation Plan for the Project. Alberta Transportation is committed to Indigenous participation in the Project including potential training and contracting opportunities. Alberta Transportation intends to obtain feedback on the draft Plan from LBT and other Indigenous groups.





Springbank Off-stream Reservoir Project

Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table

DRAFT – Subject to Terms of Use

November 2018

Prepared by:

Alberta Transportation

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Terms of Use

This draft response is intended to inform the regulatory process, including consultation, and project planning of the Springbank Off-stream Reservoir Project (the Project). Alberta Transportation has prepared this draft response to the *Tsuut'ina Traditional Land Use Report for the Proposed Springbank Off-Stream Reservoir Project* (TLRU Report). Subject to the conditions below, the final copy of this response will be filed with the Canadian Environmental Assessment Agency and become part of the public record. Alberta Transportation will also use this response, and the information in the TLRU Report, as part of the record of the consultation process for this Project.

Tsuut'ina Nation has put the following conditions on the use of the information in the TLRU Report1:

- Alberta Transportation is not permitted to identify specific locations of traditional use sites;
- Alberta Transportation is permitted to identify use sites generally as "traditional use areas";
- Alberta Transportation is not permitted to disclose the specific nature of the traditional use sites;
- The TLRU Report is only to be used in relation to the SR1 Project, and not for any other purpose except with the written permission of the Tsuut'ina Nation.

In accordance with these terms of use, information on specific locations and specific uses of traditional use sites as set out in the TLRU Report have been removed from this publicly filed version of the document.

¹ As instructed by legal counsel for the Tsuut'ina Nation by email correspondence dated May 11, 2018.



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Acronyms

AEMA Alberta Emergency Management Agency

ACT Alberta Culture and Tourism

AEP Alberta Environment and Parks

CEMA Calgary Emergency Management Agency

EIA environmental impact assessment

GPS Global Positioning System

KWBZ key wildlife and biodiversity zone

LAA local assessment area

PDA Project development area

Project area PDA and the immediately adjacent LAA (within 400 m)

QAES Qualified Aquatic Environmental Specialist

RAA regional assessment area

RAP restricted activity period

TEK traditional ecological knowledge

the Project Springbank Off-stream Reservoir Project

TLRU traditional land and resource use



TN² Tsuut'ina Nation

TSS total suspended sediment

TUA traditional use area

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² Tsuut'ina Nation acronym (TN) is only used in Table 1.

Traditional Land and Resource Use Information and Mitigation November 2018

1.0 TRADITIONAL LAND AND RESOURCE USE INFORMATION AND MITIGATION

1.1 OVERVIEW

Tsuut'ina Nation provided Alberta Transportation with the TLRU Report on April 3, 2018. Alberta Transportation committed to review the TLRU Report and provide Tsuut'ina Nation with a response in relation to the results of the *Springbank Off-stream Reservoir Project Environmental Impact Assessment* filed March 2018 (March 2018 EIA). As the TLRU Report was provided after the filing of the March 2018 EIA, TLRU information, concerns, and recommendations will be used for project planning, consultation and regulatory purposes, where applicable. A draft copy of this response was discussed with Tsuut'ina Nation in December, 2018 during a consultation meeting.

1.2 INFORMATION SOURCES

The information contained in the mitigation table response (Table 1; page 2.3) has been compiled using two sources: *Tsuut'ina Traditional Land Use Report for the Proposed Springbank Off-Stream Reservoir Project* (2018), prepared by Tsuut'ina Nation and Trailmark Systems; and *Springbank Off-stream Reservoir Project Environmental Impact Assessment*.

In April 2018, Tsuut'ina Nation submitted the TLRU Report to Alberta Transportation, to be considered in the planning and regulatory process for the Project. The report is composed of TLRU and traditional ecological knowledge (TEK) information as well as recommended mitigation measures presented by Tsuut'ina Nation.

The TLRU Report contains both Project-specific information shared by Tsuut'ina Nation Elders, harvesters, and other land users during interviews, workshops, and field surveys, as well as information identified through a literature review. Project-specific information was shared by 10 individuals from Tsuut'ina Nation who participated in the interviews, 10 who participated in the field surveys, and approximately 10-15 who participated in the Tsuut'ina Nation Elders group workshop. Information gathered during the literature review was obtained through academic, digital, and archival sources. While each statement in the TLRU Report has been attributed with its original source, for the purposes of Table 1 all TLRU and TEK information and recommendations are attributed to Tsuut'ina Nation and have not been separated by information source or individual participant.

1.3 METHODOLOGY

Following a thorough review of the Tsuut'ina Nation TLRU Report, data were summarized into related topics that represent the information, concerns, and recommendations shared by Tsuut'ina Nation and placed into the context of the March 2018 EIA (Table 1).



1.1

Traditional Land and Resource Use Information and Mitigation

<u>Column 1:</u> The "Traditional Land and Resource Use Information" column includes information shared by Tsuut'ina Nation regarding existing conditions followed by potential Project effects. The information has been organized under the following March 2018 EIA categories:

- traditional ecological knowledge
 - hydrogeology (groundwater)
 - hydrology
 - surface water quality
 - fish and fish habitat
 - vegetation and wetlands
 - wildlife and biodiversity
- traditional land and resource use
 - traditional use areas
 - hunting
 - fishing
 - trapping
 - plant harvesting
 - travel
 - habitation
 - cultural, spiritual, and ceremonial practices or areas
- community health and wellbeing
- employment and livelihood
- accidents and malfunctions
- · cumulative effects
- project design

Column 2: The information included in the "Location of Sites or Areas" column demonstrates where the specific sites or areas identified by Tsuut'ina Nation are in relation to the Project, including Project Development Area (PDA), Local Assessment Area (LAA), or Regional Assessment Area (RAA), and in geographical reference to specific project components such as the diversion channel, diversion outlet, offstream storage dam, and floodplain berm. In accordance with the terms of use of the TLRU Report, the specific location and nature of each traditional use site has not been disclosed.

<u>Column 3:</u> Information included in the "Relevant March 2018 Filing Environmental Impact Assessment Section(s)" column identifies the section(s) of the March 2018 EIA where Tsuut'ina Nation's information, concerns, or recommendations have been considered.

<u>Column 4:</u> Information included in the "Mitigation Measures Proposed in the Environmental Impact Assessment" column identifies the relevant mitigation measures that have been proposed in the March 2018 EIA to mitigate potential effects from the Project.

<u>Column 5:</u> Information included in the "Tsuut'ina Nation Recommendations and Requests" column outlines all recommendations or requests proposed by Tsuut'ina Nation for mitigating potential effects from the Project. They have been included once or multiple times, depending on the relevant topics.



Traditional Land and Resource Use Information and Mitigation November 2018

<u>Column 6:</u> Information included in the "Alberta Transportation Response" column provides Alberta Transportation's response to Tsuut'ina Nation's recommendations and requests outlined in Column 5.



Traditional Land and Resource Use Information and Mitigation Table November 2018

2.0 TRADITIONAL LAND AND RESOURCE USE INFORMATION AND MITIGATION TABLE

2.1 OVERVIEW OF THE TSUUT'INA NATION TLRU REPORT

Hunting, fishing, trapping, plant gathering, camping, and other activities, including ceremonial practices, have been and continue to be important traditional use activities for Tsuut'ina Nation. According to the TLRU Report, traditional activities occur throughout the Tsuut'ina Nation Traditional Territory, including in the PDA. Due to continuing development in the region, study participants stated that access to areas where traditional practices can occur is becoming an increasing challenge.

Tsuut'ina Nation stated that healthy lands, habitat, water, air, wildlife, fish, and plants are all part of a healthy environment and important for continuing traditional use activities. Study participants expressed concerns about potential Project effects on:

- water flow, quality, and quality (including groundwater, springs, and drinking water)
- fish spawning
- wildlife migration and habitat (including wetlands and muskeg)
- wildlife health
- traditional use activities
- resource contamination
- availability of traditional use resources
- access to traditional use areas
- members' nutritional and cultural food security
- potential Project malfunction
- the Project, as it is currently designed
- the exercise of Tsuut'ina Nation rights

In response to these concerns, Tsuut'ina Nation has proposed a series of recommendations and requests in order to help mitigate potential effects from the Project (see Table 1 Tsuut'ina Nation Recommendations and Requests column).

2.2 TSUUT'INA NATION TLRU ASSOCIATED WITH THE PROJECT

Table 1 provides an overview of Tsuut'ina Nation's TLRU within and in the vicinity of the PDA, LAA, and RAA, as provided in the TLRU Report. Alberta Transportation has considered the information in reference to the March 2018 EIA.



Table 1 Tsuut'ina Nation Traditional Land and Resource Use Information and Mitigation Table

Traditional Land and Resource Use Information	Location of Sites or Areas	Relevant March 2018 Filing Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the Environmental Impact Assessment	Tsuut'ina Nation Recommendations and Requests	Alberta Transportation Response
Traditional Ecological Knowledge					
Hydrogeology (Groundwater)					
Existing Conditions TN stated that the more the ground is disturbed, the less it is able to absorb water. TN noted that trees have an effect on groundwater because they purify spring water. Potential Project Effects TN expressed concerns about effects on groundwater and springs as a result of the Project, including the potential for water contamination and effects on access at traditional gathering areas. TN added that the construction of the diversion channel will have an effect on springs. TN expressed concerns about the continued ability to access clean drinking water within the traditional territory.	The PDA is within the TN Traditional Territory as identified in the TLRU Report.	Volume 3A Section 5.4.2.2 and Volume 3B, Section 5.2: Hydrogeology Volume 3A and Volume 3B, Section 14: Traditional Land and Resource Use Volume 1, Attachment A: Water Management Plan Volume 4, Supporting Documentation, Document 12)	Water will be discharged in a manner to avoid erosion using turbidity barriers, containment berms and settling ponds. Dewatering will be in accordance with the terms and conditions of the Environmental Protection and Enhancement Act approval conditions, and Water Act approval and the federal Fisheries Act and Navigable Waters Protection Act. The water management plan, which complies with regulatory requirements, will be used to manage dewatering and discharge of water on the construction site. A Care of Water Plan will be developed to manage dewatering and discharge of water on the construction site. At locations where flows from care of water operations are discharged into waterbodies, test the water quality at discharge locations and monitor the total suspended sediment (TSS) to ensure the water quality is made equal to or better than the initial water source. Existing water wells within the reservoir footprint will be decommissioned and plugged off to prevent groundwater contamination and to prevent flood waters from infiltrating nearby water wells. Regional-scale effects on groundwater quantity will be mitigated by allowing seepage in the dry diversion channel to infiltrate back into the subsurface, or flow back into Elbow River via surface water drainage pathways. During construction, silt fences and turbidity barriers will be used to control TSS and to ensure the water quality from care of water system discharges is made equal to or better than the initial water quality by carrying out frequent water quality testing.	If the Project is approved, TN recommends holding a ceremony to show respect for the spirit of the water.	At the request of Indigenous groups, Alberta Transportation will fund and participate in a ceremony prior to the start of construction.



Table 1 Tsuut'ina Nation Traditional Land and Resource Use Information and Mitigation Table

Traditional Land and Resource Use Information	Location of Sites or Areas	Relevant March 2018 Filing Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the Environmental Impact Assessment	Tsuut'ina Nation Recommendations and Requests	Alberta Transportation Response	
Hydrology						
<u>Existing Conditions</u> TN members stated that their land use is culturally connected to rivers, including Elbow River, noting that buffalo were dependent on the water.	Elbow River is within the PDA.	Volume 3A and Volume 3B, Section 5: Hydrogeology Volume 3A and Volume 3B, Section 6: Hydrology	Bank and riparian areas disturbed during construction will be rehabilitated and re-vegetated. Silt fences, turbidity barriers and riprap materials will be used to prevent	No specific recommendations or requests were made by Tsuut'ina Nation regarding hydrology.		
Potential Project Effects TN reported that changing how water moves can result in effects on its "power, flow and spirit" and expressed concerns that the Project will have an effect on the relationship between TN and the water within the traditional territory. TN expressed concerns that the Project will affect water flow on the TN reserve, including reducing the flow as well as affecting wells, springs, and underground drinking water.	The PDA is within the TN Traditional Territory as identified in the TLRU Report. TN reserve is within the LAA.	Volume 3A and Volume 3B, Section 6: Hydrology Volume 3A and Volume 3B	Section 6: Hydrology Volume 3A and Volume 3B Section 7: Surface Water Quality Volume 3A and Volume 3B, Section 14: Traditional Land and	rehabilitated and re-vegetated. Silt fences, turbidity barriers and riprap materials will be used to prevent future bank erosion.		
Surface Water Quality						
Potential Project Effects TN expressed concerns about the quality of flood waters that would be diverted within the TN Traditional Territory, noting that the land may contain chemicals from farming. TN expressed concerns that contaminated flood waters will have an effect on the quality of traditional resources located on the TN reserve.	The PDA is within the TN Traditional Territory as identified in the TLRU Report. TN reserve is within the LAA.	Volume 3A and Volume 3B, Section 7: Surface Water Quality Volume 3A and Volume 3B, Section 12: Land Use and Management Volume 3A and Volume 3B, Section 14: Traditional Land and Resource Use	Potential contaminant-related effects will be mitigated through project design (e.g., road water runoff management), implementing a spill containment and response plan, using appropriate sediment and erosion control measures, limiting the use of and following best management practices for herbicides and fertilizers in the dry reservoir or near waterbodies, and using nontoxic biodegradable hydraulic fluids	No specific recommendations or requests were made by Tsuut'ina Nation regarding surface water quality.		



Table 1 Tsuut'ina Nation Traditional Land and Resource Use Information and Mitigation Table

Traditional Land and Resource Use Information Location of Sites or Areas Relevant March 2016 Filing Continues Assessment Resource Assessment Requests In equipment for any required instruction works. Fish and Fish Habitat Existing Conditions To epidement deal calls, cuttles, pile, suckers, foul (including brook, bown, bull, and randow troot), and withfelfs, any prepared in Elbow Now, bull, and randow troot), and withfelfs, any prepared in Elbow Now, bull, and randow troot), and withfelfs, any prepared in Elbow Now, bull, and randow troot), and withfelfs, any prepared in Elbow Now, bull, and randow troot), and withfelfs, any prepared in Elbow Now, bull, and randow troot), and withfelfs, any prepared in Elbow Now, bull, and randow troot, and withfelfs, any prepared in Elbow Now, bull, and randow troot, and withfelfs, and prepared in Elbow Now, bull, and randow troot, and withfelfs, any prepared in Elbow Now, bull, and randow troot, and withfelfs, and prepared in Elbow Now, bull, and randow troot, and withfelfs, and the PDA, which is a species of the Companied prepared in the PDA, as well as to bull out of the prepared and the PDA, which is a species of the Companied prepared in the PDA, and the National Companied in the PDA, which is a species of the Companied prepared in the PDA, and the National Companied in the Nat			1	,	
Fish and Fish Habitat Existing Conditions TN expands that char, cuttles, pike, suckers, trout (including brook, but and markers) TN expands that char, cuttles, pike, suckers, trout (including brook, but and markers) TN expands that char, cuttles, pike, suckers, trout (including brook, but and markers) TN expands that char, cuttles, pike, suckers, trout (including brook, but and markers) TN expands that char, cuttles, pike, suckers, trout (including brook, but and markers) TN expands that char, cuttles, pike, suckers, trout (including brook, but and that but and with the first species.) TN expands to the restricted activity, benefit that the suckers that the property permitting and suckers that the property permitting and suckers that the property permitting and the first that the first that the property permitting and the first that the first that the property permitting and the first that the	Traditional Land and Resource Use Information	Environmental Impact			Alberta Transportation Response
Ensigned Conditions Th explained that char, cuttles, pike, suckers, trout (including brook, but, and an analyse frout), and whitelish, are present in Elbow River and in its tributaries in the Project area. Th exposted that spawing advites in Elbow River way depending on the species. In explained that char, pike and suckers spaw in cold, as well as its tributaries in the Project area. Th expressed concerns should effect on spawning in Elbow River and its tributaries, including mountain whitelish, as well as its tributaries in the Project area may contaminate fish. Poemiol Project Effects Th expressed concerns that standing waters in the Project area may contaminate fish. Poemiol Project Effects The expressed concerns that standing waters in the Project area may contaminate fish. Poemiol Project Effects The expressed concerns that standing waters in the Project area may contaminate fish. Poemiol Project Effects The expressed concerns that standing waters in the Project area may contaminate fish. Poemiol Project Effects The expressed concerns that standing waters in the Project area may contaminate fish. Poemiol Project Effects The expressed concerns that standing waters in the Project area may contaminate fish. Poemiol Project Effects The expressed concerns that standing waters in the Project area may contaminate fish. Poemiol Project Effects The expressed concerns that standing waters in the Project area may contaminate fish. Poemiol Project Effects The expressed concerns that standing waters in the Project area may contaminate fish. Poemiol Project Effects The expressed concerns that standing waters in the Project area may contaminate fish. Poemiol Project Effects The expressed concerns that standing waters in the Project area may contaminate fish. Poemiol Project Effects The expressed concerns that standing waters in the Project area may contaminate fish. Poemiol Project Effects The expressed concerns that standing the expression of the structures will not the fish that the expression of the expre					
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into a retention pond or vegetated area to remove suspended solids,	Existing Conditions TN explained that char, cutties, pike, suckers, trout (including brook, brown, bull, and rainbow trout), and whitefish, are present in Elbow River and in its tributaries in the Project area ³ . TN reported that spawning activities in Elbow River vary depending on the species. TN explained that char, pike and suckers spawn in cold water and mountain whitefish spawn in Elbow River south of the PDA, as well as its tributaries in the Project area. Potential Project Effects TN expressed concerns about effects on spawning in Elbow River and its tributaries, including mountain whitefish, as well as bull trout, which is a species at risk. TN expressed concerns that standing waters in the Project area may		undertaken to identify if fish passage is impeded for migratory salmonids or other fish species. Works in water will be timed with respect to the restricted activity periods (RAPs) wherever possible. For Elbow River, the RAP is May 01 – July 15 and September 16 – April 15. Condition and use of restricted activity periods will be provided within further project permitting and authorization under the <i>Fisheries Act</i> . For planning purposes, the Elbow River RAP will be applied as an avoidance and mitigation measure. To allow for fish passage and construction of the structures within the Elbow River, the Elbow River will be diverted, and flows will be maintained downstream by the construction of a temporary bypass channel. Drainage areas within the reservoir will be graded to reduce stranding of fish during release of stored flood water from the reservoir. Maintenance, debris removal on the structure, and on the fish passage structures will occur to accommodate fish passage. Debris will be cleaned from the structure gates after a flood recedes to allow unimpeded fish passage upstream over the structure. Structures will be designed so that storm water runoff and wash water from the access roads, decks, side slopes, and approaches are directed into a retention pond or vegetated	were made by Tsuut'ina Nation regarding	

³ Based on figures used in the Tsuut'ina Nation TLRU Report, the Project area is assumed to encompass the PDA plus the LAA in the immediate vicinity (within approximately 400 m); unless otherwise clarified in the Tsuut'ina Nation TLRU Report, "Project area" has been used throughout this document.



Table 1 Tsuut'ina Nation Traditional Land and Resource Use Information and Mitigation Table

Traditional Land and Resource Use Information Location of Sites or Areas	Relevant March 2018 Filing Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the Environmental Impact Assessment	Tsuut'ina Nation Recommendations and Requests	Alberta Transportation Response
		sediment and other deleterious substances from entering watercourses. • Where debris removal from the structures is required, debris removal will be timed to avoid disruption to sensitive fish life stages (i.e., outside the RAP), unless the debris and its accumulation is immediately threatening to the integrity of the structure or relates to an emergency (i.e., risk of structure failure). • During post-flood reservoir maintenance, areas that had isolated pools may be graded to prevent the isolation of fish in successive flood events. • Isolated pools will be identified, marked, and a determination by a Qualified Aquatic Environmental Specialist (QAES) will be made as to whether there are stranded fish in the pool that require rescue and relocation to secure habitats in Elbow River. When the water has been fully drained, the low-level outlet canal will also be surveyed to identify isolated pools where fish might be stranded. • Potential contaminant-related effects will be mitigated through project design (e.g., road water runoff management), implementing a spill containment and response plan, using appropriate sediment and erosion control measures, limiting the use of and following best management practices for herbicides and fertilizers in the dry reservoir or near waterbodies, and using nontoxic biodegradable hydraulic fluids in equipment for any required instream works.		
Vegetation and Wetlands				
Existing Conditions TN stated that wetlands in the Project area provide important habitat for plants that provide nutritional value for animals and TN members; wetlands also provide habitat for other culturally-used plants. Potential Project Effects	Volume 3A and Volume 3B, Section 10: Vegetation and Wetlands Volume 3A and Volume 3B, Section 11: Wildlife and Biodiversity	 Restrict all construction activities to the approved construction footprint. Where possible, temporary workspaces and access roads will be in areas that avoid wildlife features and native vegetation (e.g., shrubland, treed areas, wetlands). 	TN requests the opportunity for additional fieldwork in spring and summer 2019 (approximately June) to observe plants that are in season because the original fieldwork was held in October 2017. This will allow for a greater understating of potential Project effects.	Subject to land access from the private landowners, Alberta Transportation agrees to a field visit - similar to the one conducted in October 2017 - with Elders in the spring of 2019 to observe plants that are in season and to identify priority areas for possible



Table 1 Tsuut'ina Nation Traditional Land and Resource Use Information and Mitigation Table

Traditional Land and Resource Use Information	Location of Sites or Areas	Relevant March 2018 Filing Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the Environmental Impact Assessment	Tsuut'ina Nation Recommendations and Requests	Alberta Transportation Response
TN expressed concerns about wetlands and muskeg areas in the Project area, noting that they are important habitat for beaver, elk, and other wildlife. TN expressed concerns about berry patches in and near the PDA, which grizzly bear rely on. TN expressed concerns about the undisturbed forested areas in the Project area, which provide important habitat and protection for wildlife. TN expressed concerns that standing waters in the PDA may contaminate plants.		Volume 3A and Volume 3B, Section 14: Traditional Land and Resource Use	Existing access roads and previously disturbed areas will be used, where feasible. Temporary work spaces will be reclaimed using native species that are compatible with pre-construction site conditions, as outlined in the reclamation plan. Potential contaminant-related effects will be mitigated through project design (e.g., road water runoff management), implementing a spill containment and response plan, using appropriate sediment and erosion control measures, limiting the use of and following best management practices for herbicides and fertilizers in the dry reservoir or near waterbodies, and using nontoxic biodegradable hydraulic fluids in equipment for any required instream works.	TN requests that undisturbed forests be avoided, particularly those along rivers.	harvest of traditional plants prior to construction. Where possible, temporary workspaces and access roads will be in areas that avoid native vegetation (e.g., treed areas).
Wildlife and Biodiversity			moticum works.		
Existing Conditions TN indicated that elk, moose, deer (white-tailed and mule deer), grizzly bear, black bear, cougar, bobcat, lynx, coyote, fox, wolves, beaver, ground squirrel, mole, rabbit, duck, bald eagle, magpie, and spruce grouse are present in the Project area, and adjacent to Elbow River and its tributaries; TN noted there are mule deer located along Elbow River immediately south of the PDA.	Wilderness Area, Springbank Road, Highway 22, and Elbow River are within the PDA. TN reserve and Redwood Meadows are within the LAA.	Volume 3A and Volume 3B, Section 10: Vegetation and Wetlands Volume 3A and Volume 3B, Section 11: Wildlife and Biodiversity	 Restrict all construction activities to the approved construction footprint. Where possible, temporary workspaces and access roads will be in areas that avoid wildlife features and native vegetation (e.g., shrubland, treed areas, wetlands). Existing access roads and previously disturbed areas will be used, where feasible. Pre-construction surveys will be conducted to identify wildlife features (e.g., nests, dens) and appropriate site-specific mitigation developed. If an active nest or den is found, it will be subject to a provincial or federal disturbance setback buffer and site-specific mitigation. Where possible, construction activities during the Restricted Activity Period (RAP) for the key wildlife and biodiversity zone (KWBZ) identified along Elbow River (December 15 to April 30) will be avoided or reduced. 	TN requests the opportunity for additional fieldwork in spring and summer 2019 (approximately June) to observe waterfowl because the original fieldwork was held in October 2017. This will allow for a greater understating of potential Project effects.	Subject to land access from the private landowners, Alberta Transportation agrees to a field visit - similar to the one conducted in October 2017 - with Elders in the spring of 2019 to observe waterfowl.

⁴ Redwood is assumed to be Redwood Meadows; location reference is associated with Redwood Meadows.



Table 1 Tsuut'ina Nation Traditional Land and Resource Use Information and Mitigation Table

Traditional Land and Resource Use Information	ocation of Sites or Areas	Relevant March 2018 Filing Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the Environmental Impact Assessment	Tsuut'ina Nation Recommendations and Requests	Alberta Transportation Response
calve from late May to late June; elk migrate through the TN reserve and Project area in August, October, and January. TN explained that the elk have been migrating through the area for hundreds of years and noted that bear, cougar, lynx, and wolves follow the elk.			Where possible, construction activities during the RAP for the KWBZ identified along Elbow River (December 15 to April 30) will be		
TN explained that the elk moved their calving grounds to Springbank following development.			avoided or reduced. This will limit potential sensory disturbance to		
TN reported that moose are regularly observed at the northeast section of Highway 22 and Springbank Road.			wintering ungulates (ESRD 2015a, Government of Alberta 2017b). If construction activities must occur		
TN identified beaver habitat throughout the Project area, including the west side of Elbow River at the southwest portion of the PDA.			during this time period, a wildlife mitigation and monitoring plan will be		
TN observed an eagle nest southeast of the PDA adjacent to the outlet channel and explained that the eagles are likely present because they can harvest fish nearby.			developed in consultation with regulators, which will include monitoring ungulate habitat use and response to human disturbance.		
Potential Project Effects TN expressed concerns that the Project may have an effect on the health of the elk herd that migrates through the Project area.			To maintain ungulate movement within the KWBZ, the floodplain berm will be revegetated with materials conducive for ungulate movement.		
TN expressed concerns that the Project may have an effect on the landscape and, as a result, may affect beaver, grizzly bear, black bear, bald eagle, bobcat, cougar, lynx, mule deer, and wolves. TN also expressed concerns about elk calving grounds, the ability of elk to navigate through the Project area. TN expressed concerns about the undisturbed forested areas in the Project area which provide important habitat and protection for wildlife.			The section of reinforced concrete (~250 m) closest to Elbow River will be covered with top soil and seeded with native grasses. The central portion of the floodplain berm includes approximately 550 m of exposed riprap, where sections will be filled with substrate finer than		
Potential Project Effects TN expressed concerns that standing waters in the PDA may contaminate wildlife. TN expressed concerns that wildlife, including moose, that use the unnamed creek area because it is low-lying and sheltered will be affected by the diversion outlet.			riprap, such as sand, gravel and vegetation to allow for more walkable sections (Austin and Garland 2001; Huijser et al. 2008; Clevenger 2011). The south portion, furthest from Elbow River, will be a 450 m earthen embankment vegetated with native grasses.		
			 The diversion channel will be built with 3H:1V side slopes, which is within the range that most large mammals (e.g., elk,) are known to traverse (McCorquodale 2003; Frair et al. 2005; Mao et al. 2005; The Bow Corridor Ecosystem Advisory Group 2012). A remote camera program will be designed, in consultation with Alberta Environment and Parks, to identify whether the diversion channel acts as a barrier to wildlife movement during dry operations, especially for ungulates, and determine the effectiveness of mitigation implemented throughout 		



Table 1 Tsuut'ina Nation Traditional Land and Resource Use Information and Mitigation Table

Traditional Land and Resource Use Information	Location of Sites or Areas	Relevant March 2018 Filing Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the Environmental Impact Assessment	Tsuut'ina Nation Recommendations and Requests	Alberta Transportation Response
			the diversion channel. This will		
			include monitoring along Elbow River		
			to determine if wildlife use of the		
			KWBZ has been affected by the		
			construction and operation of the		
			Project. Although the specific details		
			and design of the remote camera		
			program will be determined with AEP		
			prior to construction, the following		
			describes the basis of a preliminary		
			approach.		
			 During the Project dry operation 		
			phase, a total of 14 remote		
			cameras will be deployed in the		
			wildlife LAA and monitor wildlife		
			movement for at least one-year		
			post-construction. The six		
			remote cameras along the		
			Elbow River will remain at the		
			same locations as during the		
			construction phase. Four remote		
			cameras will be deployed soon after completion of project		
			construction and placed at the		
			same locations as pre-		
			construction baseline surveys		
			near Highway 22 (i.e., near the		
			raised portion of the highway at		
			the north end of the wildlife		
			LAA). An additional four remote		
			cameras will be installed along		
			wildlife friendly fencing at the		
			edge of the diversion channel at		
			crossable sections where there		
			is vegetation. Remote cameras		
			at the diversion channel will be		
			spaced approximately 1 km		
			apart.		
			 A wildlife biologist will visit the 		
			cameras every four months		
			during construction and		
			operation to change out memory		
			cards and batteries and check		
			on the overall status of		
			equipment (e.g., positioning,		
			weather related malfunctions,		
			animal or human tampering of		
			equipment).		
			Potential contaminant-related effects		
			will be mitigated through project		
			design (e.g., road water runoff		
			management), implementing a spill		



Table 1 Tsuut'ina Nation Traditional Land and Resource Use Information and Mitigation Table

Traditional Land and Resource Use Information	Location of Sites or Areas	Relevant March 2018 Filing Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the Environmental Impact Assessment	Tsuut'ina Nation Recommendations and Requests	Alberta Transportation Response				
			containment and response plan, using appropriate sediment and erosion control measures, limiting the use of and following best management practices for herbicides and fertilizers in the dry reservoir or near waterbodies, and using nontoxic biodegradable hydraulic fluids in equipment for any required instream works.						
Traditional Land and Resource Use									
Traditional Use Areas									
Existing Conditions The TN Traditional Territory includes and extends beyond the Project area, TN reserve, and the general Springbank area. TN stated that the floodplain topography and the Elbow River valley, as well as the presence of many important plants explains why TN chose the area as part of traditional territory. TN oral history supports that the Elbow River area began to be used by TN hundreds of years ago.	The PDA is within the TN Traditional Territory as identified in the TLRU Report. Elbow River and Wilderness Area are within the PDA.	Volume 3A and Volume 3B, Section 8: Aquatic Ecology Volume 3A and Volume 3B, Section 10: Vegetation and Wetlands Volume 3A and Volume 3B, Section 11: Wildlife and Biodiversity	Alberta Transportation will minimize disturbance to cultural and spiritual sites and subsurface impacts, and develop a protocol for recovery, collection, reporting on, and possible repatriation of artifacts found in consultation with Indigenous groups, which could include flagging, fencing, or providing signage of sites to prevent disturbance during	No specific recommendations or requests were made by Tsuut'ina Nation regarding traditional use areas.					
Existing Conditions A total of 338 traditional use areas were recorded within the Project area during the TN field visits; while not a comprehensive list of all potential sites in the Project area, the types and quantity of sites observed provide context for the variety of traditional use areas important to TN. Types of sites identified by TN include land use, animal, habitat, cultural, gathering, and terrain sites. ⁶ As directed by TN, the nature of each traditional use site has not been disclosed.	Approximately 90% of sites identified by TN are located within the PDA.	Volume 3A and Volume 3B, Section 14: Traditional Land and Resource Use Volume 3A and Volume 3B, Section 15: Public Health	Section 14: Traditional Land and Resource Use Volume 3A and Volume 3B,	Section 14: Traditional Land and Resource Use Volume 3A and Volume 3B,	of sites Resource Use Volume 3A and Volume 3B, section 15: Public Health	O% of sites Identified by TN re located within he PDA. Resource Use Volume 3A and Volume 3B, Section 15: Public Health Stored flood waters will be release through the low-level outlet gated structure back into Elbow River in controlled manner to avoid downstream flood damage. Potential contaminant-related effer will be mitigated through project	 construction. Stored flood waters will be released through the low-level outlet gated structure back into Elbow River in a controlled manner to avoid downstream flood damage. Potential contaminant-related effects 		
TN reported that hunting, fishing, gathering, camping, and other traditional activities, such as ceremonial practices, occur in the Project area; historically and culturally important sites as well as important animal habitat were also reported by TN. ⁷ TN also indicated that traditional activities that occur outside the Project area are dependent upon resources that are available within the Project area. TN members practice traditional use activities in the Wilderness Area. Potential Project Effects			design (e.g., road water runoff management), implementing a spill containment and response plan, using appropriate sediment and erosion control measures, limiting the use of and following best management practices for herbicides and fertilizers in the dry reservoir or near waterbodies, and using nontoxic biodegradable hydraulic fluids						

⁵ A comprehensive description of the traditional territory as set out in the TLRU Report has not been included in this table.

⁷ In accordance with the terms of use, when identifying the relative location of Tsuut'ina Nation use areas, all hunting, trapping, fishing, plant gathering, travel, habitation, and cultural or ceremonial areas or other areas associated with traditional activities are generally referred to as "traditional use areas". In addition, the specific locations of traditional use areas have not been disclosed in this document.



⁶ While some of these sites may overlap with some of the environmental observations or traditional use areas identified throughout Table 1, the Tsuut'ina Nation TLRU Report stated: "The methodology for the field site visit did not include ground-truthing of any existing traditional use sites. Moreover, no fishing locations were visited or ground-truthed, as the field visits focused on terrestrial environments" (Tsuut'ina Nation 2018, 78).

Table 1 Tsuut'ina Nation Traditional Land and Resource Use Information and Mitigation Table

Traditional Land and Resource Use Information	Location of Sites or Areas	Relevant March 2018 Filing Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the Environmental Impact Assessment	Tsuut'ina Nation Recommendations and Requests	Alberta Transportation Response
TN expressed concerns that standing waters in the Project area may contaminate wildlife, fish, and plants and affect TN members' cultural and nutritional food security.			in equipment for any required instream works. • Alberta Transportation is		
Potential Project Effects Of the 338 traditional use areas reported by TN, the following traditional use areas were described in detail by TN. The specific locations have been disclosed in reference to the Project and its components; however, the specific nature of each site cannot be disclosed.	Approximately 90% of sites identified by TN are located within the PDA.		commitment to collaborating with Indigenous groups and stakeholders to develop a land-use management plan for the Springbank Reservoir lands which aligns with the South Saskatchewan Regional Plan.		
TN reported that some landowners allow TN hunters to access private lands to hunt,			All Indigenous groups with an interest in the area will be invited to participate.		
Species fished by TN include char, cutties, pike, suckers, trout (including brown, bull, and rainbow trout), and mountain whitefish.			The land use management plan will address: Land management for the area		
TN expressed concerns about effects on the ability to fish (including trout and whitefish) in the event of changes to the health and flow of the river.			which will allow for management of flood waters in the off-stream reservoir during floods		
TN expressed concerns that Project effects on the flow and quality of the Elbow River waters will result in effects on trout and whitefish harvesting.			 Practice of Treaty Rights and traditional use Monitoring, reporting on the 		
TN stated that access is the primary barrier to using traditional lands, followed by environmental concerns about food sources. TN expressed concerns that the Project and other developments will affect fishing.			lands - Post flood rehabilitation		
TN stated that access is the primary barrier to using traditional lands, followed by environmental concerns about food sources. TN expressed concerns that the Project and other developments will result in harvesters having to travel greater distances to hunt and will affect fishing.					
TN members participated in annual Sun Dance ceremonies, until approximately 1889,					
TN also held Sacred Beaver bundle ceremonies Hunting					
•	The BDA is 100)/-	Alberta Transportation will registe in	No aposific recommendations or requests	
Existing Conditions In the past, TN members relied on antelope, beaver, buffalo, deer, duck elk, goose, mountain goat, mountain sheep, porcupine, rabbit, and squirrel harvesting, as well as egg harvesting.	The PDA is within the TN Traditional Territory as identified in the TLRU Report.	Volume 3A and Volume 3B, Section 10: Vegetation and Wetlands Volume 3A and Volume 3B,	Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and project site limits) during construction and operations,	No specific recommendations or requests were made by Tsuut'ina Nation regarding hunting.	
TN reported that some landowners allow TN hunters to access private lands to hunt.	2 252.0	Section 11: Wildlife and Biodiversity	including for hunting and fishing and Alberta Transportation will advise		
TN noted that development affected some local elk hunting areas.		Volume 3A and Volume 3B, Section 12: Land Use and	Indigenous groups on post- construction land access		
In the past, TN travelled through the traditional territory following the seasonal availability of different foods. TN explained that the "Indian pass system", which was imposed upon TN from 1885 until the 1930s, restricted land users' ability to access hunting areas, including from the		Management	management. • Alberta Transportation will notify Indigenous groups regarding project		



Traditional Land and Resource Use Information and Mitigation Table

Table 1 Tsuut'ina Nation Traditional Land and Resource Use Information and Mitigation Table

Traditional Land and Resource Use Information To Areas The reserve to Rocky Mountain House, the Rocky Mountains, Chief Mountain, and Blood [®] lands. Potential Project Effects The expressed concerns about effects on hunting, including barriers to access hunting areas, habitat loss, as well as changes in wildlife abundance, behaviour, health and distribution. The expressed concerns about effects on elk, which are important for traditional subsistence purposes; The explained that the Project area contains important habitat for elk as well as the predators who feed on elk. This tated that access is the primary barrier to using traditional lands, followed by environmental concerns about food sources. The expressed concerns that the Project will result in harvesters having to travel greater distances to hunt. Environmental Impact Assessment Environmental Limpact Assessment As and Volume 3B, Section 14: Traditional Land and Resource Use Volume 3A and Volume 3B, Section 15: Public Health Environmental Impact Assessment Environmental Limpact Assessment E	Requests	Alberta Transportation Response
Mountain, and Blood® lands. Potential Project Effects TN expressed concerns about effects on hunting, including barriers to access hunting areas, habitat loss, as well as changes in wildlife abundance, behaviour, health and distribution. TN expressed concerns about effects on elk, which are important for traditional subsistence purposes; TN explained that the Project area contains important habitat for elk as well as the predators who feed on elk. TN stated that access is the primary barrier to using traditional lands, followed by environmental concerns about food sources. TN expressed concerns that the Project will result in harvesters having to travel greater distances to hunt. Section 14: Traditional Land and Resource Use Volume 3A and Volume 3B, Section 15: Public Health Section 15: Public Health The substitution activities will be avoided during the RAP for the KWBZ identified along Elbow River (December 15 to April 30). This will reduce potential effects on wildlife movement and wintering ungulates (ESRD 2015a). If construction during the RAP cannot be avoided, site-specific mitigation will be developed in consultation will be developed in consultation will be developed in consultation will be developed and at Primez Creek. Vegetated areas will provide a more conducive wildlife passage across the channel. The diversion channel will be built with 3H:1V side slopes, which is		
Potential Project Effects TN expressed concerns about effects on hunting, including barriers to access hunting areas, habitat loss, as well as changes in wildlife abundance, behaviour, health and distribution. TN expressed concerns about effects on elk, which are important for traditional subsistence purposes; TN explained that the Project area contains important habitat for elk as well as the predators who feed on elk. TN stated that access is the primary barrier to using traditional lands, followed by environmental concerns about food sources. TN expressed concerns that the Project will result in harvesters having to travel greater distances to hunt. Volume 3A and Volume 3B, Section 15: Public Health **Construction activities will be avoided during the RAP for the KWBZ identified along Elbow River (December 15 to April 30). This will reduce potential effects on wildlife movement and wintering ungulates (ESRD 2015a). If construction during the RAP cannot be avoided, site-specific mitigation will be developed in consultation with AEP. **The side slopes and bottom of the diversion channel will be vegetated, except under the proposed bridges and at Pirmez Creek. Vegetated areas will provide a more conducive wildlife passage across the channel. **The diversion channel will be built with 3H:1V side slopes, which is		
TN expressed concerns about effects on hunting, including barriers to access hunting areas, habitat loss, as well as changes in wildlife abundance, behaviour, health and distribution. TN expressed concerns about effects on elk, which are important for traditional subsistence purposes; TN explained that the Project area contains important habitat for elk as well as the predators who feed on elk. TN stated that access is the primary barrier to using traditional lands, followed by environmental concerns about food sources. TN expressed concerns that the Project will result in harvesters having to travel greater distances to hunt. Section 15: Public Health Construction activities will be avoided during the RAP for the KWBZ identified along Elbow River (December 15 to April 30). This will reduce potential effects on wildlife movement and wintering ungulates (ESRD 2015a). If construction during the RAP cannot be avoided, site-specific mitigation will be developed in consultation with AEP. The side slopes and bottom of the diversion channel will be vegetated, except under the proposed bridges and at Pirmez Creek. Vegetated areas will provide a more conducive wildlife passage across the channel. The diversion channel will be built with 3H:1V side slopes, which is		
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within the range that most large mammals (e.g., elk,) are known to traverse (McCorquodale 2003; Frair et al. 2005; Mao et al. 2005; The Bow Corridor Ecosystem Advisory Group 2012). To maintain ungulate movement within the KWBZ, the floodplain berm will be revegetated with materials conducive for ungulate movement. The section of reinforced concrete (~250 m) closest to Elbow River will be covered with top soil and seeded with native grasses. The central portion of the floodplain berm includes approximately 550 m of exposed riprap, where sections will be filled with substrate finer than riprap, such as sand, gravel and vegetation to allow for more walkable sections (Austin and Garland 2001; Huijser et al. 2008; Clevenger 2011). The south portion, furthest from Elbow River, will be a 450 m earthen embankment vegetated with native		

⁸ Blood is assumed to be Blood Tribe (Kainai First Nation) lands.

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Alberta

Table 1 Tsuut'ina Nation Traditional Land and Resource Use Information and Mitigation Table

Traditional Land and Resource Use Information	Location of Sites or Areas	Relevant March 2018 Filing Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the Environmental Impact Assessment	Tsuut'ina Nation Recommendations and Requests	Alberta Transportation Response
Fishing					
Existing Conditions Species fished by TN include char, cutties, pike, suckers, trout (including brown, bull, and rainbow trout), and mountain whitefish. TN reported that fishing typically occurs in spring and summer; fish are harvested for both subsistence and ceremonial purposes.		Volume 3A and Volume 3B, Section 6: Hydrology Volume 3A and Volume 3B, Section 7: Surface Water Quality Volume 3A and Volume 3B, Section 8: Aquatic Ecology Volume 3A and Volume 3B, Section 12: Land Use and	 A monitoring program will be undertaken to identify if fish passage is impeded for migratory salmonids or other fish species. Works in water will be timed with respect to the RAPs wherever possible. For Elbow River, the RAP is May 01 – July 15 and September 16 – April 15. Condition and use of 	No specific recommendations or requests were made by Tsuut'ina Nation regarding fishing.	
Existing Conditions TN members have observed fluctuations in water quality in the area over time; TN also explained that there a sewage smell has been present in the past, as a result of effluent discharge from Bragg Creek, which has had an effect on use.	Bragg Creek is in the RAA.	Section 12: Land Use and Management Volume 3A and Volume 3B, Section 14: Traditional Land and Resource Use	restricted activity periods will be provided within further project		
Potential Project Effects TN expressed concerns about effects on the ability to fish (including trout and whitefish) in the event of changes to the health and flow of the river. TN reported that previous floods have damaged river bottoms, resulting in poor fishing for approximately three years. TN expressed concerns that subsequent floods could damage fishing for longer periods of time. TN expressed concerns about effects on fishing, including barriers to access fishing areas, habitat loss, as well as changes in fish abundance, behaviour, health, and distribution. TN expressed concerns that Project effects on the flow and quality of the Elbow River waters will result in effects on trout and whitefish harvesting. TN stated that access is the primary barrier to using traditional lands, followed by environmental concerns about food sources. TN expressed concerns that the Project and other developments will affect fishing. TN expressed concerns about water quality and the continued ability to fish within the traditional territory as a result of the Project.	The PDA is within the TN Traditional Territory as identified in the TLRU Report.				



Table 1 Tsuut'ina Nation Traditional Land and Resource Use Information and Mitigation Table

Traditional Land and Resource Use Information	Location of Sites or Areas	Relevant March 2018 Filing Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the Environmental Impact Assessment	Tsuut'ina Nation Recommendations and Requests	Alberta Transportation Response
			AEP will avoid substantial interference with public navigation of Elbow River through the following design practices: As part of construction, a permanent portage will be developed around the in-stream water intake components. Signs directing traffic to detours will be installed during construction of road realignments and modifications. Signs will be installed along the existing Elbow River channel and on the dam. Multiple signs will be placed upstream and downstream of the water intake components on both banks of Elbow River. These signs will warn users on Elbow River that they are approaching in-stream water intake components and of the associated danger with this infrastructure and to direct them to a portage location. A floating, high visibility boom will be in place upstream and downstream of the water intake components. Alberta Transportation will notify Indigenous groups regarding project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods. Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and project site limits) during construction and operations, including for hunting and fishing and Alberta Transportation will advise Indigenous groups on post-construction access management.		
Trapping					
Existing Conditions TN explained that coyote, fox, and wolves were trapped; eagles were trapped for ceremonial purposes.		Volume 3A and Volume 3B, Section 11: Wildlife and Biodiversity	Alberta Transportation will notify Indigenous groups regarding project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods.	No specific recommendations or requests were made by Tsuut'ina Nation regarding trapping.	



Table 1 Tsuut'ina Nation Traditional Land and Resource Use Information and Mitigation Table

Traditional Land and Resource Use Information	Location of Sites or Areas	Relevant March 2018 Filing Environmental Impact Assessment Section(s) Volume 3A and Volume 3B.	Mitigation Measures Proposed in the Environmental Impact Assessment Alberta Transportation will maintain	Tsuut'ina Nation Recommendations and Requests	Alberta Transportation Response
		Section 14: Traditional Land and Resource Use	access to identified current use sites (located outside of the designated construction and project site limits) during construction and operations, including for hunting and fishing and Alberta Transportation will advise Indigenous groups on post- construction access management.		
Plant Harvesting					
Existing Conditions TN members have a strong cultural connection with medicinal and ceremonial plant harvesting in the traditional territory. TN stated that medicinal plants can be found along Elbow River. TN added that the medicinal and ceremonial plants grow in the Elbow River valley as well as in wetlands and along riparian areas which cannot be found in other areas, such as foothills. TN observed nutritional, medicinal, and ceremonial plants growing in the Project area, including bull berry, chokecherry, gooseberry, kinnikinnick (bear berry), raspberry, saskatoon berry, wild strawberry, bergamot, buffalo grass (sage), cedar, juniper, mint, mushrooms, white poplar, sweetgrass, willow (diamond and red), and yarrow, as well as other berries, grasses, sedges and trees. TN reported that pine, spruce, and other trees are also culturally important plants, used as firewood and to build ceremonial, burial, or domestic structures and travois. In the past, TN members relied on blueberry, chokecherry, serviceberry, and prairie turnips as the primary sources of fruits and vegetables. TN reported that sweetgrass and some medicinal flowers are harvested in early August but noted that sweetgrass is becoming less abundant in the vicinity of the TN reserve. Sage is harvested in August and bergamot is harvested in July.	The PDA is within the TN Traditional Territory as identified in the TLRU Report. Elbow River and Elbow River valley are within the PDA. TN reserve is within the LAA.	Volume 3A and Volume 3B, Section 10: Vegetation and Wetlands Volume 3A and Volume 3B, Section 14: Traditional Land and Resource Use Volume 3A and Volume 3B, Section 15: Public Health	 Restrict all construction activities to the approved construction footprint. Alberta Transportation will notify Indigenous groups regarding project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods. Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction. Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and project site limits) during construction and operations, including for hunting and fishing and Alberta Transportation will advise Indigenous groups on post-construction access management. Native areas disturbed by the Project will be reseeded using an Alberta Transportation native custom seed mix. 	No specific recommendations or requests were made by Tsuut'ina Nation regarding plant harvesting.	
<u>Potential Project Effects</u> TN expressed concerns about effects on cultural and medicinal plant harvesting, including barriers to access plant harvesting areas, habitat loss, as well as changes in plant abundance.			Maintenance activities will be restricted to the reservoir footprint to reduce the area of disturbance during post-flood operations.		
TN expressed concerns about ceremonial and medicinal plants found in the Project area, including sweetgrass, which is becoming more difficult to find.					
TN members are concerned about needing to travel farther and look harder to find medicinal and ceremonial plants.					
Travel					



Table 1 Tsuut'ina Nation Traditional Land and Resource Use Information and Mitigation Table

Traditional Land and Resource Use Information	Location of Sites or Areas	Relevant March 2018 Filing Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the Environmental Impact Assessment	Tsuut'ina Nation Recommendations and Requests	Alberta Transportation Response
Existing Conditions TN explained that trails were travelled on food or by horse and wagon or on horseback. TN identified possible trails in the Project area. TN identified two trails in the RAA and noted that one was used by approximately 1890.		Volume 3A and Volume 3B, Section 13: Historical Resources Volume 3A and Volume 3B, Section 12: Land Use and Management Volume 3A and Volume 3B, Section 14: Traditional Land and Resource Use	 Alberta Transportation is commitment to collaborating with Indigenous groups and stakeholders to develop a land-use management plan for the Springbank Reservoir lands which aligns with the South Saskatchewan Regional Plan. All Indigenous groups with an interest in the area will be invited to participate. The land use management plan will address: Land management for the area which will allow for management of flood waters in the off-stream reservoir during floods Practice of Treaty Rights and traditional use Monitoring, reporting on the lands Post flood rehabilitation Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and project site limits) during construction and operations, including for hunting and fishing and Alberta Transportation will advise Indigenous groups on post-construction access management. 	No specific recommendations or requests were made by Tsuut'ina Nation regarding travel.	
Habitation					
Existing Conditions In the past, TN members would leave winter settlements when spring arrived in order to camp together in fields during agricultural planting and harvesting seasons. TN observed evidence of camping areas in the Project area. TN identified two original settlements on the TN reserve: one is located north of the Old Agency site in the southeast corner of the reserve, and known as Chief Bullhead's settlement; the other, Chief Big Wolf's settlement, is located 5 km west.	Chief Big Wolf's settlement and the Old Agency site are in the RAA.	Volume 3A and Volume 3B, Section 13: Historical Resources Volume 3A and Volume 3B, Section 14: Traditional Land and Resource Use	Alberta Transportation will notify Indigenous groups regarding project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods.	No specific recommendations or requests were made by Tsuut'ina Nation regarding habitation.	
Cultural, Spiritual and Ceremonial Practices or Areas					
Existing Conditions	Elbow River is within the PDA.		Alberta Transportation will follow current industry best practices and	TN requests that the traditional use sites on the ridge, along the outlet channel, and at	Prior to Alberta Transportation's response, given the scale and resolution of the figures



Table 1 Tsuut'ina Nation Traditional Land and Resource Use Information and Mitigation Table

Traditional Land and Resource Use Information	Location of Sites	Relevant March 2018 Filing Environmental Impact	Mitigation Measures Proposed in the	Tsuut'ina Nation Recommendations and	Alberta Transportation Response
Traditional Earla and Resource 550 information	or Areas	Assessment Section(s)	Environmental Impact Assessment	Requests	, aborta transportation response
TN members practiced and continue to practice ceremonies, including but not limited to bundle ceremonies, fasting, feasting, pow wows, sweats, smudging, Sun Dances, and vision quests. TN explained that there are cultural sites in the undisturbed lands and therefore undisturbed lands should remain that way. TN reported a traditional use area located at the southern edge of the Project area where materials are gathered that are used in ceremonies. TN reported a buffalo jump along Elbow River, immediately south of the PDA. TN members participated in annual Sun Dance ceremonies, as well as Sacred Beaver bundle ceremonies		Volume 3A and Volume 3B, Section 10: Vegetation and Wetlands Volume 3A and Volume 3B, Section 13: Historical Resources Volume 3A and Volume 3B, Section 14: Traditional Land and Resource Use	comply with all provincial and federal legislation. Should additional historical resources be encountered during construction, Alberta Transportation will follow current Alberta Culture and Tourism (ACT) policies and guidelines. • Alberta Transportation will participate in discussions with ACT and Indigenous groups regarding further investigation of identified sites located within the designated construction site boundary. • Alberta Transportation will commit to	the diversion channel where it meets Elbow River not be disturbed.	in the TLRU Report, the specific locations of the traditional use sites identified on the ridge, along the outlet channel, and at the diversion channel are subject to confirmation with TN. Alberta Transportation will limit disturbance, to the extent possible and practical, of cultural and spiritual sites and subsurface impacts. Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and project site limits) during construction and operations, and Alberta Transportation is
Existing Conditions TN reported several traditional use areas in the Project area that show evidence of cultural and archaeological importance, including over 100 teepee rings, fire pits, and possible graves and headstones; TN stated that 20-25 teepee rings were observed in a group in some instances. TN noted that many of these sites are located within or adjacent to areas where Project infrastructure is proposed. TN indicated that it is possible that there is sacred ground in the Project area because people who died in the past may have been buried rather than carried home, including "the Blackfoots, the Piegans, the Stoneys, and Tsuut'ina, and some of the Crees that came down". (Tsuut'ina Nation 2018, 64) TN members reported using rock cairns to mark tree burials or important events.	TN reserve is within the LAA.		 Alberta Transportation will confinit to adhering to any conditions ACT applies to these sites. Alberta Transportation will participate in discussions with Indigenous groups regarding possible monitoring opportunities. Alberta Transportation will notify Indigenous groups regarding project activities and schedules, including provision of project maps and design components. The disposition of artifacts and provision of Global Positioning System (GPS) coordinates are under the jurisdiction of ACT and not 		currently working with Indigenous groups on a post-construction land access management plan. Alberta Transportation will minimize disturbance to cultural and spiritual sites and subsurface impacts, and develop a protocol for recovery, collection, reporting on, and possible repatriation of artifacts found in consultation with Indigenous groups, which could include flagging, fencing, or providing signage of sites to prevent disturbance during construction.
Existing Conditions TN explained that harvesting and using medicinal and ceremonial plants from the Elbow River area is an important part of TN cultural identity. A TN member reported being taught how to harvest and use plants by their grandmother. TN land users follow specific cultural protocols when harvesting plants and animals. Existing Conditions TN explained that observing prairie chicken and beaver behaviour can provide information about the weather and changing seasons;			Alberta Transportation. Alberta Transportation will limit disturbance, to the extent possible and practical, of cultural and spiritual sites and subsurface impacts. Alberta Transportation will follow heritage resource protection methods as mandated by the Historical Resources Act. Alberta Transportation will minimize disturbance to cultural and spiritual		
therefore, both animals play an important role in TN cultural and ceremonial practices. Other animals with cultural or spiritual importance to TN include badger, bear, buffalo, crow, dog, eagle, elk, muskrat, snake, weasel, and a "big fish with a horn on its head". (Tsuut'ina Nation 2018, 37) TN reported that water is also culturally and spiritually important. Potential Project Effects TN expressed concerns about effects on cultural sites in the Project area, including fire pits and teepee rings.			sites and subsurface impacts, and develop a protocol for recovery, collection, reporting on, and possible repatriation of artifacts found in consultation with Indigenous groups, which could include flagging, fencing, or providing signage of sites to prevent disturbance during construction. • Alberta Transportation will follow heritage resource protection methods as mandated by ACT and		



Table 1 Tsuut'ina Nation Traditional Land and Resource Use Information and Mitigation Table

Traditional Land and Resource Use Information Location of Sit	es Relevant March 2018 Filing Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the Environmental Impact Assessment	Tsuut'ina Nation Recommendations and Requests	Alberta Transportation Response
TN expressed concerns about cultural sites that are likely to be present in undisturbed areas.		 verify archaeological results with Indigenous groups. At the request of Indigenous groups, Alberta Transportation will participate in ceremonies (if invited) prior to the start of construction, including making offerings. Alberta Transportation will participate in discussions with ACT and Indigenous groups regarding further investigation of identified sites located within the designated construction site boundary. Disturbance of identified burial sites located within the designated construction site boundary will be avoided to the extent possible and practical. Alberta Transportation will participate in discussions with ACT and Indigenous groups regarding possible mitigation options for burial sites located within the designated construction site boundary and particularly within the footprint of structures that will be disturbed by construction. 		
Community Health and Wellbeing				
Existing Conditions TN reported that harvested food, including elk, is shared with others. TN explained that in the past, at the age of approximately 10, boys and girls began to be taught different traditional activities by their parents, aunts and uncles, or other older members of the community. Youth continue to be taught by other members of the community. Taught activities include but are not limited to hunting, fishing, trapping, performing or participating in rituals, riding horses, tanning, sewing, beading, and other domestic activities.	Volume 3A and Volume 3B, Section 8: Aquatic Ecology Volume 3A and Volume 3B, Section 11: Wildlife and Biodiversity Volume 3A and Volume 3B, Section 14: Traditional Land and Resource Use	• .	No specific recommendations or requests were made by Tsuut'ina Nation regarding community health and wellbeing.	
Employment and Livelihood				
	Volume 3A and Volume 3B, Section 17: Employment and Economy Volume 3A and Volume 3B, Section 14: Traditional Land and Resource Use	 Alberta Transportation will participate in discussions with Indigenous groups regarding possible monitoring opportunities. Alberta Transportation will adhere to government procurement policies and procedure with respect to labor, and goods and services. 	TN requests the opportunity to be field crew members during archaeological and other Project-related fieldwork.	Alberta Transportation will commit to a requirement for contractors to employ qualified Indigenous field assistants on archaeological fieldwork. Alberta Transportation will discuss opportunities for qualified Indigenous field assistants to participate on other Project-related fieldwork as practical.
Accidents and Malfunctions				



Table 1 Tsuut'ina Nation Traditional Land and Resource Use Information and Mitigation Table

Traditional Land and Resource Use Information	Location of Sites or Areas	Relevant March 2018 Filing Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the Environmental Impact Assessment	Tsuut'ina Nation Recommendations and Requests	Alberta Transportation Response
Potential Project Effects TN expressed concerns about potential Project malfunctions, including dam failure or a blockage which results in additional flooding.		Volume 3D, Section 1.5.1: Off- stream Reservoir Dam Failure or Breach Volume 3D, Section 1.5.2: Diversion Structure Failure or Breach	 In the event of failure or breach of the dam, Alberta Emergency Management Agency (AEMA) and Calgary Emergency Management Agency (CEMA) will enact emergency response procedures and disaster recovery programs. The service spillway is designed to pass debris during flood operations and will be monitored. If the diversion inlet gates do not open because of electrical failure or malfunction, floodwaters are designed to overtop the auxiliary spillway as opposed to flooding Elbow River upstream of the diversion structure. All electrically-powered components within the diversion structure will have backup generators to power them and could be manipulated manually to resolve issues, if required. All components of the Project will be tested annually before flood season and identified issues will be resolved. Should failure or malfunction of the service spillway gates or diversion inlet gates occur, causes will be investigated, and mitigation action taken. Should overtopping of the auxiliary spillway occur, the spillway will be inspected during post-flood operations for structural damage. Should a failure or breach of the auxiliary spillway occur, emergency response procedures will be implemented to address public safety concerns and mitigate damage to infrastructure and services during flooding. 	TN requests assurances that the Project will operate as it is intended to operate. TN requests a targeted consultation session to discuss the possibility of a dam failure.	Dam safety and emergency response planning will be added to the agenda for a future consultation meeting with Tsuut'ina Nation
Cumulative Effects					
Existing Conditions TN expressed concerns that the availability to "pursue traditional land use practices is threatened by cavalier [attitudes] towards development with foreseeable impacts on Tsuut'ina reserve lands and water." (Tsuut'ina Nation 2018, 61)	TN reserve is within the LAA.	Volume 3A and Volume 3B, Section 6: Hydrology Volume 3A and Volume 3B, Section 7: Surface Water Quality	AEP will avoid substantial interference with public navigation of Elbow River through the following design practices:	No specific recommendations or requests were made by Tsuut'ina Nation regarding cumulative effects.	



Table 1 Tsuut'ina Nation Traditional Land and Resource Use Information and Mitigation Table

Traditional Land and Resource Use Information	Location of Sites or Areas	Relevant March 2018 Filing Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the Environmental Impact Assessment	Tsuut'ina Nation Recommendations and Requests	Alberta Transportation Response
TN stated that access is the primary barrier to using traditional lands, followed by environmental concerns about food sources. TN expressed concerns that the Project and other developments will result in harvesters having to travel greater distances to hunt and will affect local fishing.		Volume 3A and Volume 3B, Section 8: Aquatic Ecology Volume 3A and Volume 3B, Section 10: Vegetation and Wetlands	 As part of construction, a permanent portage will be developed around the in-stream water intake components. Signs directing traffic to detours 		
Existing Conditions TN stated that oil development and fracking has had an effect on water quality and quantity on the west end of the TN reserve, and noted that Fish Creek is dry. TN noted that development (including highway and bridge construction, oil and gas, Spray Lakes, clear-cutting, irrigation, dams, population growth, and settlement) is adding to cumulative effects, including effects on water flow on the TN reserve, loss of plant and animal habitat, and access barriers. TN stated that lack of access is having the greatest effect on traditional land use and is disregarding or infringing upon TN rights.	TN reserve is within the LAA. Fish Creek and Spray Lakes are outside the RAA.	Volume 3A and Volume 3B, Section 11: Wildlife and Biodiversity Volume 3A and Volume 3B, Section 12: Land Use and Management Volume 3A and Volume 3B, Section 14: Traditional Land and Resource Use Volume 3A and Volume 3B, Section 15: Public Health	will be installed during construction of road realignments and modifications. - Signs will be installed along the existing Elbow River channel and on the dam. Multiple signs will be placed upstream and downstream of the water intake components on both banks of Elbow River. These signs will warn users on Elbow River that they are approaching in-stream water intake components and of		
Existing Conditions TN stated that development, including road building, is leading to the "disappearance of culturally important plants in many traditional areas." (Tsuut'ina Nation 2018, 65)		Volume 3C, Section 1: Cumulative Effects	the associated danger with this infrastructure and to direct them to a portage location. A floating, high visibility boom will be in place upstream and		
Potential Project Effects TN expressed concerns about cumulative effects on the environment and on the TN reserve. TN expressed concerns that ongoing cumulative effects will have an effect on TN harvesters' ability to fish in part of Elbow River and will result in harvesters needing to travel greater distances to hunt.	TN reserve is within the LAA.		downstream of the water intake components. Alberta Transportation will notify Indigenous groups regarding project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods. Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and project site limits) during construction and operations, including for hunting and fishing and Alberta Transportation will advise Indigenous groups on post-construction access management. The area along the Elbow River flood plain (Area A) will be accessible for some TLRU activities; this will be a conservation zone with public access and opportunities for low impact recreation. Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and project site limits) during construction and operations,		



Table 1 Tsuut'ina Nation Traditional Land and Resource Use Information and Mitigation Table

Traditional Land and Resource Use Information	Location of Sites or Areas	Relevant March 2018 Filing Environmental Impact Assessment Section(s)	Mitigation Measures Proposed in the Environmental Impact Assessment	Tsuut'ina Nation Recommendations and Requests	Alberta Transportation Response
			Alberta Transportation will advise Indigenous groups on post- construction access management.		
Project Design					
Existing Conditions TN indicated that the McLean Creek project is the better location for a diversion project, and noted that third party opinions support this. Potential Project Effects TN expressed concerns that the Project will change from its original purpose as a dry dam once the infrastructure is in place and be used for other purposes such as power generation. TN expressed concerns that the placement of the Project is working in the interests of Calgary and its subdivisions, rather than in the interests of TN, noting that this is a "patterned, inherent bias". (Tsuut'ina Nation 2018, 61) Because of TN concerns about habitat disturbance, and changes to traditionally important resources (nutritional and ceremonial), TN is opposed to the Project as it is currently proposed.		Volume 1, Section 2: Project Justification and Alternatives Considered Volume 1, Section 3.4: Dry Operation Volume 3A and Volume 3B, Section 8: Aquatic Ecology Volume 3A and Volume 3B, Section 10: Vegetation and Wetlands Volume 3A and Volume 3B, Section 11: Wildlife and Biodiversity Volume 3A and Volume 3B, Section 14: Traditional Land and Resource Use Volume 3B, Section 17: Employment and Economy	 The main objective of the Project is to divert and retain a portion of Elbow River flows during a flood and release the water in a controlled manner after the threat of flood has subsided. The reservoir will not hold a permanent pool of water. The Project will reduce the potential damaging effects of future Elbow River floods on the City of Calgary and downstream communities. Alberta Transportation will participate in discussions with Indigenous groups regarding possible monitoring opportunities. 	TN requests that Alberta Transportation revisit the McLean Creek project and other alternatives and consult with TN regarding these alternative projects. If the Project is approved, TN requests, at minimum, the following: • that TN monitors are present during all pre-construction and construction activities. • that for every tree removed, the same type of tree be replanted, by First Nation people, in proximity to where the tree was removed. • that there is support for TN to establish a community-based water monitoring program.	The Canadian Environmental Assessment Agency IR3-45 requests that Alberta Transportation provide additional information on the comparison of Mclean Creek (MC1), the Tri-River Joint Reservoir and the Micro-Watershed Impounding Concept. Once completed, Alberta Transportation will provide this response to Tsuut'ina Nation and if requested will discuss the response. To maintain the integrity of permanent structures, trees will not be permitted to grow on the diversion system, the diversion channel, or the dam structure. Temporary work spaces will be reclaimed incorporating input on native species to be used for reclamation from Tsuut'ina Nation and other Indigenous groups. Alberta Transportation will discuss possible monitoring opportunities with Tsuut'ina Nation and other Indigenous groups.



Conclusion
November 2018

3.0 CONCLUSION

In April 2018, Tsuut'ina Nation submitted the *Tsuut'ina Traditional Land Use Report for the Proposed Springbank Off-Stream Reservoir Project* to Alberta Transportation. Alberta Transportation reviewed the TLRU Report in relation to the results of the March 2018 EIA and prepared a mitigation table (Table 1) in response to the information, concerns and recommendations raised by Tsuut'ina Nation. In accordance with the terms of use for the TLRU Report, as stipulated by Tsuut'ina Nation, the specific location and nature of each traditional use site has not been disclosed.

Overall, the information provided by Tsuut'ina Nation in the TLRU Report serves to confirm the assumptions made in the March 2018 EIA regarding the nature and extent of Tsuut'ina Nation current use in the PDA. The conclusion of the TLRU assessment in Section 14 of the March 2018 EIA that the effects of the Project on TLRU will not result in the long-term loss of availability of traditional use resources or access to lands currently relied on for traditional use practices or the permanent loss of traditional use sites and areas in the RAA remains unchanged. Alberta Transportation is committed to working with Tsuut'ina Nation in order to develop mitigation strategies to avoid, reduce, or otherwise manage potential effects of the Project and to address or respond to identified concerns. The information shared by Tsuut'ina Nation will continue to be used for project planning, consultation and regulatory purposes, where applicable.

Recognizing that land within the PDA will be converted from private freehold to Crown land, Alberta Transportation will be consulting with Indigenous groups and stakeholders regarding access to, and land use planning, for the area during dry operations. Alberta Transportation invites Tsuut'ina Nation to engage in land use planning in order to participate in developing a satisfactory solution to land use within the PDA. This includes the dry reservoir area referred to as Area B, which, in the March 2018 EIA, was designated as a restricted area for operational and safety reasons with limited or no public access.



RESPONSE TO TSUUT'INA NATION TRADITIONAL LAND AND RESOURCE USE INFORMATION INCLUDING MITIGATION TABLE

References November 2018

4.0 REFERENCES

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RESPONSE TO TSUUT'INA NATION TRADITIONAL LAND AND RESOURCE USE INFORMATION INCLUDING MITIGATION TABLE

References November 2018

Tsuut'ina Nation. 2018. *Tsuut'ina Traditional Land Use Report for the Proposed Springbank Off-Stream Reservoir Project.* Prepared by Tsuut'ina Nation and Trailmark Systems. Prepared for Alberta Transportation.



Appendix 1-2 Project Engagement Records: SCRTs December 2019

APPENDIX 1-2 PROJECT ENGAGEMENT RECORDS: SCRTS



Appendix 1-2 Project Engagement Records: SCRTs December 2019



Appendix 1-2 Project Engagement Records: SCRTs December 2019

The Specific Concerns and Response Tables (SCRT) attached include specific concerns dated from August 2014 to August 2019 for the Treaty 7 nations (Attachment 1-2.1), and October 2016 to September 2019 for the eight additional Indigenous groups identified by the Canadian Environmental Assessment Agency (CEAA) (Attachment 1-2.2). Since the latest update to these tables, several meetings have been held to discuss concerns and additional information and written submissions have been provided to the Indigenous groups. An overview of these meetings and written submissions is summarized below.

Multiple Indigenous groups submitted written technical reviews and/or statements of concern (SOCs) to both CEAA and Alberta Transportation. Alberta Transportation has reviewed all submissions from Indigenous groups, including those not submitted directly to Alberta Transportation, and has supplied detailed written responses to the Indigenous groups. Alberta Transportation has offered to meet with groups to discuss these responses.

In addition to meetings and written responses, Alberta Transportation provided a detailed Project Update package to all engaged Indigenous groups that contained information such as an update on the Project status, updated maps, a description of Project components, the approvals required for the Project, and the potential impacts to treaty rights and traditional uses. Alberta Transportation has also sent correspondence with details about future land use and the IPP and requested written feedback as well as offered meetings to those groups who have not been met with yet to discuss these topics. Alberta Transportation continues to update all Indigenous groups regarding the status of the Project and the regulatory process and remains open to all meeting requests from Indigenous groups.

A chronological bulleted summary of meetings, letters/information provided, and written responses are below:

Meetings:

- Tsuut'ina Nation September 17, 2019
 - o discussed hydrogeology and groundwater concerns
- Tsuut'ina Nation October 10, 2019
 - o Elders' tour and discussion
- Kainai First Nation October 17, 2019 and November 21, 2019
 - o discussed Alberta Transportation's response to the Kainai First Nation Traditional Use Study (TUS), future land use and the draft Indigenous Participation Plan (IPP)
- Foothills Ojibway Society October 28, 2019
 - o discussed the status of the Project, and concerns related to wildlife and medicinal plants



Appendix 1-2 Project Engagement Records: SCRTs December 2019

- Louis Bull Tribe November 14, 2019
 - o discussed Alberta Transportation's response to the Louis Bull Tribe TUS, future land use, and the draft IPP
- Ermineskin Cree Nation November 18, 2019
 - o discussed future land use and the draft IPP
- Stoney Nakoda Nations November 19, 2019
 - o discussed concerns, future land use, and the draft IPP
- Samson Cree Nation November 26, 2019
 - o discussed future land use and the draft IPP
- Letters/information provided:
 - Letter inviting participation in land use planning and the draft IPP October 22, 2019
 - Update on submission regarding CEAA Conformity Package 1 November 5, 2019
 - Project Update package November 8, 2019
 - Land use draft guidelines and associated documents -November 12 to 15, 2019
 - Draft IPP November 12 to 15, 2019
- Written responses:
 - Technical reviews/SOCs:
 - o Samson Cree Nation November 2019
 - o Louis Bull Tribe December 2019
 - o Piikani Nation December 2019
 - o Montana First Nation December 2019
 - o Blood Tribe/Káínai First Nation December 2019
 - o Tsuut'ina Nation December 2019
 - o Ermineskin Cree Nation December 2019



Attachment 1-2-1 Treaty 7 Indigenous Groups December 2019

ATTACHMENT 1-2.1 TREATY 7 INDIGENOUS GROUPS



Attachment 1-2-1 Treaty 7 Indigenous Groups December 2019



Springbank SR1 - Specific Concerns and Response Table

First Nation or Metis Settlement: BLOOD TRIBE/KAINAI

Date: AUGUST 2014 - AUGUST 2019

Document or Meeting Reference	2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. First Nation/Metis Settlement response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
Letter from JFK Law Corporation to Deputy Minister Barry Day on behalf of the Blood Tribe/Kainai June 25, 2018 Letter from JFK Law Corporation to DEMA Land Services June 25, 2018 Springbank EIS Technical comments – Ermineskin Cree Nation and Blood Tribe.	Impacts to health Impacts to traditional territory Aboriginal rights Treaty rights	Transportation has not made adequate efforts to obtain information about: an assessment of country foods relied upon by the Blood Tribe/Kainai; traditional territory of Blood Tribe/Kainai; impacts to drinking water and recreational waters by Blood Tribe/Kainai; and potential health and socioeconomic effects of the project on Blood Tribe/Kainai. The proponent has failed to adequately assess the impacts to the current use of lands for traditional purposes and potential impacts to the Blood Tribe/Kainai's rights. The proponent has failed to understand the scope of Treaty rights held by the Blood Tribe/Kainai. No meaningful efforts have been made to gather information from the Blood Tribe/Kainai. Proponent has failed to gather baseline information regarding the location of lands which the Blood Tribe/Kainai access to exercise Treaty rights.	In a letter dated January 26, 2018, Alberta Transportation described the timelines for the EIA submission, indicating that the timelines had been extended by 60 days to undertake further Indigenous engagement activities. Alberta Transportation also proposed a workshop to discuss traditional land and resource use (TLRU) and obtain feedback from the Blood Tribe/Kainai. Alberta Transportation also welcomed written feedback on the updated Environmental Impact Assessment (EIA) TLRU sections (Volumes 3A and 3B), which were provided February 5, 2018. In a letter dated January 29, 2018, Alberta Justice responded to the January 5, 2018 letter, referencing the January 26, 2018 letter and Alberta Transportation's offer to hold a workshop. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-7 SR1 Project Specific Concerns and Responses - Kainai First Nation</i> from the March 2018 EIA: Alberta Transportation has been engaged with the Indigenous groups since 2014 to understand how the Project potentially impacts rights, interests and traditional uses including offering and funding site visits and TUS studies. Alberta Transportation funded and provided the opportunity for the Blood Tribe/Kainai to visit the site. Nation members visited the site on 13 days. An interim TUS report was delivered by the Blood Tribe/Kainai on March 13, 2017. The TUS study was used in the EIA. However, Permission to use the spatial information from the TUS study has not been received by Alberta Transportation, therefore the information regarding sites and areas has been generalized for use in the EIA and exact locations, including those in the project development area, are not provided. The potential effects to country foods, drinking water and health have been assessed within the EIA, and were included in the draft TLRU section (Volumes 3A and 3B) sent to Blood Tribe/Kainai for review and comment on February 5, 2018. Effects to socioeconomic conditions have been incl	None at this time.	None at this time.	Ongoing: Working with First Nation At the meeting held on August 7, 2018, Alberta Transportation committed to providing written responses to the Blood Tribe/Kainai's submissions to CEAA. As of August 31, 2019, Alberta Transportation has provided a response to Blood Tribe/Kainai's TUS report, but has not provided a response to their technical submission; however, it will be forthcoming in 2019.

	Document or Meeting Reference	2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern Agency (CEAA) IR2-01, IR2-02, and IR2-08. The Blood Tribe/Kainai has not provided a response.	5. First Nation/Metis Settlement response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
2	November 25, 2014 Initial SR1 Meeting held with Mike Oka, Blood Tribe/Kainai Consultation Coordinator, Stand Off Alberta.	Traditional Knowledge Medicinal Plants	The Blood Tribe/Kainai indicated that they would like to see the EIA and a traditional knowledge study done at the same time. The Blood Tribe/Kainai indicated they would like to complete a Traditional Use Study (TUS) of the SR1 Project Area. The Blood Tribe/Kainai wanted to have their Elders involved when medicinal plants and traditional knowledge is being assessed.	Alberta Transportation provided funding for the Blood Tribe/Kainai to conduct a TUS on the project lands (privately and publicly held). Blood Tribe/Kainai conducted a TUS (14 field days) in summer/fall of 2016. The Blood Tribe/Kainai delivered a Joint Interim TUS Report on March 13, 2017 that was co-authored with the Siksika Nation. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-7 SR1 Project Specific Concerns and Responses - Kainai First Nation</i> from the March 2018 EIA: Alberta Transportation provided funding for the Kainai First Nation to conduct a TUS on the project lands. An interim report was delivered by the Kainai First Nation in March 2017. The TUS study was used in the EIA.	At the meeting held on January 18, 2017, the Blood Tribe/Kainai expressed displeasure that their knowledge holders were not included in the environmental impact studies. At the meeting held on January 18, 2017 meeting, the Blood Tribe/Kainai stated that their TUS is not the same as a traditional knowledge study, and that they would like to do this if funding was provided.	None at this time.	Ongoing: Working with First Nation
3	June 25, 2018 Springbank Offstream Reservoir Project EIS Technical Review and Information Request by PGL Environmental Consultations, dated June 15, 2018. June 25, 2018 Springbank EIS Technical comments – Ermineskin Cree Nation and Blood Tribe June 25, 2018 Blood Tribe/Kainai Traditional Knowledge, Land, and Resource Use Study: Springbank Off-Stream Reservoir Project by Oak Road Concepts Inc, dated June 2018.	Traditional use	Clarify how TLRU information was incorporated into the analysis of effects. TUS reports for all First Nations should be incorporated into the baseline report and effects assessment. Incorporate information from recent Traditional Land Use report submitted by the Blood Tribe/Kainai. Project-specific information on Blood Tribe/Kainai TLRU is too narrow to make the assessment valid. Lack of historical context on the nature of Blood Tribe/Kainai's connection to the project areas.	Alberta Transportation responded to the Blood Tribe/Kainai's TUS report on August 9, 2019. The TUS report provided more detailed information about the Blood Tribe/Kainai's use of the project area. As the TUS report was provided after the filing of the March 2018 EIA, TLRU information, concerns, and recommendations will be used for project planning, consultation and regulatory purposes, where applicable. The TUS report was thoroughly reviewed and then placed into the context of the March 2018 EIA to form the mitigation table included in Alberta Transportation's response.	None at this time.	None at this time.	Ongoing: Working with First Nation
4	August 7, 2018 Meeting between the Blood Tribe/Kainai, Alberta Transportation, and Stantec.	Traditional use	The Blood Tribe/Kainai do not agree with how traditional use has been assessed in the EIA.	At the meeting held on August 7, 2018, Alberta Transportation committed to providing written responses to the Blood Tribe/Kainai's submissions to CEAA, including the traditional use information in the <i>Traditional Knowledge, Land, and Resource Use Study: Springbank Off-Stream Reservoir Project</i> report (TLRU report). Alberta Transportation responded to the Blood Tribe/Kainai's TUS report on August 9, 2019. The TUS report was thoroughly reviewed and then placed into the context of the March 2018 EIA to form the mitigation table included in Alberta Transportation's response.	None at this time.	None at this time.	Ongoing: Working with First Nation

	1. Document or Meeting Reference	2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. First Nation/Metis Settlement response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
5	June 25, 2018 Letter from JFK Law corporation to CEAA, dated June 15, 2018	Traditional use	The Proponent should negotiate with Blood Tribe/Kainai to provide resources and reasonable timelines to gather an adequate baseline of Blood Tribe/Kainai Traditional Knowledge Use (TKU) in the Project areas and produce a comprehensive assessment of potential impacts and a determination of significance. Upon completion of the community-based assessment of potential impacts to Blood Tribe/Kainai TKU, the Proponent should meet with Blood Tribe/Kainai representatives to discuss concerns and address potential mitigation and compensation measures as recommended by the report.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
6	November 25, 2014 Initial SR1 Meeting held with Mike Oka, Blood Tribe/Kainai Consultation Coordinator, Stand Off Alberta. May 16, 2016 Blood Tribe/Kainai Letter to Alberta Transportation (DEMA) in support of their TUS budget request.	Traditional Knowledge Confidentiality	Blood Tribe/Kainai were concerned that if they share traditional knowledge with the Crown on SR1 they may lose ownership of that information. Concerns expressed over how the traditional knowledge the Blood Tribe/Kainai Elders or technicians provide will be used, and that the knowledge needs to be protected.	At the meeting held on January 18, 2017 meeting, Stantec stated that they could include input on traditional ecological knowledge and land use into the EIA and report Indigenous findings subject to confidentiality issues. In an email to the Blood Tribe/Kainai on January 30, 2017, Alberta Transportation stated they will accept an abbreviated TUS rather than the full report, if the Blood Tribe/Kainai would prefer to keep some knowledge internal. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-7 SR1 Project Specific Concerns and Responses - Kainai First Nation</i> from the March 2018 EIA: A joint interim TUS report was delivered by Kainai and Siksika First Nations in March 2017. The TUS study was used in the EIA. However, permission to use the spatial information from the TUS study has not been received by Alberta Transportation, therefore the information regarding sites and areas has been generalized for use in the EIA and exact locations, including those in the project development area, are not provided.	At the meeting held on January 18, 2017 meeting, the Blood Tribe/Kainai responded to Stantec that this was a start, and better communication about traditional knowledge was needed.	None at this time.	Ongoing: Working with First Nation
7	September 15, 2016 Alberta Transportation meeting with the Blood Tribe/Kainai, Piikani Nation, and Siksika Nation at Head Smashed In Buffalo Jump	Traditional Territory	The Blood Tribe/Kainai questioned the additional indigenous groups that had been included in the CEAA guidelines, as historically this area was Blackfoot territory.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-7 SR1 Project Specific Concerns and Responses - Kainai First Nation</i> from the March 2018 EIA: The list of Indigenous groups required for engagement on the Project was provided to Alberta Transportation by the Canadian Environmental Assessment Agency (CEAA).	None at this time.	None at this time.	Ongoing: Working with First Nation.

	2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. First Nation/Metis Settlement response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
Initial SR1 Meeting held with Mike Oka, Blood Tribe/Kainai Consultation Coordinator, Stand Off Alberta. July 11-14, 2016 Site Visits September 15, 2016 Alberta Transportation meeting with the Blood Tribe/Kainai, Piikani Nation, and Siksika Nation at Head Smashed In Buffalo Jump January 18, 2017 Alberta Transportation meeting with the Blood Tribe/Kainai, Piikani Nation, and Siksika Nation in Lethbridge, Alberta. January 31, 2017 Email from Blood Tribe/Kainai to DEMA March 13, 2017 The Blood Tribe/Kainai delivered a Joint Interim Traditional Use Report that was co-authored with the Siksika Nation	Historical Resources	If tipi rings are disturbed by SR1 they will have no meaning. Construction of SR1 may disturb historical resources. The Blood Tribe/Kainai Elders and Technicians on inspection of Property #21 along the "unnamed creek" identified what they believed to be tipi rings on the north side of the unnamed creek. Blood Tribe/Kainai expressed concern that the tipi rings are potentially located adjacent to the SR1 reservoir outfall along an unnamed creek into the Elbow River. The Blood Tribe/Kainai Elders and consultation technicians reinspected the areas on SR1 properties #4, #21, and #24. The area of most interest was near the dry reservoir in locations that they identified as a wintering ground with many tipi rings. The Blood Tribe/Kainai are concerned the evidence of these wintering grounds and tipi rings will be lost if this area is excavated for the SR1 outfall to drain the dry reservoir after a flood event. Blood Tribe/Kainai Elders and Technicians re-visited Property #1 and walked around the old Stoney (North South) Trail. Concerns expressed about how construction might impact former campsites, which include tipi rings and other cultural artifacts from Blackfoot history. Concerns were raised related to impacts on cultural sites by the SR1 during and after construction.	In an email on January 7, 2017, Alberta Transportation requested the Blood Tribe/Kainai's TUS prior to the January 18, 2017 meeting, so they could review any detailed site-specific concerns and be prepared to discuss potential mitigation measures. Alberta Transportation brought Stantec (Alberta Transportation's consultant) to the January 18, 2017 meeting to share information on their EIA field data collection program and methodologies and to gain an understanding of the traditional knowledge and traditional uses component required in the EIA. The Blood Tribe/Kainai delivered a Joint Interim TUS Report on March 13, 2017 that was co-authored with the Siksika Nation. Alberta Transportation responded in a letter dated May 10, 2017, and indicated that cultural and historical resource concerns had been forwarded to Alberta Culture and Tourism (ACT). Also stated that concerns from the TUS would be incorporated into and addressed in the EIA. The TUS report was used to inform the TLRU sections of the EIA (Volumes 3A and 3B). Alberta Transportation responded to the Blood Tribe/Kainai's March 13, 2017 TUS in a letter dated May 10, 2017: Alberta Transportation forwarded the concerns to ACT, and ACT's Treaty 7 contact would be able to discuss the concerns further. On March 23, 2018, Aliberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-7 SR1 Project Specific Concerns and Responses - Kainai First Nation</i> from the March 2018 EIA: Project activities within the project development area would disturb 11 precontact period and 11 historic period archaeological sites. No traditional land use sites of very high heritage value, such as spiritual sites or human burials, have been identified within the project development area. Identified sites include isolated finds, artifact scatters, campsites and historic remains such as homesteads and a school. Effects to historical resources are detailed in the EIA, Volume 3A and 3B, section 13. ACT independently assesses the her	At the meeting held on January 18, 2017 the Blood Tribe/Kainai explained that traditional knowledge is different from traditional use. Blood Tribe/Kainai has not participated in Traditional Knowledge as of yet. They need to be on the ground with the people doing the assessment as it is hard to incorporate Traditional Knowledge into the report. Traditional Use has been assessed and a report is being drafted. At the meeting held on August 7, 2018, Blood Tribe/Kainai remain concerned about cultural sites and features, and how these sites will be protected and/or mitigated. In Blood Tribe/Kainai's view, Alberta Transportation's response of following all the requirements for the protection of historic resources as determined by ACT is not adequate. At the meeting held on August 7, 2018, the Blood Tribe/Kainai committed to providing Alberta Transportation with the GPS coordinates for the sites identified in their June 2018 TUS. To date, Blood Tribe/Kainai has not provided the GPS data.	None at this time.	Ongoing: Working with First Nation

	1. Document or Meeting Reference	2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. First Nation/Metis Settlement response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
			The Blood Tribe/Kainai expressed concern about their history being erased due to growth and development in the province, and how will this be accommodated. Expressed concerns related to ceremonial locations and impacts to Blackfoot cultural sites.	In emails sent September 28, 2018, November 14, 2018, and August 8, 2019, and in a letter from Alberta Justice to Blood Tribe/Kainai's legal counsel dated February 7, 2019 Alberta Transportation requested the GPS data again. Alberta Transportation responded to the Blood Tribe/Kainai's TUS report on August 9, 2019. Alberta Transportation will minimize disturbance to cultural and spiritual sites and subsurface impacts, and develop a protocol for recovery, collection, reporting on, and possible repatriation of artifacts found in consultation with Indigenous groups, which could include flagging, fencing, or providing signage of sites to prevent disturbance during construction. Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction access management.			
9	May 16, 2016 Blood Tribe/Kainai Letter to Alberta Transportation (DEMA) in support of their TUS budget request.	Historical Resources Flood Debris	Concerns were expressed about debris and sediment that may be left in the reservoir after a flood, which would cover evidence of Blackfoot people being there.	The Blood Tribe/Kainai delivered a Joint Interim TUS Report on March 13, 2017 that was co-authored with the Siksika Nation. Alberta Transportation responded in a letter dated May 10, 2017, and indicated that cultural and historical resource concerns had been forwarded to Alberta Culture and Tourism (ACT). Also stated that concerns from the TUS would be incorporated into and addressed in the EIA. The TUS report was used to inform the TLRU sections of the EIA (Volumes 3A and 3B). On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-7 SR1 Project Specific Concerns and Responses - Kainai First Nation</i> from the March 2018 EIA: It is anticipated that sediment and debris will enter the reservoir area during a flood. The volume of sediment and debris will depend upon the size of the flood. Debris that has the potential to affect the functioning of the reservoir will be removed after a flood event. ACT independently assesses the heritage value of historic resources, determines the need for, and scope of, any avoidance or mitigation measures, and issues Project approval under the <i>Historical Resources Act</i> . If the Project is approved Alberta Transportation will follow all the requirements for the protection of historic resources as determined by ACT. At the meeting held on August 7, 2018, Alberta Transportation committed to cross reference the sites in the Blood Tribe/Kainai's June 2018 TUS and those identified in the HRIA; to confirm the risks to these sites; and propose possible mitigation measures for these sites. Alberta Transportation has committed to overlay the GPS coordinates with the PDA to determine sites at risk. In emails sent September 28, 2018, November 14, 2018, and August 8,	At the meeting held on August 7, 2018, Blood Tribe/Kainai remain concerned about cultural sites and features, and how these sites will be protected and/or mitigated. In Blood Tribe/Kainai's view, Alberta Transportation's response of following all the requirements for the protection of historic resources as determined by ACT is not adequate. At the meeting held on August 7, 2018, the Blood Tribe/Kainai committed to providing Alberta Transportation with the GPS coordinates for the sites identified in their June 2018 TUS. To date, Blood Tribe/Kainai has not provided the GPS data.	None at this time.	Ongoing: Working with First Nation

	1. Document or Meeting Reference	2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. First Nation/Metis Settlement response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
				counsel dated February 7, 2019 Alberta Transportation requested the GPS data again.			
				In a letter dated June 18, 2019, Alberta Transportation provided an update on the debris deflector. Alberta Transportation received concerns regarding debris management during the Indigenous consultation and stakeholder engagement programs for the Project including concerns related to debris build up in the off-stream reservoir. The proposed debris deflector mitigates these concerns by reducing the potential for large debris entering the off-stream reservoir.			
10	May 16, 2016	Historical Resources	Concerns expressed on the loss	On March 23, 2018, Alberta Transportation sent detailed responses to	At the meeting held on August 7, 2018,	None at this time.	Ongoing: Working with
	Blood Tribe/Kainai Letter to Alberta Transportation (DEMA) in support of their TUS budget request.	Medicinal Plants	of cultural sites such as tipi rings, effigies of different sorts, medicinal plants. During a visit to Property #1	specific concerns raised to date by providing a copy of <i>Table 7-7 SR1 Project Specific Concerns and Responses - Kainai First Nation</i> from the March 2018 EIA: Project activities within the project development area would disturb 11 precontact period and 11 historic period archaeological sites. No traditional land use sites of very high heritage value, such as	Blood Tribe/Kainai remain concerned about cultural sites and features, and how these sites will be protected and/or mitigated. In Blood Tribe/Kainai's view, Alberta Transportation's response of		First Nation
	June 27 – July 1, 2016		(June 28, 2016), the landowner showed the Blood Tribe/Kainai	spiritual sites or human burials, have been identified within the project	following all the requirements for the		
	Site Visits		Elders the First Nation's Trail (North South Trail), and discussed medicinal value of some of the plants on the property. The landowner also showed the Elders the location of an old campsite for First Nations travelling along the Trail.	on's Trail and I value of on the wner also he location or First and son's Trail and I value of on the wner also he location or First and location on the wner also he location or First and development area. Identified sites include isolated finds, artifact scatters, campsites and historic remains such as homesteads and a school. Effects to historical resources are detailed in the EIA, Volume 3A and 3B, section 13. ACT independently assesses the heritage value of historic resources, determines the need for, and scope of, any avoidance or mitigation measures, and issues Project approval under the <i>Historical Resources</i>	protection of historic resources as determined by ACT is not adequate. At the meeting held on August 7, 2018, the Blood Tribe/Kainai committed to providing Alberta Transportation with the GPS coordinates for the sites identified in their June 2018 TUS. To date, the Blood Tribe/Kainai has not provided the GPS data.		
				Vegetation will be cleared from the project development area during construction. However, effects of the Project are not anticipated to result in the loss of traditionally used species in the local assessment area. The effects on plants and traditional use are assessed in the EIA in Volume 3A and 3B, sections 10 and 14.			
				Alberta Transportation would provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction.			
				At the meeting held on August 7, 2018, Alberta Transportation committed to cross reference the sites in the Blood Tribe/Kainai's June 2018 TUS and those identified in the HRIA; to confirm the risks to these sites; and propose possible mitigation measures for these sites. Alberta Transportation has committed to overlay the GPS coordinates with the PDA to determine sites at risk.			
				In emails sent September 28, 2018, November 14, 2018, and August 8, 2019, and in a letter from Alberta Justice to Blood Tribe/Kainai's legal counsel dated February 7, 2019 Alberta Transportation requested the GPS data again.			
				Alberta Transportation responded to the Blood Tribe/Kainai's TUS report on August 9, 2019. Alberta Transportation will minimize disturbance to			

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				cultural and spiritual sites and subsurface impacts, and develop a protocol for recovery, collection, reporting on, and possible repatriation of artifacts found in consultation with Indigenous groups, which could include flagging, fencing, or providing signage of sites to prevent disturbance during construction.			
				Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction access management.			
11	June 25, 2018	Historic resources	Risks and impacts to cultural	None at this time.	None at this time.	None at this time.	Ongoing: Working with
	Springbank EIS Technical comments – Ermineskin Cree Nation and Blood Tribe.		heritage sites is not clear, and mitigation measures do not provide substantive information.				First Nation
12	June 25, 2018	Historical resources	Effects to sites of	At the meeting held on August 7, 2018, Alberta Transportation committed	At the meeting held on August 7, 2018,	None at this time.	Ongoing: Working with
	Blood Tribe/Kainai Traditional Knowledge, Land, and Resource Use Study: Springbank Off-Stream Reservoir Project by Oak Road Concepts Inc, dated June 2018.	cultural sites d, and study: Stream ct by Oak	spiritual, ceremonial, and cultural importance within the project area, as well as loss of access to these sites. These sites include traditional Blackfoot camps and trails. Anything short of avoidance would not be effective mitigation.	to cross reference the sites in the Blood Tribe/Kainai's June 2018 TUS and those identified in the HRIA; to confirm the risks to these sites; and propose possible mitigation measures for these sites. Alberta Transportation has committed to overlay the GPS coordinates with the PDA to determine sites at risk. In emails sent September 28, 2018, November 14, 2018, and August 8, 2019, and in a letter from Alberta Justice to Blood Tribe/Kainai's legal counsel dated February 7, 2019 Alberta Transportation requested the GPS data again.	the Blood Tribe/Kainai committed to providing Alberta Transportation with the GPS coordinates for the sites identified in their June 2018 TUS. To date, the Blood Tribe/Kainai has not provided the GPS data.		First Nation
			Absence of maps depicting location of sites of potential historical, archaeological, or cultural interest to Blood Tribe/Kainai's current use of the lands. Recommendation: Develop avoidance or redesign measures to ensure Blood Tribe/Kainai cultural properties, ceremonial sites, and identified traditional camping areas and associated material features remain intact and accessible.	Alberta Transportation responded to the Blood Tribe/Kainai's TUS report on August 9, 2019. A portion of the North-South Trail is located within the Project construction area and it is anticipated that this site will be affected by construction of the floodplain berm. The NWMP Trail is located within the off-stream reservoir and it is not anticipated to be affected by Project construction activities. The trail will be affected in the flood and post-flood operation phase due to direct physical disturbance associated with reservoir filling or draining, damage from sediment deposition or debris, or cleanup. Construction of the Project and fencing of infrastructure will restrict access to certain areas of the Project, including portions of the hunting access/route identified by Blood Tribe/Kainai. The traditional camp associated with the North-South Trail is located within the Project construction area and it is anticipated that this site will be affected by construction of the floodplain berm. The Our Lady of Peace Mission site and the traditional camp identified to the east are located outside the PDA and are not anticipated to be directly affected by the Project. The traditional camp associated with the NWMP Trail is located within the off-stream reservoir and is not anticipated to be affected by Project construction activities. Flood and post-flood operation will affect the site due to direct physical disturbance associated with reservoir filling or draining, damage from sediment deposition or debris, or cleanup. The traditional winter camp and associated features identified along the banks			

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				of Val Vista Creek is anticipated to be affected by construction of the off- stream dam.			
				Alberta Transportation will minimize disturbance to cultural and spiritual sites and subsurface impacts, and develop a protocol for recovery, collection, reporting on, and possible repatriation of artifacts found in consultation with Indigenous groups, which could include flagging, fencing, or providing signage of sites to prevent disturbance during construction.			
				Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction access management.			
1;	November 25, 2014 Initial SR1 Meeting held with Mike Oka, Blood Tribe/Kainai Consultation Coordinator, Stand Off Alberta.	Human remains	Construction of SR1 may disturb human remains.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-7 SR1 Project Specific Concerns and Responses - Kainai First Nation</i> from the March 2018 EIA: Should any chance find of human remains be made during construction, all construction will immediately cease in the area, the site will be secured and all provincial regulations regarding the chance find of human remains will be followed.	None at this time.	None at this time.	Ongoing: Working with First Nation
14	Email exchange between Blood Tribe/Kainai and DEMA	Historical Resources	Blood Tribe/Kainai stated that the Department of Transportation should begin to think about mitigation measures for the loss of sites within SR1, which would be lost in the first big flood.	The issue of mitigation measures was added to the January 18, 2017 meeting agenda. The meeting agenda was sent to the Blood Tribe/Kainai for review on January 16, 2017. At the meeting held on January 18, 2017, Alberta Transportation stated that once they received the TUS and the site-specific concerns their experts can start working on potential mitigation. The Blood Tribe/Kainai delivered a Joint Interim TUS Report on March 13, 2017 that was co-authored with the Siksika Nation. The TUS was used to inform the TLRU sections of the EIA (Volumes 3A and 3B). On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-7 SR1 Project Specific Concerns and Responses - Kainai First Nation</i> from the March 2018 EIA: Project activities within the project development area would disturb 11 precontact period and 11 historic period archaeological sites. No traditional land use sites of very high heritage value, such as spiritual sites or human burials have been identified within the project development area. Identified sites include isolated finds, artifact scatters, campsites and historic remains such as homesteads and a school. Effects to historical resources are detailed in the EIA, Volume 3A and 3B, section 13. ACT independently assesses the heritage value of historic resources, determines the need for, and scope of, any avoidance or mitigation measures, and issues Project approval under the <i>Historical Resources Act</i> . If the Project is approved Alberta Transportation will follow all the requirements for the protection of historic resources as determined by ACT.	At the meeting held on August 7, 2018, Blood Tribe/Kainai remain concerned about cultural sites and features, and how these sites will be protected and/or mitigated. In Blood Tribe/Kainai's view, Alberta Transportation's response of following all the requirements for the protection of historic resources as determined by ACT is not adequate. At the meeting held on August 7, 2018, the Blood Tribe/Kainai committed to providing Alberta Transportation with the GPS coordinates for the sites identified in their June 2018 TUS. To date, the Blood Tribe/Kainai has not provided the GPS data.	None at this time.	Ongoing: Working with First Nation

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				At the meeting held on August 7, 2018, Alberta Transportation committed to cross reference the sites in the Blood Tribe/Kainai's June 2018 TUS and those identified in the HRIA; to confirm the risks to these sites; and propose possible mitigation measures for these sites. Alberta Transportation has committed to overlay the GPS coordinates with the PDA to determine sites at risk.			
				In emails sent September 28, 2018, November 14, 2018, and August 8, 2019, and in a letter from Alberta Justice to Blood Tribe/Kainai's legal counsel dated February 7, 2019 Alberta Transportation requested the GPS data again.			
				Alberta Transportation responded to the Blood Tribe/Kainai's TUS report on August 9, 2019. Alberta Transportation will minimize disturbance to cultural and spiritual sites and subsurface impacts, and develop a protocol for recovery, collection, reporting on, and possible repatriation of artifacts found in consultation with Indigenous groups, which could include flagging, fencing, or providing signage of sites to prevent disturbance during construction.			
				Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction access management.			
15	September 15, 2016 Alberta Transportation meeting with the Blood Tribe/Kainai, Piikani Nation, and Siksika Nation at Head Smashed In Buffalo Jump January 18, 2017 Alberta Transportation meeting with the Blood Tribe/Kainai, Piikani Nation, and Siksika Nation in Lethbridge, Alberta. March 13, 2017 The Blood Tribe/Kainai delivered a Joint Interim Traditional Use Report that was co-authored with the Siksika Nation	Information sharing Historical Resources	Blood Tribe/Kainai requested archaeological information gathered during the SR-1 site investigations be shared with the Blood Tribe/Kainai. Lack of sharing archaeological data for SR1 is a concern. Requested Historical Resources Impact Assessment (HRIA) and archaeological information.	At the meeting held on January 18, 2017, Alberta Transportation indicated that the impacts to historical resources is under ACT's jurisdiction, and Stantec/Alberta Transportation are not able to provide that information at this time. Requests for the archaeological studies would have to go through ACT. Should ACT approve the request for the information, Alberta Transportation could then share it. In a letter dated May 10, 2017, Alberta Transportation indicated they had forwarded Blood Tribe/Kainai's archaeological concerns to ACT, and the Treaty 7 contact would be available to them to discuss their concerns. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-7 SR1 Project Specific Concerns and Responses - Kainai First Nation</i> from the March 2018 EIA: Alberta Transportation is not authorized to disclose the information requested directly to the Blood Tribe/Kainai. Alberta Transportation contacted ACT and obtained the Treaty 7 representative contact details and passed those details to the Blood Tribe/Kainai. The Blood Tribe/Kainai can make their request for the information directly to this individual. In an email on August 21, 2018, Alberta Transportation provided the contact information for the Treaty 7 contact at ACT again.	In an email on August 21, 2018, the Blood Tribe/Kainai requested the HRIA from ACT.	Alberta Transportation cannot provide the requested information. Alberta Transportation provided the contact information for the Treaty 7 contact at ACT to whom the Blood Tribe/Kainai can make the request.	No further action required.
16	March 13, 2017 The Blood Tribe/Kainai delivered a Joint Interim Traditional Use Report that	Historical resources	Desire to further study Blackfoot Traditional Camp Site in creek valley. A joint archaeological and TUS should be undertaken	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation

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	was co-authored with the Siksika Nation		of the creek valley to identify possible burial sites.				
17	March 13, 2017 The Blood Tribe/Kainai delivered a Joint Interim Traditional Use Report that was co-authored with the Siksika Nation	Historical resources Traditional use	Due to likelihood that there are Blackfoot traditional use and cultural sites throughout the creek valley, it is suggested that the natural creek channel should not be used as an outflow channel.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
18	September 15, 2016 Alberta Transportation meeting with the Blood Tribe/Kainai, Piikani Nation, and Siksika Nation at Head Smashed In Buffalo Jump	Wildlife Vegetation Information sharing	Blood Tribe/Kainai requested information on Species at Risk (Wildlife and Plants) gathered during the SR-1 investigations	Possible impacts and mitigation measures related to concerns raised by the Blood Tribe/Kainai (Plant and Wildlife Species at Risk) will be addressed as part of the EIA. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-7 SR1 Project Specific Concerns and Responses - Kainai First Nation</i> from the March 2018 EIA: Twenty-six species of management concern, including 15 birds and 11 mammals were observed during wildlife field surveys between 2015 and 2017. No plant species at risk were recorded during field surveys. Results of the field work are provided in the EIA; Volume 4, Appendix H and L, and Vol 3A sections 10 and 11.	None at this time.	None at this time.	Ongoing: Working with First Nation
19	January 18, 2017 Alberta Transportation meeting with the Blood Tribe/Kainai, Piikani Nation, and Siksika Nation in Lethbridge, Alberta	Wildlife	Concerns expressed on SR1 construction impact to animal homes, such as the beavers.	Possible impacts and mitigation measures related to concerns raised by the Blood Tribe/Kainai (wildlife) will be addressed as part of the EIA. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-7 SR1 Project Specific Concerns and Responses - Kainai First Nation</i> from the March 2018 EIA: No beaver dams were identified during surveys conducted for the Project. It is not anticipated that the Project would affect beaver dams. In the event of a flood, effects to beaver dams may occur whether the Project is in place or not. The effects of the Project to wildlife and aquatic species are discussed in the EIA Volumes 3A and 3B, sections 8 and 11. Alberta Transportation responded to the Blood Tribe/Kainai's TUS report on August 9, 2019. There were no beaver dams or lodges identified within the construction footprint for the Project during the baseline wildlife surveys completed within the LAA and, as a result, Alberta Transportation is not expecting to remove any dams or lodges. If an active beaver dam is identified within the construction footprint at a later date, mitigation for dam removal will be developed with the appropriate agencies (e.g., AEP) and the relevant permit(s) obtained, as required.	None at this time.	None at this time.	Ongoing: Working with First Nation
20	June 25, 2018 Springbank Offstream Reservoir Project EIS Technical Review and Information Request by PGL	Wildlife Traditional use	Provide regional data and traditional use data as context for the baseline study results for elk. Potential for project to influence elk movement patterns.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation

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	Environmental Consultations, dated June 15, 2018.		Justify the 250 metre and 500 metre road buffers for elk.				
			More detail needed regarding population trends and threats to elk.				
			Justify why a 15 kilometre buffer of the project area was chosen for the RAA for wildlife.				
21	June 25, 2018	Wildlife	Location of remote cameras not	None at this time.	None at this time.	None at this time.	Ongoing: Working with
	Springbank Offstream Reservoir Project EIS Technical Review and Information Request by PGL Environmental Consultations, dated June 15, 2018.		provided.				First Nation
22	June 25, 2018 Springbank Offstream Reservoir Project EIS Technical Review and	Wildlife	Explain why elevation and aspect was not included in the grizzly bear habitat suitability model.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
	Information Request by PGL Environmental Consultations, dated June 15, 2018.		Explain why a 500 metre buffer of industrial developments was used in the grizzly bear habitat suitability model.				
			Clarify why average home range for female grizzly bear was chosen as the RAA for vegetation and wetlands.				
23	June 25, 2018	Wildlife habitat	Recommend a habitat compensation plan be	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
	Springbank Offstream Reservoir Project EIS Technical Review and Information Request by PGL Environmental Consultations, dated June 15, 2018.		developed.				1 list Nation
24	June 25, 2018	Wildlife	Provide details on monitoring	None at this time.	None at this time.	None at this time.	Ongoing: Working with
	Springbank Offstream Reservoir Project EIS Technical Review and Information Request by PGL Environmental Consultations, dated June 15, 2018.		program to monitor project effects on wildlife.				First Nation
25	June 25, 2018	Wildlife	Concerned that the conclusion of significance is discussed at a	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation

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	Springbank Offstream Reservoir Project EIS Technical Review and		high level for wildlife and is not done for each species.				
	Information Request by PGL Environmental Consultations, dated June 15, 2018.		Definition of significance should include wildlife habitat and biodiversity.				
			Summary of the wildlife and biodiversity cumulative effects needed.				
26	June 25, 2018	Wildlife	Concerns regarding assessment	In a letter dated June 18, 2019, Alberta Transportation indicated they had	None at this time.	None at this time.	Ongoing: Working with
	Springbank EIS Technical comments – Ermineskin Cree	Hunting	of wildlife, especially elk, upon which the Blood Tribe/Kainai depend for hunting.	created a draft post-construction land use document for the SR1 project that provides draft principles of future land use for the Project Development Area (PDA). The primary use of all lands within the PDA,			First Nation
	Nation and Blood Tribe.		Concerns regarding wildlife,	including the land use area (LUA), is for flood mitigation. In light of the			
	June 25, 2018 Blood Tribe/Kainai Traditional		including those that are hunted in the project area.	primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses such as vegetation management and			
	Knowledge, Land, and		Loss of use of high quality	First Nations' traditional activities (including the exercise of treaty rights such as hunting) will be allowed within the LUA. As such, the potential for			
	Resource Use Study: Springbank Off-Stream		hunting area and bird hunting area.	increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35			
	Reservoir Project by Oak Road Concepts Inc, dated		Prior to construction of the	rights and to engage in traditional uses.			
	June 2018.		Project, the Proponent should	Alberta Transportation responded to the Blood Tribe/Kainai's TUS report			
	June 25, 2018		invite Blood Tribe/Kainai land users to hunt in the PDA,	on August 9, 2019. The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration			
	Letter from JFK Law corporation to CEAA, dated		particularly for big game such as	of habitat during construction, affecting 168 ha associated with permanent			
	June 15, 2018		moose, elk, and deer.	Project infrastructure, with the remaining area (566 ha) represented by temporary workspace which will be reclaimed following construction.			
				Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of			
				wildlife in the RAA is unlikely (see Volume 3A, Section 11.4.2).			
				Portions of the hunting areas identified by the Blood Tribe/Kainai that are			
				located within the designated construction footprint will be directly affected by construction activities and fencing of infrastructure will restrict access to			
				certain areas of the Project. Mitigation measures will be implemented to reduce potential adverse effects of the Project on current use sites and			
				areas:			
				 Alberta Transportation will notify Indigenous groups regarding Project activities and schedules, including provision of Project 			
				maps and design components, and discuss key traditional			
				harvesting periods.Alberta Transportation will maintain access to identified current			
				use sites (located outside of the designated construction and			
				project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-			
				construction land access management.			
				The construction and management of the off-stream reservoir presents a unique opportunity with the conversion of private land to Crown land for			
				future use by First Nations and stakeholders. Through the engagement			

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				process that included feedback from Indigenous groups, a draft principles of future land use for the Project has been developed. The primary use of all lands within the PDA is for flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses include traditional activities, including the exercise of treaty rights such as hunting will be allowed to occur within the designated LUA. Alberta Transportation invites Blood Tribe/Kainai to participate in the engagement process for the LUA.			
27	June 25, 2018 Springbank Offstream Reservoir Project EIS Technical Review and Information Request by PGL Environmental Consultations, dated June 15, 2018.	Birds	Explain using a seven day window for conducting a nest survey.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
28	October 29, 2018 Blood Tribe/Kainai Government Open House	Fish Wildlife	Effects to fish and wildlife.	At the open house held on October 29, 2018, Alberta Transportation discussed the effects to fish and wildlife, including: wildlife friendly fencing; having vegetated 3:1 slopes; a fish rescue program to collect stranded fish; etc	None at this time.	None at this time.	Ongoing: Working with First Nation
29	September 15, 2016 Alberta Transportation meeting with the Blood Tribe/Kainai, Piikani Nation, and Siksika Nation at Head Smashed In Buffalo Jump	Fish habitat Information sharing	Blood Tribe/Kainai requested impact information on fish and fish habitat resulting from the SR-1 project	Possible impacts and mitigation measures related to concerns raised by the Blood Tribe/Kainai (fish, fish habitat) will be addressed as part of the EIA. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-7 SR1 Project Specific Concerns and Responses - Kainai First Nation</i> from the March 2018 EIA: The Project will result in the permanent loss of 1,854 m² fish habitat at the diversion structure. This area has been identified as suitable foraging habitat for trout including, mountain whitefish, brown trout and rainbow trout. The area that will be lost is small compared to the habitat available within the local assessment area, which is approximately 3,100,000 m². Given the limited extent of the habitat affected impacts to fish and fish habitat are predicted to be not significant. The assessment of effects to fish and fish habitat are provided in the EIA Volumes 3A and 3B, section 8. Alberta Transportation responded to the Blood Tribe/Kainai's TUS report on August 9, 2019. Modelling for fish passage velocities was completed up to the expected maximum 3-day delay of a 1:10 year magnitude flood. Modelled results for water depth and velocities (see Volume 4, Appendix M, Attachment 8A) indicate that the water velocities and flow patterns in Elbow River post-construction are similar to the pre-construction state. Mitigation for fish passage, including boulder clusters and v-weirs, would be constructed downstream of the structure gates and include features that mimic natural fish habitats in cobble bed rivers, such as those altered		None at this time.	Ongoing: Working with First Nation

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				during the construction of the diversion structure. With mitigation, fish migrations past the structure would not be impeded in a manner that would affect the sustainability of the fish populations, the distribution, or abundance of fish, including fish that support a commercial, recreational or Aboriginal fishery, as defined by the Fisheries Act, in the LAA (see Volume 3A, Section 8.4.4.2). During construction of the diversion channel, the unnamed tributary to the Elbow River would be diverted into the diversion channel. Approximately 1,200 m of the tributary would be removed, with the lowest 300 m (less than 1 m wide channel) being fish habitat that would be lost. The loss of the 300 m2 of habitat in the tributary could be offset by the enhancement or construction of side channel habitat on Elbow River that could provide rearing habitat for salmonids and cover for small-bodied fish (see Volume 3A, Section 8.4.4.2).			
30	September 15, 2016 Alberta Transportation meeting with the Blood Tribe/Kainai, Piikani Nation, and Siksika Nation at Head Smashed In Buffalo Jump	Fish	Blood Tribe/Kainai requested information on how the design of the SR1 is being undertaken to ensure that during a flood/drain event that the mortality of fish is limited.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-7 SR1 Project Specific Concerns and Responses - Kainai First Nation</i> from the March 2018 EIA: After a flood, the water flows in the diversion channel will be gradually reduced and the reservoir slowly drained to facilitate the movement of fish from the reservoir, back to the Elbow River with the receding water. The outlet will be designed and operated in a manner that allows fish egress out of the reservoir, downstream into the outlet channel. Drainage areas within the reservoir will be graded to reduce stranding of fish during release of stored flood water from the reservoir. During draining of the reservoir, monitoring will be undertaken to identify isolated pools and the potential that fish may become stranded. If potential fish stranding is identified, a fish rescue program will be undertaken to return the fish to the river.	None at this time.	None at this time.	Ongoing: Working with First Nation
31	March 13, 2017 The Blood Tribe/Kainai delivered a Joint Interim Traditional Use Report that was co-authored with the Siksika Nation June 25, 2018 Blood Tribe/Kainai Traditional Knowledge, Land, and Resource Use Study: Springbank Off-Stream Reservoir Project by Oak Road Concepts Inc, dated June 2018.	Medicinal and Ceremonial Plants	Concerns expressed on the potential impact to medicinal and ceremonial plants. Stated that these will need to be protected or relocated. Concerns regarding plants, including those used for medicinal purposes, within the project area.	Alberta Transportation responded in a letter dated May 10, 2017: Possible impacts and mitigation measures related to concerns raised by the Blood Tribe/Kainai about impacts to medicinal and ceremonial plants will be addressed as part of the EIA. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-7 SR1 Project Specific Concerns and Responses - Kainai First Nation</i> from the March 2018 EIA: Vegetation will be cleared from the project development area during construction. However, effects of the Project are not anticipated to result in the loss of traditionally used species in the local assessment area. The effects on plants and traditional use are assessed in the EIA in Volume 3A and 3B, sections 10 and 14. Alberta Transportation would provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction. Alberta Transportation responded to the Blood Tribe/Kainai's TUS report on August 9, 2019. Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction. Following construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded with a native custom seed mix to meet AEP reclamation	None at this time.	None at this time.	Ongoing: Working with First Nation

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				requirements. Native trees and shrubs should re-establish over time. Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important.			
				The construction and management of the off-stream reservoir presents a unique opportunity with the conversion of private land to Crown land for future use by First Nations and stakeholders. Through the engagement process that included feedback from Indigenous groups, a draft principles of future land use for the Project has been developed. The primary use of all lands within the PDA is for flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated LUA. Alberta Transportation invites the Blood Tribe/Kainai to participate in the engagement process for the LUA.			
32	June 25, 2018 Blood Tribe/Kainai Traditional Knowledge, Land, and Resource Use Study: Springbank Off-Stream Reservoir Project by Oak Road Concepts Inc, dated June 2018. June 25, 2018 Springbank Offstream Reservoir Project EIS Technical Review and Information Request by PGL Environmental Consultations, dated June 15, 2018.	Vegetation Medicinal and Ceremonial plants	Loss of access to high quality natural prairie grassland, mixed wood and coniferous forests, and wetlands that are suitable for medicinal and food plant gathering. Clarify the claim that native plant communities may be altered but areas would not be lost as a result of filling and draining the reservoir. Long term loss of traditional use plants in flooded areas not considered. Justify assessment of potential loss of rare plants.	Alberta Transportation responded to the Blood Tribe/Kainai's TUS report on August 9, 2019. Traditionally used plant species will be directly affected due to vegetation removal and grading associated with construction, affecting 168 ha associated with permanent project infrastructure and approximately 566 ha of temporary workspace. Although individual plants will be removed from the PDA, none of the traditionally used species identified will be lost in the LAA, nor will vegetation communities supporting traditionally used plants be lost from the PDA (see Volume 3A, Section 10.4). Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction. Following construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded with a native custom seed mix to meet AEP reclamation requirements. Native trees and shrubs should re-establish over time. Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important. Many of the potentially affected grassland and wetland plant communities have intrinsic adaptations to periodic flooding, while other species such as aspen and spruce would be less tolerant to flooding due to having a low anaerobic tolerance. Mortality of traditional use species found in upland plant communities is expected. However, these species are widespread and are expected to re-establish by natural recruitment; permanent loss of traditional use species is not predicted. Overall, residual effects on vegetation and wetlands post-flood would not result in the loss of native upland or wetland plant communities, nor would it result in the loss of wetland function from the LAA (see Volume 3B, Section 10.2).	None at this time.	None at this time.	Ongoing: Working with First Nation
33	June 25, 2018 Springbank Offstream Reservoir Project EIS Technical Review and Information Request by PGL	Vegetation	Planting native shrub and tree species should be considered to mitigate the change in species diversity and loss of native vegetation communities.	Alberta Transportation responded to the Blood Tribe/Kainai's TUS report on August 9, 2019. Following construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded with a native custom seed mix to meet AEP reclamation requirements. Native trees and shrubs should re-establish over time. Alterations will be made to the Alberta Transportation custom native seed	None at this time.	None at this time.	Ongoing: Working with First Nation

	1. Document or Meeting Reference	2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. First Nation/Metis Settlement response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
	Environmental Consultations, dated June 15, 2018.		Mitigation should include developing a management plan to prevent spread of regulated weeds.	mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important.			
34	June 25, 2018 Springbank Offstream Reservoir Project EIS Technical Review and Information Request by PGL Environmental Consultations, dated June 15, 2018.	Vegetation	Provide an invasive species management plan.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
35	June 25, 2018 Blood Tribe/Kainai Traditional Knowledge, Land, and Resource Use Study: Springbank Off-Stream Reservoir Project by Oak Road Concepts Inc, dated June 2018.	Landscapes Vegetation	Destruction of the landscape. Destruction of old growth forests within the PDA.	Alberta Transportation responded to the Blood Tribe/Kainai's TUS report on August 9, 2019. Many of the potentially affected grassland and wetland plant communities have intrinsic adaptations to periodic flooding, while other species such as aspen and spruce would be less tolerant to flooding due to having a low anaerobic tolerance. Mortality of traditional use species found in upland plant communities is expected. However, these species are widespread and are expected to re-establish by natural recruitment; permanent loss of traditional use species is not predicted. Overall, residual effects on vegetation and wetlands post-flood would not result in the loss of native upland or wetland plant communities, nor would it result in the loss of wetland function from the LAA (see Volume 3B, Section 10.2).	None at this time.	None at this time.	Ongoing: Working with First Nation
36	June 25, 2018 Letter from JFK Law corporation to CEAA, dated June 15, 2018	Medicinal plants	Prior to the construction of the Project, the Proponent should invite Blood Tribe/Kainai land users to harvest medicinal plants in the PDA, particularly along the river.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-7 SR1 Project Specific Concerns and Responses - Kainai First Nation</i> from the March 2018 EIA: Vegetation will be cleared from the project development area during construction. However, effects of the Project are not anticipated to result in the loss of traditionally used species in the LAA. The effects on plants and traditional use are assessed in the EIA in Volume 3A and 3B, sections 10 and 14. Alberta Transportation would provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction. In a letter dated June 18, 2019, Alberta Transportation indicated they had created a draft post-construction land use document for the SR1 project that provides draft principles of future land use for the Project Development Area (PDA). The primary use of all lands within the PDA, including the LUA, is for flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses such as vegetation management and First Nations' traditional activities (including the exercise of treaty rights such as hunting) will be allowed within the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights and to engage in traditional uses.	None at this time.	None at this time.	Ongoing: Working with First Nation

	1. Document or Meeting Reference	2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. First Nation/Metis Settlement response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
37	June 25, 2018	Vegetation	Confirm if a monitoring plan for	None at this time.	None at this time.	None at this time.	Ongoing: Working with
	Springbank Offstream Reservoir Project EIS Technical Review and Information Request by PGL Environmental Consultations, dated June 15, 2018.	Wetlands	post-construction and post-flood conditions will be developed to monitor reclaimed areas (vegetation and wetlands).				First Nation
38	March 13, 2017	Wetlands (sloughs)	Concerns expressed related to	Alberta Transportation responded in a letter dated May 10, 2017: Possible	None at this time.	None at this time	Ongoing: Working with
	The Blood Tribe/Kainai delivered a Joint Interim		the protection of off-river sloughs as animals and fish in and around the Elbow River rely	impacts and mitigation measures related to concerns raised by the Blood Tribe/Kainai about off-river sloughs will be addressed as part of the EIA.			First Nation
	Traditional Use Report that was co-authored with the		on the sloughs.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-7 SR1</i>			
	Siksika Nation June 25, 2018		Concerns regarding wetlands and natural meadows within the PDA.	Project Specific Concerns and Responses - Kainai First Nation from the March 2018 EIA: The Project would result in the loss of 8 ha of estimated high value wetland area and 13 ha of moderate wetland area in the local			
	Blood Tribe/Kainai Traditional Knowledge, Land, and Resource Use Study: Springbank Off-Stream Reservoir Project by Oak Road Concepts Inc, dated June 2018.	Land, and se Study: Off-Stream oject by Oak	assessment area. Approximately 312 ha of the local assessment area contains wetland cover types. No vegetation and wetland land units are completely lost, and therefore no significant effects on vegetation and wetlands are predicted. Water Act approval would be obtained for disturbances to wetlands before construction, and permanent disturbance to wetlands would be replaced in accordance with the Alberta Wetland Policy. Effects to wetlands are assessed in the EIA in Volumes 3A and 3B section 10.				
				Alberta Transportation responded to the Blood Tribe/Kainai's TUS report on August 9, 2019. Mitigation measures for impacts to wetlands include: reducing the removal of vegetation in wetlands to the extent possible; where possible, conduct ground level cutting/mowing/mulching of wetland vegetation instead of grubbing; Alberta Transportation will not apply herbicide within 30 m of plant species or ecological communities of management concern, wetland or waterbody. Spot spraying, wicking, mowing, or hand picking are acceptable measures for control of regulated weeds in this area. Many of the potentially affected grassland and wetland plant communities have intrinsic adaptations to periodic flooding, while other species such as aspen and spruce would be less tolerant to flooding due to having a low anaerobic tolerance. Mortality of traditional use species found in upland plant communities is expected. However, these species are widespread and are expected to re-establish by natural recruitment; permanent loss of traditional use species is not predicted. Overall, residual effects on vegetation and wetlands post-flood would not result in the loss of native upland or wetland plant communities, nor would it result in the loss of wetland function from the LAA (see Volume 3B, Section 10.2).			
39	June 25, 2018	Wetlands	How is direct/indirect loss or alteration of surface or	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
	Springbank Offstream Reservoir Project EIS Technical Review and		groundwater flow patterns being				

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	Information Request by PGL Environmental Consultations, dated June 15, 2018.		measured with respect to wetland function?				
40	March 13, 2017 The Blood Tribe/Kainai delivered a Joint Interim Traditional Use Report that was co-authored with the Siksika Nation	Upstream/downstream effects.	Concerns expressed related to impact on upstream and downstream effects.	Alberta Transportation responded in a letter dated May 10, 2017: Possible impacts and mitigation measures related to concerns raised by the Blood Tribe/Kainai about upstream/downstream effects and other concerns will be addressed as part of the EIA. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-7 SR1 Project Specific Concerns and Responses - Kainai First Nation</i> from the March 2018 EIA: Upstream effects as a result of the Project are not anticipated. Some backup of flood water when the diversion structure is in operation is expected, however the backup would reach approximately 500m upstream from the diversion structure. The purpose of the Project is to protect lands and communities downstream. The EIA details the potential effects on all valued components during both construction and	None at this time.	None at this time.	Ongoing: Working with First Nation
41	June 25, 2018 Springbank Offstream Reservoir Project EIS Technical Review and Information Request by PGL Environmental Consultations, dated June 15, 2018.	Hydrogeology Groundwater	Run numerical groundwater model simulations that predict potential effects from construction dewatering. Uncertainty analyses should be completed in the revised numerical groundwater model report. Remodel flood simulations and conduct sensitivity analysis on the model results by introducing high permeability windows into the reservoir base. Conduct and report particle tacking simulations and conduct sensitivity analyses on the particle tracking using high permeability windows. Add bedrock heterogeneities and fractured bedrock to the conceptual hydrostratigraphic framework.	dry operations and during a flood. None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
42	June 25, 2018 Springbank Offstream Reservoir Project EIS Technical Review and Information Request by PGL	Hydrology	Provide a rationale for the LAA selected for the hydrology assessment.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation

	Document or Meeting Reference Environmental Consultations,	2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. First Nation/Metis Settlement response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
43	dated June 15, 2018. June 25, 2018 Springbank Offstream Reservoir Project EIS Technical Review and Information Request by PGL Environmental Consultations, dated June 15, 2018.	Hydrology	Provide a flood frequency analysis incorporating effects of climate change, and determine if the 2013 flood is suitable as the design flood.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
44	June 25, 2018 Blood Tribe/Kainai Traditional Knowledge, Land, and Resource Use Study: Springbank Off-Stream Reservoir Project by Oak Road Concepts Inc, dated June 2018.	Springs	Disruptions to natural springs and the potential for interaction between reservoir/flood water and groundwater.	Alberta Transportation responded to the Blood Tribe/Kainai's TUS report on August 9, 2019. Springs within the Elbow River valley, including the sites identified by the Blood Tribe/Kainai, could interact with floodwater under natural conditions, but these interactions are attributable to the flood event, not to the Project. Springs in the off-stream reservoir area could interact with flood water that is retained during flood operations. Effects on springs in the off-stream reservoir area would be short term in duration. Mapped springs are situated near the outer edge of the reservoir and, as a result, any interactions between flood water and these springs are only expected during a design flood. Groundwater interactions with floodwater were examined in Volume 3B, Section 5. Groundwater in the wetted area of the off-stream reservoir will interact with flood water during operations. Effects on groundwater are expected to be localized and short term in duration. Given the low permeability of the underlying sediments, the expected seepage out of the reservoir area is relatively low compared to flow rates in the Elbow River. Additionally, seepage out of the reservoir area will be toward the Elbow River, from where the flood water originated.	None at this time.	None at this time.	Ongoing: Working with First Nation
45	June 25, 2018 Springbank Offstream Reservoir Project EIS Technical Review and Information Request by PGL Environmental Consultations, dated June 15, 2018.	Cumulative effects	Cumulative effects for hydrology under construction and dry conditions should be assessed, including the proposed mitigation at Bragg Creek. Scope of EIA must be expanded to include potential effects from all works recommended in the Deltares report.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
46	November 25, 2014 Initial SR1 Meeting held with Mike Oka, Blood Tribe/Kainai Consultation Coordinator, Stand Off Alberta. March 13, 2017 The Blood Tribe/Kainai delivered a Joint Interim	Economic opportunities	Request for job fair and for employment opportunities for members of the Blood Tribe/Kainai. Establish ASAP the following: who will be employed in the development of the proposed project, what community benefits will be available, and	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-7 SR1 Project Specific Concerns and Responses - Kainai First Nation</i> from the March 2018 EIA: If the Project is approved, Alberta Transportation will follow government procurement policies and procedure with respect to labor, and goods and services. Alberta Transportation is willing to discuss possible economic opportunities with the Blood Tribe/Kainai.	None at this time.	None at this time.	Ongoing: Working with First Nation

Traditional Use Report that was co-authored with the Siksika Nation June 25, 2018 Letter from JFK Law corporation to CEAA, dated June 15, 2018 October 29, 2018 Blood Tribe/Kainai Government Open House	2. Project Specific Aspect of the Concern Expressed	what steps will be taken to address and accommodate future impacts to Blood Tribe/Kainai interests. The Proponent should consult with Blood Tribe/Kainai regarding the establishment of employment targets for Blood Tribe/Kainai community members and the development of a plan to meet those targets. As part of its employment plan, the Proponent should consult with Blood Tribe/Kainai regarding potential support for educational, training, and apprenticeship programs that could facilitate the employment of Blood Tribe/Kainai community members, and especially young people. The Proponent should consult with Blood Tribe/Kainai regarding businesses in the	At the open house held on October 29, 2018, Alberta Transportation indicated they are willing to discuss possible economic opportunities with the Blood Tribe/Kainai. In a letter dated June 18, 2019, Alberta Transportation stated they are committed to Indigenous participation in the Project including training, employment, and contracting opportunities.	5. First Nation/Metis Settlement response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
		Project. Where possible the Proponent and Blood Tribe/Kainai should attempt to identify opportunities for Direct Negotiated Contracts with Blood Tribe/Kainai businesses. Employment opportunities during construction.				
47 November 25, 2014	Monitoring	The Blood Tribe/Kainai requested that they be allowed	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-7 SR1</i>	None at this time.	None at this time.	Ongoing: Working with First Nation
Initial SR1 Meeting held with Mike Oka, Blood Tribe/Kainai Consultation Coordinator, Stand Off Alberta. September 15, 2016 Alberta Transportation meeting with the Blood Tribe/Kainai, Piikani Nation,	Historical Resources Employment Communication	to have monitors on site throughout SR1 construction. Blood Tribe/Kainai requested front line monitors be present throughout the SR-1 construction. Request for on-site monitors during construction.	Project Specific Concerns and Responses - Kainai First Nation from the March 2018 EIA: If the Project is approved, Alberta Transportation is willing to discuss possible monitoring opportunities with the Blood Tribe/Kainai.			. HOCHGROII

	1. Document or Meeting Reference	2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. First Nation/Metis Settlement response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
	and Siksika Nation at Head Smashed In Buffalo Jump		The Proponent should work with Blood Tribe/Kainai in the design				
	March 13, 2017 The Blood Tribe/Kainai		and implementation of environmental monitoring. As part of environmental				
	delivered a Joint Interim Traditional Use Report that was co-authored with the Siksika Nation		monitoring, the Proponent should consult with Blood Tribe/Kainai to discuss the possibility of training,				
	June 25, 2018		employment, and contracting opportunities for Blood				
	Letter from JFK Law corporation to CEAA, dated		Tribe/Kainai. As part of its environmental				
	June 15, 2018		monitoring plan, the Proponent and Blood Tribe/Kainai should develop a joint communications plan for the presentation of				
			environmental monitoring results to the community and the incorporation of community feedback.				
48	June 25, 2018 Letter from JFK Law corporation to CEAA, dated June 15, 2018	Traditional use	Given the potential negative effects of the Project on Blood Tribe/Kainai TU and traditional knowledge, and the traditional way of life and culture of its people, the Proponent should discuss ways to support programming within the community to strengthen the transmission of Blood Tribe/Kainai's way of life and culture to future generations.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
49	June 25, 2018 Letter from JFK Law corporation to CEAA, dated June 15, 2018	Training	The Proponent should consult with Blood Tribe/Kainai regarding the design and implementation of culturalsensitivity training program that is mandatory for all Project employees and contractors.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
50	January 18, 2017 Alberta Transportation meeting with the Blood Tribe/Kainai, Piikani Nation, and Siksika Nation in Lethbridge, Alberta.	First Nations Involvement	Blackfoot members should have accompanied Stantec during their EIA work.	At the meeting held on January 18, 2017, Stantec responded that they are paying more attention to First Nations, and they want First Nation input on the EIA. The Blackfoot Nations had access to the SR-1 lands, and now Alberta Transportation and Stantec want to hear their concerns and the impact to their Treaty rights and traditional uses so they can include these in the EIA.	None at this time.	None at this time.	Ongoing: Working with Frist Nation

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				At the meeting held on January 18, 2017, Alberta Transportation also responded that they were undertaking the work in accordance with the requirements of the regulatory process. Alberta Transportation indicated that they did not have the authority to change the regulatory process and if the Blood Tribe/Kainai wanted to be directly involved in the EIA process they would have to consult provincial agencies such as Alberta Environment and Parks (AEP), Indigenous Relations, and ACT.			
				On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-7 SR1 Project Specific Concerns and Responses - Kainai First Nation</i> from the March 2018 EIA: Alberta Transportation funded and provided the opportunity for the Blood Tribe/Kainai to visit the site. Nation members visited the site on 13 days.			
51	August 8, 2017 The Blood Tribe/Kainai through their Legal Counsel Clayton Leonard sent an Email to Bob Chappell, Team Lead, Barrister and Solicitor for the Government of Alberta expressing concerns related to upcoming Open Houses for the Springbank SR1.	Notification	The Blood Tribe/Kainai through their legal counsel expressed concern that they were not notified about upcoming public open houses for the Springbank SR1. The Blood Tribe/Kainai requested clarification if the Government of Alberta considers the open houses as part of the consultation process. If so, the Blood Tribe/Kainai objects to receiving no notice of them, and indicated that public open houses are not a forum where consultation can occur. The Blood Tribe/Kainai requests a meeting with the Government of Alberta to discuss the consultation plan for the project.	Alberta Transportation notified the Blood Tribe/Kainai of upcoming open houses on August 11, 2017, stating that these were not part of the ongoing consultation. On September 3, 2017 Alberta Transportation shared the display boards and handouts from the August open houses. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-7 SR1 Project Specific Concerns and Responses - Kainai First Nation</i> from the March 2018 EIA: Notification of the Public Open Houses/Information Sessions for SR1 was provided to the Blood Tribe/Kainai prior to the various information sessions as a courtesy and that notification clearly stated that they were not as part of the consultation with the Blood Tribe/Kainai ongoing for the SR1 Project.	None at this time.	None at this time.	Ongoing: Working with First Nation
52	June 19, 2017 The Blood Tribe/Kainai through their Legal Counsel Clayton Leonard sent a letter to Seamas Skelly, Senior Water Projects Technologist. Alberta Transportation; Rick Blackwood, ADM, Alberta Environment and Parks (AEP); Bob Chappell, Alberta Justice	First Nation involvement	The Blood Tribe/Kainai object to a tour of the Project area arranged by Alberta Transportation for the Natural Resources Conservation Board (NRCB) and the Canadian Environmental Assessment Agency (CEAA). The Blood Tribe/Kainai objected to the lack of representation of First Nations whose Treaty rights and traditional uses may	Alberta Transportation responded in a letter on June 22, 2017 to let the Blood Tribe/Kainai know that the tour had been cancelled.	None at this time.	None at this time.	Ongoing: Working with First Nation

	1. Document or Meeting Reference	2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. First Nation/Metis Settlement response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
			be impacts by the proposed Project.				
			The Blood Tribe/Kainai also concerned that they were not notified of the tour.				
			The Blood Tribe/Kainai request that the tour be postponed until it can be conducted with proper notification to and involvement of First Nations.				
53	September 18, 2017 The Blood Tribe/Kainai, Dorothy First Rider, Tribal	First Nation involvement Historical Resources	The Blood Tribe/Kainai expressed concerns related to a tour of the SR1 lands from the	Alberta Transportation replied to the September 18, 2017 email the same day to let the Blood Tribe/Kainai know they would pass the letter along to CEAA, as they were organizing the tour.	None at this time.	None at this time.	Ongoing: Working with First Nation
	Government Committee Chairperson sent an email to Alberta Transportation expressing concerns.		public road allowances, rather than seeing First Nation heritage sites and hearing from First Nations about their use of the lands.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-7 SR1 Project Specific Concerns and Responses - Kainai First Nation</i> from the March 2018 EIA: The tour in question was a tour arranged by CEAA on September 19, 2017. Indigenous groups were invited to participate by CEAA. CEAA requested that Alberta Transportation facilitate the tour. At the time of the tour, private land access was not available to all areas of the project development area (PDA).			
54	June 25, 2018	Mitigation	Proponent has yet to provide Blood Tribe/Kainai with an	A meeting was held on August 7, 2018 with the intent of reviewing <i>Table 7-7 SR1 Project Specific Concerns and Responses - Kainai First Nation</i>	None at this time.	None at this time.	Ongoing: Working with First Nation
	Blood Tribe/Kainai Traditional Knowledge, Land, and Resource Use Study:		opportunity to review the mitigation measures.	from the March 2018 EIA and obtaining the Blood Tribe/Kainai's responses to the proposed mitigation measures within that table.			
	Springbank Off-Stream Reservoir Project by Oak Road Concepts Inc, dated June 2018.		Recommendation: Hold at least two mitigation workshops with Blood Tribe/Kainai where Elders, hunters, and consultation personnel have the opportunity to discuss proposed mitigation with Alberta Transportation and develop mutually agreeable mitigation measures.	Alberta Transportation responded to the Blood Tribe/Kainai's TUS report on August 9, 2019. Alberta Transportation committed to holding the requested mitigation workshops with the Blood Tribe/Kainai. The cover letter that accompanied the response also indicated Alberta Transportation's desire to meet to discuss the proposed mitigation measures.			
55	June 25, 2018 Letter from JFK Law	Reclamation	In the event that the Project is to be decommissioned, the	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
	corporation to CEAA, dated June 15, 2018		Proponent should consult with Blood Tribe/Kainai regarding the				
	·		design, implementation, and monitoring of its Reclamation				
			Plan to maximize the use of Blood Tribe/Kainai Traditional				
			Ecological Knowledge and support Blood Tribe/Blood				

	Document or Meeting Reference	2. Project Specific Aspect of the Concern Expressed	Specific Concern Expressed Tribe/Kainai employment in the	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. First Nation/Metis Settlement response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
56	June 25, 2018 Letter from JFK Law corporation to CEAA, dated June 15, 2018	Communication plan	reclamation process. The Proponent should work with Blood Tribe/Kainai in the development of a communications plan for flood and post-flood operations.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
57	March 13, 2017 The Blood Tribe/Kainai delivered a Joint Interim Traditional Use Report that was co-authored with the Siksika Nation	Site access	Blood Tribe/Kainai stated that access was not provided to areas the Blood Tribe/Kainai wanted to visit.	Alberta Transportation responded in a letter dated May 10, 2017: Alberta Transportation approved all the Blood Tribe/Kainai budgets for site visits to SR1 and facilitated access to private lands with landowners on all properties the Blood Tribe/Kainai requested. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-7 SR1 Project Specific Concerns and Responses - Kainai First Nation</i> from the March 2018 EIA: Alberta Transportation approved all the Blood Tribe/Kainai budgets for site visits to SR1 and facilitated access to private lands with landowners on all properties the Blood Tribe/Kainai requested. Nation members visited the site on 13 days. All areas that Blood Tribe/Kainai requested access to were arranged and facilitated by Alberta Transportation.	None at this time.	None at this time.	Ongoing: Working with First Nation.
58	June 25, 2018 Springbank EIS Technical comments – Ermineskin Cree Nation and Blood Tribe. June 25, 2018 Blood Tribe/Kainai Traditional Knowledge, Land, and Resource Use Study: Springbank Off-Stream Reservoir Project by Oak Road Concepts Inc, dated June 2018. June 25, 2018 Letter from JFK Law corporation to CEAA, dated June 15, 2018	Land access	Justify how the removal of access to Areas B, C, and D does not constitute a long-term loss of available resources or access to lands. Recommend identifying mitigation measures to allow access during construction and dry operations to Area B, C, and D, subject to safety considerations. Absence of rationale for exclusion of traditional users from Areas B and C during dry operations phase. Recommendation: Negotiate access to Areas B and C during dry operations for traditional gathering, hunting, ceremonial use, and for traditional cultural and heritage camps involving Elders and youth. The Proponent should attempt to ensure that Areas B and C of the PDA are accessible to Blood	At the meeting held on August 7, 2018, Alberta Transportation discussed possible land use planning. Alberta Transportation relayed that land use planning will have to be discussed with the project operator, Alberta Environment and Parks, but there is a possibility to have discussions regarding access to some of the areas. In a letter dated June 18, 2019, Alberta Transportation indicated they had created a draft post-construction land use document for the SR1 project that provides draft principles of future land use for the Project Development Area (PDA). The primary use of all lands within the PDA, including the LUA, is for flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses such as vegetation management and First Nations' traditional activities (including the exercise of treaty rights such as hunting) will be allowed within the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights and to engage in traditional uses. Alberta Transportation responded to the Blood Tribe/Kainai's TUS report on August 9, 2019. The construction and management of the off-stream reservoir presents a unique opportunity with the conversion of private land to Crown land for future use by First Nations and stakeholders. Through the engagement process that included feedback from Indigenous groups, a draft principles of future land use for the Project has been developed. The primary use of all lands within the PDA is for flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be		None at this time.	Ongoing: Working with First Nation

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			Tribe/Kainai and its members for Traditional Use (TU) purposes, subject to safety considerations related to flooding. If Area C will contain grazing options that are privately managed, the Proponent should work with private managers to ensure maximum access for Blood Tribe/Kainai hunters to the area	allowed to occur within the designated LUA. Alberta Transportation invites the Blood Tribe/Kainai to participate in the engagement process for the LUA.			
			The Proponent should work with Blood Tribe/Kainai to design an access management plan for Areas B and C. Such a plan could support Blood Tribe/Kainai's access to the area for hunting and other traditional purposes.				
59	June 25, 2018	Temporal boundaries	The temporal parameters are	None at this time.	None at this time.	None at this time.	Ongoing: Working with
	Blood Tribe/Kainai Traditional Knowledge, Land, and Resource Use Study: Springbank Off-Stream Reservoir Project by Oak Road Concepts Inc, dated June 2018.	Spatial boundaries	too narrow to be considered valid by the Blood Tribe/Kainai.				First Nation
		for the Traditional Resource Use (Tassessment are considering sites). Development Are determining significant effects using the	The spatial parameters chosen for the Traditional Land Resource Use (TLRU) assessment are flawed; i.e., only considering sites in the Project Development Area (PDA) but determining significance of effects using the Regional Assessment Area (RAA).				
			The proponent conflates the PDA, LAA, an RAA in the residual effects significance determination.				
			Absence of information on the spatial parameters of the TLRU/LAA (local assessment area).				
60	January 5, 2018	Timelines	Requested clarification as to	In a letter dated January 26, 2018, Alberta Transportation described the	None at this time.	None at this time.	Ongoing: Working with
	Letter from JFK Law Corporation to Deputy Minister Barry Day on behalf of the Blood Tribe/Kainai		why Blood Tribe/Kainai is being asked for comments on the EIA, given that the EIA does not conform to the EIS guidelines. Information cannot be provided in the time frame given.	timelines for the EIA submission, indicating that the timelines had been extended by 60 days to undertake further Indigenous engagement activities. Alberta Transportation also proposed a workshop to discuss TLRU and obtain feedback from the Blood Tribe/Kainai. Alberta Transportation also welcomed written feedback on the updated EIA TLRU sections (Volumes 3A and 3B), which were provided February 5, 2018.			First Nation

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			Request Alberta Transportation's timeline for amending the EIA.	In a letter dated January 29, 2018, Alberta Justice responded to the January 5, 2018 letter, referencing the January 26, 2018 letter and Alberta Transportation's offer to hold a workshop.			
				On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-7 SR1 Project Specific Concerns and Responses - Kainai First Nation</i> from the March 2018 EIA: Following CEAA's non conformancy review revisions to the EIA were underway to address regulator comments. In December 2017, Alberta Transportation was looking for feedback from the Blood Tribe/Kainai on the TLRU sections. As the TLRU was updated in early February, a revised draft TLRU section was sent to Blood Tribe/Kainai on February 5, 2018 and Alberta Transportation requested feedback on that document. Alberta Transportation offered a workshop with Blood Tribe/Kainai to better understand how the project potentially impacts Blood Tribe/Kainai and is awaiting on a suitable date to meet.			
				Project timelines for resubmission of the EIA were extended by 60 days in order to undertake further indigenous engagement activities. Feedback was requested by March 1, 2018 in order to meet a resubmission date of end March 2018. Relevant information, concerns and recommendations received after the EIA has been filed in March 2018 will be used for project planning and implementation purposes, where applicable.			
61	January 5, 2018 Letter from JFK Law Corporation to Deputy Minister Barry Day on behalf of the Blood Tribe/Kainai	Resources, time, and funding provided to First Nation	Request sufficient time and resources to provide additional information regarding other areas of non-conformity.	In a letter dated January 26, 2018, Alberta Transportation described the timelines for the EIA submission, indicating that the timelines had been extended by 60 days to undertake further Indigenous engagement activities. Alberta Transportation also proposed a workshop to discuss TLRU and obtain feedback from the Blood Tribe/Kainai. Alberta Transportation also welcomed written feedback on the updated EIA TLRU sections (Volumes 3A and 3B), which were provided February 5, 2018.	None at this time.	None at this time.	Ongoing: Working with First Nation
				In a letter dated January 29, 2018, Alberta Justice responded to the January 5, 2018 letter, referencing the January 26, 2018 letter and Alberta Transportation's offer to hold a workshop.			
				On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-7 SR1 Project Specific Concerns and Responses - Kainai First Nation</i> from the March 2018 EIA: Project timelines for resubmission of the EIA were extended by 60 days in order to undertake further Indigenous engagement activities.			
				The draft TLRU section (Volumes 3A and 3B) was sent to Blood Tribe/Kainai for review and comment on February 5, 2018. Feedback was requested by March 1, 2018 in order to meet a resubmission date of end March 2018. Relevant information, concerns and recommendations received after the EIA has been filed in March 2018 will be used for project planning and implementation purposes, where applicable.			

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62	January 5, 2018 Letter from JFK Law Corporation to Deputy Minister Barry Day on behalf of the Blood Tribe/Kainai	Resources, time, and funding provided to First Nation	Request time to provide a report outlining Blood Tribe/Kainai's use of the project area.	In a letter dated January 26, 2018, Alberta Transportation described the timelines for the EIA submission, indicating that the timelines had been extended by 60 days to undertake further Indigenous engagement activities. Alberta Transportation also proposed a workshop to discuss traditional land and resource use (TLRU) and obtain feedback from the Blood Tribe/Kainai. Alberta Transportation also welcomed written feedback on the updated Environmental Impact Assessment (EIA) TLRU sections (Volumes 3A and 3B), which were provided February 5, 2018.	The Blood Tribe provided an interim joint TUS on March 13, 2017, and Blood Tribe/Kainai Traditional Knowledge, Land, and Resource Use Study: Springbank Off-Stream Reservoir Project on June 25, 2018.	None at this time.	No further action required.
				In a letter dated January 29, 2018, Alberta Justice responded to the January 5, 2018 letter, referencing the January 26, 2018 letter and Alberta Transportation's offer to hold a workshop.			
				On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-7 SR1 Project Specific Concerns and Responses - Kainai First Nation</i> from the March 2018 EIA: An interim TUS report was delivered by the Blood Tribe/Kainai on March 13, 2017. The TUS study was used in the EIA. However, Permission to use the spatial information from the TUS study has not been received by Alberta Transportation, therefore the information regarding sites and areas has been generalized for use in the EIA and exact locations, including those in the project development area, are not provided.			
63	October 29, 2018 Blood Tribe/Kainai Government Open House	Design	Why the reservoir was not designed to hold more than the 2013 flood given the potential effects of climate change and increased flooding.	At the open house held on October 29, 2018, Alberta Transportation explained that the 2013 flood is about a 1 in 200 year flood and would be a rare event.	None at this time.	None at this time.	Ongoing: Working with First Nation
64	June 25, 2018 Blood Tribe/Kainai Traditional Knowledge, Land, and Resource Use Study: Springbank Off-Stream Reservoir Project by Oak Road Concepts Inc, dated June 2018.	Project choice	Recommendation: Provide additional rationale to Blood Tribe/Kainai Elders over the choice of location for flood mitigation measures and discuss and clarify alternatives such as McLean Creek.	 Alberta Transportation responded to the Blood Tribe/Kainai's TUS report on August 9, 2019. As noted in the Volume 1, Section 2.2.1, following the floods of June 2013, the Government of Alberta set up the Southern Alberta Flood Recovery Task Force. Five potential locations for flood mitigation measures on the Elbow River were identified, as follows: a dry dam on Quirk Creek near the upper reaches of the Elbow River: The Quirk Creek option was dismissed due to slope stability concerns. a dry dam on Canyon Creek, also near the upper reaches of the Elbow River: The Canyon Creek option was dismissed because the volume was too small for the amount required for flood mitigation. an underground diversion tunnel running east from Glenmore Reservoir and discharging into the Bow River. The Glenmore Reservoir diversion tunnel has a positive benefit/cost ratio in only two of the four scenarios considered, and it has a lower benefit/cost ratio than either the Project or the MC1 Option in all four of the scenarios. Consequently, the diversion tunnel was rejected from further consideration. an earth fill dam built on the main channel of the Elbow River near its confluence with McLean Creek and spanning the Elbow River valley 	None at this time.	None at this time.	Ongoing: Working with First Nation

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65	August 7, 2018 Meeting between the Blood Tribe/Kainai, Alberta Transportation, and Stantec.	Frequency of use	With the flood mitigation at Bragg Creek causing more water to stay in the river, can the flood reach the diversion structure sooner? Does this trigger more use of the project and affect how often it is used?	 (MC1 Option). This was dismissed, due to a variety of concerns, described in Volume 1, Table 2-2. an off-stream reservoir at Springbank Road was recommended in combination with local mitigation for Bragg Creek and Redwood Meadows. An assessment of the MC1 Option is in Volume 1, Section 3 and Volume 4, Supporting Documentation). SR1 has gone through a rigorous selection process and is the preferred option for a variety of environmental, technical, economic and timing reasons. Alberta Transportation's response to information request CEAA, Package 3, IR3-45 provides additional information on the comparison of the MC1 Option, the Tri-River Joint Reservoir and the Micro-Watershed Impounding Concept. Alberta Transportation will provide this response to Blood Tribe/Kainai and, if requested, will discuss the response. At the meeting held on August 7, 2018, Alberta Transportation and Stantec committed to looking into this. In an email sent August 28, 2018, Alberta Transportation provided a link to a report done by Wood Group that shows there will be no effect on the SR1 project from the Bragg Creek mitigation. 	None at this time.	None at this time.	Ongoing: Working with First Nation
66	October 29, 2018 Blood Tribe/Kainai Government Open House	Landowners	Landowners in the area losing their land.	At the open house held on October 29, 2018, Alberta Transportation explained they are working with the landowners to purchase their lands voluntarily, but will move towards expropriation if necessary.	None at this time.	None at this time.	Ongoing: Working with First Nation
67	November 25, 2014 Initial SR1 Meeting held with Mike Oka, Blood Tribe/Kainai Consultation Coordinator, Stand Off Alberta.	Flooding	Concern about if the Waterton Dam breaks which would mean evacuating Stand Off.	At the meeting held on November 25, 2014, Alberta Transportation indicated that the Government of Alberta is looking at the larger flood potential in southern Alberta, however Alberta Transportation could not answer this concern directly.	None at this time.	None at this time.	Ongoing: Working with First Nation

Springbank SR1 - Specific Concerns and Response Table

First Nation or Metis Settlement: Piikani Nation

Date: AUGUST 2014 - AUGUST 2019

	1. Document or Meeting Reference	2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. First Nation/Metis Settlement response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
1	February 22, 2017 The Piikani Nation delivered a Traditional Use Report	Treaty and Aboriginal Rights	Ongoing mitigation after the finalization of the SR1 Project to ensure no further derogation of Treaty and Aboriginal Rights are infringed upon in the designated SR1 Project Area.	Alberta Transportation responded in a letter dated May 10, 2017: Some concerns fall outside of Alberta Transportation's jurisdiction. Concerns have been forwarded to the appropriate regulatory agencies. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-6 SR1 Project Specific Concerns and Responses - Piikani Nation</i> from the March 2018 EIA: Effects on potential or established Aboriginal or Treaty rights are addressed through the assessment of the current use of lands and resources for traditional purposes. By acknowledging a link between practice-based rights and current use, this assessment accepts that adverse residual effects on availability of traditional resources for current use, on access to traditional resources or areas for current use, or on sites or areas for current use will have a consequent effect on the ability of Indigenous groups to exercise potential or established Aboriginal and Treaty rights. Given that the residual effects for the Project on traditional land and resource use are predicted to be not significant, no effects on potential or established Aboriginal or Treaty rights is expected to occur as a result of the Project. Mitigation measures for traditional land and resource use (TLRU) can be found in Volume 3A and 3B, section 14. Follow up and monitoring can be found in Volume 3C, Section 2.	None at this time.	None at this time.	Ongoing: Working with First Nation
2	June 15, 2018 Piikani Nation Letter of Objection Springbank Off- Stream Reservoir Project June 2018.	Treaty and Aboriginal rights	In the Letter of Objection, Piikani Nation indicated the project will impact the rights and interests of their members and the natural resources upon which they depend.	Alberta Transportation sent a letter dated January 28, 2019 that requested Piikani Nation provide its views and perspectives on its Aboriginal and Treaty rights, cultural and experiential values, and country foods. The letter listed four specific topics that Alberta Transportation was requesting input on to help answer Canadian Environmental Assessment Agency (CEAA) IR2-01, IR2-02, and IR2-08. To date, Piikani Nation has not provided a response.	None at this time.	None at this time.	Ongoing: Working with First Nation Alberta Transportation sent a letter dated July 30, 2018, acknowledging receipt of the Letter of Objection, Statement of Concern, and the Technical Review, all provided on June 15, 2018.
3	June 15, 2018 Piikani Nation Statement of Concern Springbank off-Stream Reservoir Project June 2018. June 15, 2018 Piikani Nation Technical Review of Alberta Transportation Springbank Off-Stream Reservoir Project	Project planning	Piikani Nation requests that Alberta Transportation discusses how issues of concern to Piikani Nation, their Treaty and Aboriginal Rights, traditional knowledge, and its traditional and contemporary land uses has been used in Project planning and site selection.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation

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	Environmental Impact Study, prepared by Schaldemose & Associates Inc., dated June 2018.						
4	November 7, 2014 Initial SR1 Meeting	Medicinal Plants Traditional Ecological Knowledge	Piikani Nation inquired about getting access to the Springbank SR1 Site. The Piikani Nation wanted to have their Elders involved in site visits on SR1 to assess impacts to medicinal plants and Blackfoot traditional knowledge. The Piikani Nation indicated they would like to complete a Traditional Use Study (TUS) of the SR1 Project area.	Alberta Transportation provided funding for the Piikani Nation to conduct a TUS on the project lands (privately and publicly held). Piikani Nation conducted a TUS (13 field days) in summer/fall of 2016. The Piikani Nation delivered a TUS on February 22, 2017. The TUS study was used to inform the Traditional Land and Resource Use (TLRU) sections of the Environmental Impact Assessment (EIA) (Volumes 3A and 3B).		Alberta Transportation funded Piikani Nation's site visits and TUS report.	No further action required.
5	February 22, 2017 The Piikani Nation delivered a Traditional Use Report	Information use	Concerns expressed over how information shared by Piikani Nation will be handled by the authorities.	At the meeting held on January 18, 2017 meeting, Stantec stated that they could include input on traditional ecological knowledge and land use into the EIA and report Indigenous findings subject to confidentiality issues. In an email to Piikani Nation on January 30, 2017, Alberta Transportation had stated they will accept an abbreviated TUS rather than the full report, if Piikani Nation would prefer to keep some knowledge internal.	None at this time.	None at this time.	Ongoing: Working with First Nation
6	June 15, 2018 Piikani Nation Statement of Concern Springbank off-Stream Reservoir Project June 2018. June 15, 2018 Piikani Nation Technical Review of Alberta Transportation Springbank Off-Stream Reservoir Project Environmental Impact Study, prepared by Schaldemose & Associates Inc., dated June 2018.	Historical resources Traditional use	Alberta Transportation should review the information in EIA Tables 14-3 and 14-5 at a workshop so that Piikani Nation use of resources is accurately captured. With so many camps it is likely that water was harvested from the Elbow River and other waterways and that a variety of food and medicinal plants were historically harvested from these areas. Request review of Table 14-3 at a workshop to ensure Piikani Nation use of resources is accurately captured.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
7	June 15, 2018 Piikani Nation Statement of Concern Springbank off-Stream Reservoir Project June 2018.	Consultation	No consultation has yet occurred with Alberta or Canada. Piikani Nation requests direct consultation to address the project specific and cumulative loss of lands and natural resources and resulting loss of meaningful opportunities for the exercise of Piikani's	Alberta Transportation has been consulting with Piikani Nation since 2014 and has met with them seven times to discuss the project, Piikani Nation's concerns, and responses to those concerns.	None at this time.	None at this time.	Ongoing: Working with First Nation

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			treaty and aboriginal rights and interests.				
8	December 17, 2018 Meeting between Alberta Transportation, Stantec, and Piikani Nation	Consultation	The Piikani Nation voiced concerns that their concerns would not be taken into account.	At the meeting held on December 17, 2018, Alberta Transportation reassured Piikani Nation that they were listening to their concerns and taking them into account for the project.	None at this time.	None at this time.	Ongoing: Working with First Nation
9	June 15, 2018 Piikani Nation Technical Review of Alberta Transportation Springbank Off-Stream Reservoir Project Environmental Impact Study, prepared by Schaldemose & Associates Inc., dated June 2018.	Consultation	Request a workshop with Piikani Nation consultation office and knowledge holders where commitments related to avoidance measures, mitigation, management, and accommodation strategies will be made prior to any permits or approvals.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
10	August 8, 2016 Site Visit August 16, 2016 Site Visit August 30, 2016 Site Visit August 31, 2016 Site Visit January 18, 2017 Alberta Transportation meeting with the Piikani Nation, Blood Tribe/Kainai, and Siksika Nation in Lethbridge, Alberta. September 18-19, 2018 Meetings between Alberta Transportation, Stantec, and Piikani Nation	Historic Resources	The Piikani Nation Consultation Technicians and Elders while walking property #21, and #24, on both sides of an unnamed creek near the proposed outlet of the reservoir the Piikani Consultation team found what they believed to be evidence of tipi rings. Piikani Nation expressed concern that the tipi rings will be lost if this area is excavated for the SR1 outfall to drain the dry reservoir after a flood event. The Piikani Nation Elders and Consultation technicians while walking SR1 properties #4 and #86 on Mary Robinson's property inspected two possible tipi ring locations, an old camp site and the old North South Trail that runs through the Robinson property. The Piikani Nation are concerned the evidence of these wintering camp grounds and tipi rings will be lost if this area is excavated for the SR1 diversion dikes. The Piikani Nation Elders and Consultation technicians reinspected the areas on SR1	At the time, the engineering and design work for the SR1 outlet was still underway. The concerns expressed by the Piikani Nation were noted and passed on for consideration as the engineering and design continued for the outlet. In emailed on January 7 and 12, 2017, Alberta Transportation requested the Piikani Nation's TUS prior to the meeting on January 18, 2017, so they could review any detailed site-specific concerns and be prepared to discuss potential mitigation measures. Alberta Transportation brought Stantec (Alberta Transportation's consultant) to the January 18, 2017 meeting to share information on their EIA field data collection program and methodologies and to gain an understanding of the traditional knowledge and traditional uses component required in the EIA. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-6 SR1 Project Specific Concerns and Responses - Piikani Nation</i> from the March 2018 EIA: Project activities within the project development area would disturb 11 precontact period and 11 historic period archaeological sites. No traditional land use sites of very high heritage value, such as spiritual sites or human burial sites have been identified within the project development area. Identified sites include isolated finds, artifact scatters, campsites and historic remains such as homesteads and a school. Effects to historical resources are detailed in the EIA, Volume 3A and 3B, section 13. There will be some limited excavation at the outfall structure (18m) to reduce the speed of the water entering the natural channel. Beyond 18m from the outfall no excavation is proposed. ACT independently assesses the heritage value of historic resources, determines the need for, and scope of, any avoidance or mitigation measures, and issues Project approval under the <i>Historical Resources Act.</i> If the Project is approved Alberta Transportation will follow all the	At the meetings held on September 18-19, 2018, Piikani Nation agreed to having a map of traditional land use (TLU) sites made as long as the map is kept confidential. At the meeting held on December 17, 2018, Piikani Nation requested that Alberta Transportation look into avoiding sites identified near the end of the floodplain berm. Piikani Nation also voiced concerns about protecting sites within the outflow channel requesting that flow control measures be looked into in that area.	None at this time.	Ongoing: Working with First Nation

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			properties #21 and #24. Concerns were expressed that there were wintering campgrounds on the east and west side of the unnamed creek which could be destroyed if this area were excavated for the outlet channel which could have a serious impact on Blackfoot cultural items that might exist in these areas. Possible tipi rings discovered. The Piikani Nation Consultation team expressed an interest in having monitors in place during the construction so that they could observe the work being undertaken and to protect Blackfoot artifacts. The Piikani Nation Elders and Consultation technicians reinspected the areas on SR1 property #4. Concerns were expressed that there were possible tipi rings identified at this location. The Piikani Nation Elders and Consultation technicians were concerned over the potential loss of Blackfoot artifacts by the SR1 construction in this location. Concerns were raised related to impacts on cultural sites by the SR-1 during and after construction. Concerned about cultural sites	requirements for the protection of historic resources as determined by ACT. At the meetings held on September 18-19, 2018, Alberta Transportation discussed creating a map with Piikani Nation identified sites so specific risks and mitigation could be discussed at future meeting. At the meeting held on December 17, 2018, Alberta Transportation stated their willingness to discuss monitoring programs, and that this was a discussion they were also having with Alberta Environment and Parks (AEP) (the eventual owner and operator of SR1). At the meeting held on December 17, 2018, Alberta Transportation provided a map showing Piikani Nation identified sites in relation to the Project components. Alberta Transportation committed to discussing moving the tail of the floodplain berm with their engineers, as well as looking into the flows at the outflow channel and how that will affect the sites there.			
11	November 7, 2014 Initial SR1 Meeting September 15, 2016 Alberta Transportation meeting with the Piikani Nation, Blood Tribe/Kainai, and Siksika Nation at Head Smashed In Buffalo Jump January 18, 2017	Historic Resources	Piikani Nation inquired on the availability of the Historic Resources Impact Assessment (HRIA). Piikani Nation requested archaeological information gathered during the SR1 site investigations. Lack of sharing archaeological data for SR1 is a concern.	At the meeting held on January 18, 2017, Alberta Transportation indicated that the impacts to historical resources is under Alberta Culture and Tourism's (ACT) jurisdiction, and Stantec/Alberta Transportation are not able to provide that information at this time. Requests for the archaeological studies would have to go through ACT. Should ACT approve the request for the information, Alberta Transportation could then share it. In a letter dated May 10, 2017, Alberta Transportation indicated they had forwarded Piikani Nation's archaeological concerns to ACT, and the Treaty 7 contact would be available to them to discuss their concerns.	None at this time.	Alberta Transportation cannot provide the requested information. Alberta Transportation provided the contact information for the Treaty 7 contact at ACT to whom Piikani Nation can make the request.	No further action required.

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	Alberta Transportation meeting with the Piikani Nation, Blood Tribe/Kainai, and Siksika Nation in Lethbridge, Alberta.			On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-6 SR1 Project Specific Concerns and Responses - Piikani Nation</i> from the March 2018 EIA: Alberta Transportation is not authorized to disclose the information requested directly to the Piikani Nation. Alberta Transportation contacted ACT and obtained the Treaty 7 representative contact details and passed those details to the Piikani Nation. The Piikani Nation can make their request for the information directly to this individual.			
12	June 15, 2018 Piikani Nation Technical Review of Alberta Transportation Springbank Off-Stream Reservoir Project Environmental Impact Study, prepared by Schaldemose & Associates Inc., dated June 2018.	Historic resources	Request Alberta Transportation's support in better data sharing between ACT and stakeholders to obtain HRIA reports. Request Piikani Nation inclusion in discussions with ACT related to further investigations of identified sites within the construction boundary.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
13	June 15, 2018 Piikani Nation Statement of Concern Springbank off-Stream Reservoir Project June 2018.	Historical resources	The EIA did not make any specific commitments to protect/avoid TLRU and cultural sites, or any specific commitments to mitigate or accommodate tangible and intangible cultural impacts to Blackfoot culture, traditions and practices that will occur as a result of the Project.	At the meetings held on September 18-19, 2018, Alberta Transportation discussed creating a map with Piikani Nation's identified TLU sites so specific risks and mitigation could be discussed at future meeting. At the meeting held on December 17, 2018, Alberta Transportation provided a map showing Piikani Nation identified sites in relation to the Project components. Alberta Transportation committed to discussing moving the tail of the floodplain berm with their engineers, as well as looking into the flows at the outflow channel and how that will affect the sites there.	At the meetings held on September 18-19, 2018, Piikani Nation agreed to having a map of TLU sites made as long as the map is kept confidential. At the meeting held on December 17, 2018, Piikani Nation requested that Alberta Transportation look into avoiding sites identified near the end of the floodplain berm. Piikani Nation also voiced concerns about protecting sites within the outflow channel requesting that flow control measures be looked into in that area.	None at this time.	Ongoing: Working with First Nation
14	September 15, 2016 Alberta Transportation meeting with the Piikani Nation, Blood Tribe/Kainai, and Siksika Nation at Head Smashed In Buffalo Jump June 15, 2018 Piikani Nation Technical Review of Alberta Transportation Springbank Off-Stream Reservoir Project Environmental Impact Study, prepared by Schaldemose & Associates Inc., dated June 2018.	Wildlife Vegetation Information sharing	Piikani Nation requested information on Species at Risk (Wildlife and Plants) gathered during the SR-1 investigations. Request Species at Risk wildlife impact information gathered during the project site investigations.	Possible impacts and mitigation measures related to concerns raised by the Piikani Nation (Plant and Wildlife Species at Risk) will be addressed as part of the EIA. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-6 SR1 Project Specific Concerns and Responses - Piikani Nation</i> from the March 2018 EIA: Twenty-six species of management concern, including 15 birds and 11 mammals were observed during wildlife field surveys between 2015 and 2017. No plant species at risk were recorded during field surveys. Results of the field work are provided in the EIA; Volume 4, Appendix H and L, and Vol 3A sections 10 and 11. At the meetings held on September 18-19, 2018, Alberta Transportation described the mitigation for wildlife that is present in the EIA. This includes: wildlife friendly fencing; vegetated and gentle slopes; observing restricted activity periods and setbacks during construction; and camera monitoring programs.	At the meetings held on September 18-19, 2018, Piikani Nation mentioned that the animals may see the area as safe and use it more after the project is built because there will be no more ranching or grazing.	None at this time.	Ongoing: Working with First Nation

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				At the meeting held on December 17, 2018, Alberta Transportation reiterated the mitigation measures for wildlife.			
15	September 18-19, 2018 Meetings between Alberta Transportation, Stantec, and Piikani Nation	Wildlife Wildlife habitat	Concerned about the wildlife and wildlife habitat in the area.	At the meetings held on September 18-19, 2018, Alberta Transportation described the mitigation for wildlife that is present in the EIA. This includes: wildlife friendly fencing; vegetated and gentle slopes; observing restricted activity periods and setbacks during construction; and camera monitoring programs. At the meeting held on December 17, 2018, Alberta Transportation reiterated the mitigation measures for wildlife.	At the meetings held on September 18- 19, 2018, Piikani Nation mentioned that the animals may see the area as safe and use it more after the project is built because there will be no more ranching or grazing.	None at this time.	Ongoing: Working with First Nation
16	June 15, 2018 Piikani Nation Statement of Concern Springbank off-Stream Reservoir Project June 2018. June 15, 2018 Piikani Nation Technical Review of Alberta Transportation Springbank Off-Stream Reservoir Project Environmental Impact Study, prepared by Schaldemose & Associates Inc., dated June 2018.	Wildlife	Alberta Transportation should provide supporting information to demonstrate that successful ungulate crossings can be achieved with the proposed cover materials for rip-rap and revise the significance rating to reflect the predicted measurable change in the abundance and distribution of ungulates in the LAA. Requests information to demonstrate that ungulate crossing can be achieved with the proposed cover and rip-rap. Revise significance rating to reflect predicted change in abundance of ungulates in LAA.	At the meetings held on September 18-19, 2018, Alberta Transportation described the mitigation for wildlife that is present in the EIA. This includes: wildlife friendly fencing; vegetated and gentle slopes; observing restricted activity periods and setbacks during construction; and camera monitoring programs.	None at this time.	None at this time.	Ongoing: Working with First Nation
17	Piikani Nation Statement of Concern Springbank off-Stream Reservoir Project June 2018. June 15, 2018 Piikani Nation Technical Review of Alberta Transportation Springbank Off-Stream Reservoir Project Environmental Impact Study, prepared by Schaldemose & Associates Inc., dated June 2018.	Wildlife	The proponent should consult members of all potentially affected indigenous groups to: (i) validate lists of traditionally important wildlife species, (ii) add unique or overlooked species of traditional importance, and (iii) identify if indigenous members have specific knowledge about wildlife patterns within the LAA. Requests collaboration with Piikani Nation to validate inventories to traditionally important wildlife species, and identify if Indigenous members have specific knowledge about wildlife patterns within the LAA.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
18	June 15, 2018	Habitat	Alberta Transportation should collect more data to calibrate habitat suitability models for	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation

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	Piikani Nation Statement of Concern Springbank off- Stream Reservoir Project June 2018.		specific key indicators and validate assessment predictions.				
19	June 15, 2018 Piikani Nation Technical Review of Alberta Transportation Springbank Off-Stream Reservoir Project Environmental Impact Study, prepared by Schaldemose & Associates Inc., dated June 2018.	Wildlife	Concerned that revegetation measures are insufficiently detailed in describing the benefits of the mitigation on wildlife habitat reinstatement.	At the meetings held on September 18-19, 2018, Alberta Transportation described the mitigation for wildlife that is present in the EIA. This includes: wildlife friendly fencing; vegetated and gentle slopes; observing restricted activity periods and setbacks during construction; and camera monitoring programs.	None at this time.	None at this time.	Ongoing: Working with First Nation
20	June 15, 2018 Piikani Nation Technical Review of Alberta Transportation Springbank Off-Stream Reservoir Project Environmental Impact Study, prepared by Schaldemose & Associates Inc., dated June 2018.	Wildlife habitat	Requests more information on the four-class wildlife habitat rating scheme.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
21	February 22, 2017 The Piikani Nation delivered a Traditional Use Report	Wildlife Medicinal plants	Impacts to wildlife and medicinal plants, especially if one species is altered or annihilated, and how this will affect the ecosystem.	Alberta Transportation responded in a letter dated May 10, 2017: Possible impacts and mitigation measures related to concerns raised by the Piikani Nation (wildlife, plants) will be addressed as part of the EIA. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-6 SR1 Project Specific Concerns and Responses - Piikani Nation</i> from the March 2018 EIA: Vegetation will be cleared from the project development area during construction. However, effects of the Project are not anticipated to result in the loss of traditionally used species in the local assessment area. The effects on plants and traditional use are assessed in the EIA in Volume 3A and 3B, sections 10 and 14. Alberta Transportation would provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction. With the application of mitigation and environmental protection measures, residual environmental effects on wildlife, including migratory birds, species at risk, biodiversity, and provisions to maintain ungulate movement which was recommended by Indigenous groups are predicted to be not significant. The residual effects on change in habitat, movement, and mortality risk are unlikely to pose a long-term threat to the persistence or viability of a wildlife species including migratory birds and species. At the meetings held on September 18-19, 2018, Alberta Transportation described the mitigation for wildlife that is present in the EIA. This includes: wildlife friendly fencing; vegetated and gentle slopes; observing restricted activity periods and setbacks during construction; and camera monitoring programs.	At the meetings held on September 18-19, 2018, Piikani Nation mentioned that the animals may see the area as safe and use it more after the project is built because there will be no more ranching or grazing.	None at this time.	Ongoing: Working with First Nation

	1. Document or Meeting Reference	2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. First Nation/Metis Settlement response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
				At the meeting held on December 17, 2018, Alberta Transportation reiterated the mitigation measures for wildlife.			
22	February 22, 2017 The Piikani Nation delivered a Traditional Use Report	Wildlife Fish	Impacts to wildlife and stranding of fish in the reservoir during flood events.	Alberta Transportation responded in a letter dated May 10, 2017: Possible impacts and mitigation measures related to concerns raised by the Piikani Nation (wildlife) will be addressed as part of the EIA. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-6 SR1 Project Specific Concerns and Responses - Piikani Nation</i> from the March 2018 EIA: The Project will result in the permanent loss of 1,854 m² fish habitat at the diversion structure. This area has been identified as suitable foraging habitat for trout including, mountain whitefish, brown trout and rainbow trout. The area that will be lost is small compared to the habitat available within the local assessment area, which is approximately 3,100,000 m². Given the limited extent of the habitat affected impacts to fish and fish habitat are predicted to be not significant. The assessment of effects to fish and fish habitat are provided in the EIA Volumes 3A and 3B, section 8. After a flood, the water flows in the diversion channel will be gradually reduced and the reservoir slowly drained to facilitate the movement of fish from the reservoir, back to the Elbow River with the receding water. The outlet will be designed and operated in a manner that allows fish egress out of the reservoir will be graded to reduce stranding of fish during release of stored flood water from the reservoir. During draining of the reservoir, monitoring will be undertaken to identify isolated pools and the potential that fish may become stranded. If potential fish stranding is identified, a fish rescue program will be undertaken to return the fish to the river. With the application of mitigation and environmental protection measures, residual environmental effects on change in habitat, movement, and mortality risk are unlikely to pose a long-term threat to the persistence or viability of a wildlife species including migratory birds, species at risk, biodiversity, and provisions to maintain ungulate mov	At the meetings held on September 18-19, 2018, Piikani Nation commented that the animals may see the area as safe and use it more after the project is built because there will be no more ranching or grazing.	None at this time.	Ongoing: Working with First Nation
23	September 15, 2016 Alberta Transportation	Fish Fish habitat	Piikani Nation requested impact information on fish and fish	Possible impacts and mitigation measures related to concerns raised by the Piikani Nation (fish, fish habitat) will be addressed as part of the EIA.	None at this time.	None at this time.	Ongoing: Working with First Nation

	1. Document or Meeting Reference	2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. First Nation/Metis Settlement response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
	Nation, Blood Tribe/Kainai, and Siksika Nation at Head Smashed In Buffalo Jump	Information sharing	habitat resulting from the SR-1 project.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-6 SR1 Project Specific Concerns and Responses - Piikani Nation</i> from the March 2018 EIA: The Project will result in the permanent loss of 1,854 m² fish habitat at the diversion structure. This area has been identified as suitable foraging habitat for trout including, mountain whitefish, brown trout and rainbow trout. The area that will be lost is small compared to the habitat available within the local assessment area, which is approximately 3,100,000 m². Given the limited extent of the habitat affected impacts to fish and fish habitat are predicted to be not significant. The assessment of effects to fish and fish habitat are provided in the EIA Volumes 3A and 3B, section 8. At the meetings held on September 18-19, 2018, Alberta Transportation described the effects to fish and fish habitat and the mitigation proposed, including that structures will allow fish passage along the Elbow River as well as into and out of the reservoir, and there will be rescue of stranded fish after the reservoir is emptied. At the meeting held on December 17, 2018, Alberta Transportation reiterated the mitigation measures for fish.			
24	September 15, 2016 Alberta Transportation meeting with the Piikani Nation, Blood Tribe/Kainai, and Siksika Nation at Head Smashed In Buffalo Jump June 15, 2018 Piikani Nation Technical Review of Alberta Transportation Springbank Off-Stream Reservoir Project Environmental Impact Study, prepared by Schaldemose & Associates Inc., dated June 2018.	Fish	Piikani Nation requested information on how the design of the SR-1 is being undertaken to ensure that during a flood event that the mortality of fish is limited. Request confirmation that fish entrainment will be monitored and a fish salvage plan be put in place.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-6 SR1 Project Specific Concerns and Responses - Piikani Nation</i> from the March 2018 EIA: After a flood, the water flows in the diversion channel will be gradually reduced and the reservoir slowly drained to facilitate the movement of fish from the reservoir, back to the Elbow River with the receding water. The outlet will be designed and operated in a manner that allows fish egress out of the reservoir, downstream into the outlet channel. Drainage areas within the reservoir will be graded to reduce stranding of fish during release of stored flood water from the reservoir. During draining of the reservoir, monitoring will be undertaken to identify isolated pools and the potential that fish may become stranded. If potential fish stranding is identified, a fish rescue program will be undertaken to return the fish to the river. At the meetings held on September 18-19, 2018, Alberta Transportation described the effects to fish and fish habitat and the mitigation proposed, including that structures will allow fish passage along the Elbow River as well as into and out of the reservoir, and there will be rescue of stranded fish after the reservoir is emptied. At the meeting held on December 17, 2018, Alberta Transportation reiterated the mitigation measures for fish.	None at this time.	None at this time.	Ongoing: Working with First Nation
25	June 15, 2018 Piikani Nation Statement of Concern Springbank off-Stream Reservoir Project June 2018. June 15, 2018	Fish habitat Consultation	Piikani Nation community representatives should be consulted about plans to provide fish habitat replacement or offset, including the DFO consultation and authorization process.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation

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	Piikani Nation Technical Review of Alberta Transportation Springbank Off-Stream Reservoir Project Environmental Impact Study, prepared by Schaldemose & Associates Inc., dated June 2018.		Request a copy of the Fisheries and Oceans Canada application, and request Piikani Nation be consulted with about plans to provide fish habitat replacement or offset.				
26	June 15, 2018 Piikani Nation Statement of Concern Springbank off-Stream Reservoir Project June 2018. June 15, 2018 Piikani Nation Technical Review of Alberta Transportation Springbank Off-Stream Reservoir Project Environmental Impact Study, prepared by Schaldemose & Associates Inc., dated June 2018.	Vegetation	Alberta Transportation should complete additional surveys in the 1-km buffer between the Project Development Area (PDA) and Local Assessment Area (LAA) to ground-truth all mapped ecosites and to determine if there are any rare plants, rare plant communities, and/or traditional use species that should be considered for mitigation. Concerned about the lack of survey sites within the 1 km buffer between the PDA and LAA, and requests additional surveys and ground truthing be done to determine if there are any rare plants and/or traditional species. Requests data on how many surveys were completed for each ecosite.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
27	June 15, 2018 Piikani Nation Statement of Concern Springbank off-Stream Reservoir Project June 2018. June 15, 2018 Piikani Nation Technical Review of Alberta Transportation Springbank Off-Stream Reservoir Project Environmental Impact Study, prepared by Schaldemose & Associates Inc., dated June 2018.	Consultation Traditional Plants Vegetation	Alberta Transportation did not consult with Piikani Nation members to: include rare traditional plants in the rare surveys, determine if the rare species identified in the RAA and LAA were traditionally important plants, or to develop species-specific mitigation plans for the three specifies of management concern (SOMC) that might be removed by the Project. Alberta Transportation should consult members of all potentially affected Indigenous groups to ensure accuracy of conclusions in the EIA for	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation

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			traditional use plants and the completeness of the underlying data and analysis.				
			Concerned that Piikani Nation was not consulted about rare plants. Requests Alberta Transportation work with Piikani Nation to identify if rare species in the LAA are traditionally important, and develop mitigation measures.				
			Recommend engaging with Indigenous communities to validate traditional plant inventories and identify if traditional plants within the LAA are being used by Indigenous people.				
28	Piikani Nation Statement of Concern Springbank off-Stream Reservoir Project June 2018. June 15, 2018 Piikani Nation Technical Review of Alberta Transportation Springbank Off-Stream Reservoir Project Environmental Impact Study, prepared by Schaldemose & Associates Inc., dated June 2018.	Vegetation Traditional plants	The impact assessment of traditional use plant species (Section 10.2.3.2) for Flood and Post-flood Operations should be revised to reflect the loss of traditional use plant species that will be lost with upland and wetland communities submerged during the design flood. Concerned that the impact assessment for traditional use plant species is misleading for the loss of traditional plant species and other vegetation during Flood and Pos-flood Operations.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
29	June 15, 2018 Piikani Nation Technical Review of Alberta Transportation Springbank Off-Stream Reservoir Project Environmental Impact Study, prepared by Schaldemose & Associates Inc., dated June 2018.	Vegetation	Concerned about inconsistent reporting about species of management concern (rare plants) in the PDA.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
30	June 15, 2018 Piikani Nation Statement of Concern Springbank off-	Seeding Reclamation Consultation	Alberta Transportation should collaborate with Indigenous communities to ensure that the seed mix (and revegetation plan	At the meetings held on September 18-19, 2018, Alberta Transportation committed to discussing the opportunity for Piikani Nation to be involved in reclamation.	None at this time.	None at this time.	Ongoing: Working with First Nation

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Stream Reservoir Project June 2018.	Traditional land use	more generally) includes species of importance to the				
June 15, 2018		Piikani Nation and other				
June 15, 2018 Piikani Nation Technical Review of Alberta Transportation Springbank Off-Stream Reservoir Project Environmental Impact Study, prepared by Schaldemose & Associates Inc., dated June 2018. September 18-19, 2018 Meetings between Alberta Transportation, Stantec, and Piikani Nation		It is necessary that Alberta Transportation engages affected Indigenous communities when developing reclamation monitoring plans to help define meaningful monitoring criteria and indicators for traditional land use objectives and targets including planning for biodiversity potential to support traditional land uses on the post- reclamation landscape. Alberta Transportation should provide a more detailed reclamation plan that outlines how revegetation efforts will mitigate wildlife habitat loss and develop a detailed reclamation plan in collaboration with members of Piikani and other Indigenous communities. Concerned that the Project's revegetation measures did not address species of importance to Indigenous people. Request collaboration with Piikani Nation to develop a revegetation plan and seed mix. Requests only plant species native to region are used in revegetation program. Request discussion of availability of vegetation, fish and wildlife species for food, traditional medicinal and cultural purposes in the LAA and RAA in the conservation and reclamation plan.				
		Piikani Nation would like the opportunity to provide input on reclamation/seed mixes.				
31 June 15, 2018	Reclamation	There are several instances in the EIA in which Alberta Transportation cited	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation

	1. Document or Meeting Reference	2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. First Nation/Metis Settlement response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
	Piikani Nation Statement of Concern Springbank off-Stream Reservoir Project June 2018. June 15, 2018 Piikani Nation Technical Review of Alberta Transportation Springbank Off-Stream Reservoir Project Environmental Impact Study, prepared by Schaldemose & Associates Inc., dated June 2018.		"reclamation of temporary disturbances" as the basis for assessing residual project effects as not significant or low in magnitude, but did not present adequate information (e.g., scientific evidence and/or case studies) to demonstrate that successful reclamation could be achieved. Concerned about unsupported arguments relating to vegetation recovery.				
32	June 15, 2018 Piikani Nation Statement of Concern Springbank off-Stream Reservoir Project June 2018. June 15, 2018 Piikani Nation Technical Review of Alberta Transportation Springbank Off-Stream Reservoir Project Environmental Impact Study, prepared by Schaldemose & Associates Inc., dated June 2018.	Landscape	Alberta Transportation should revise the Project's residual effects on landscape diversity change to significant and irreversible. Concerned that linear density is already above ecosystem thresholds. Requests reassessment of landscape diversity change.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
33	June 15, 2018 Piikani Nation Statement of Concern Springbank off-Stream Reservoir Project June 2018. June 15, 2018 Piikani Nation Technical Review of Alberta Transportation Springbank Off-Stream Reservoir Project Environmental Impact Study, prepared by Schaldemose & Associates Inc., dated June 2018.	Soil	An assessment of how changes to soil quality and quantity might impact other terrestrial resources, including biodiversity, productivity, and ecological integrity, must be completed and should involve revisions to the determination of significance for the soil quality and quantity section. Concerned about the questionable determination of significance for soil quality and quantity, and requests an assessment of how changes to soil quality and quantity might impact other terrestrial resources.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
34	June 15, 2018	Soil	An assessment of how changes to terrain and soil conditions	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation

	1. Document or Meeting Reference Piikani Nation Statement of Concern Springbank off-Stream Reservoir Project June 2018.	2. Project Specific Aspect of the Concern Expressed Indigenous land use	might impact Indigenous land use resulting from implications for terrestrial resources (e.g., vegetation and wildlife) should be completed in cells be retired.	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. First Nation/Metis Settlement response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
35	June 15, 2018	Soil	be completed in collaboration with, and informed by, the Piikani Nation. Concerned about the lack of	None at this time.	None at this time.	None at this time.	Ongoing: Working with
	Piikani Nation Technical Review of Alberta Transportation Springbank Off-Stream Reservoir Project Environmental Impact Study, prepared by Schaldemose & Associates Inc., dated June 2018.	Son	overlay of soil inspection locations relative to the development area.			Note at this time.	First Nation
36	June 15, 2018 Piikani Nation Technical Review of Alberta Transportation Springbank Off-Stream Reservoir Project Environmental Impact Study, prepared by Schaldemose & Associates Inc., dated June 2018.	Soil	Concerned that the Project's mitigation measures did not address direct placement of salvaged surface soils.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
37	February 22, 2017 The Piikani Nation delivered a Traditional Use Report	Wetlands	General concerns expressed related to impact on wetlands.	Alberta Transportation responded in a letter dated May 10, 2017: Possible impacts and mitigation measures related to concerns raised by the Piikani Nation (wetlands) will be addressed as part of the EIA. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-6 SR1 Project Specific Concerns and Responses - Piikani Nation</i> from the March 2018 EIA: The Project would result in the loss of 8 ha of estimated high value wetland area and 13 ha of moderate wetland area in the local assessment area. Approximately 312 ha of the local assessment area contains wetland cover types. No vegetation and wetland land units are completely lost, and therefore no significant effects on vegetation and wetlands are predicted. Effects to wetlands are assessed in the EIA in Volumes 3A and 3B section 10. At the meetings held on September 18-19, 2018, Alberta Transportation discussed the effects to wetlands and the mitigation measures. Lost wetlands will be compensated.	None at this time.	None at this time.	Ongoing: Working with First Nation
38	February 22, 2017 The Piikani Nation delivered a Traditional Use Report	Upstream and downstream effects	General concerns expressed related to upstream and downstream effects.	Alberta Transportation responded in a letter dated May 10, 2017: Possible impacts and mitigation measures related to concerns raised by the Piikani Nation (upstream/downstream effects) will be addressed as part of the EIA. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-6 SR1</i>	At the meeting held on December 17, 2018, Piikani Nation voiced concerns about increased river flows and erosion downstream of the gates.	None at this time.	Ongoing: Working with First Nation

	1. Document or Meeting Reference	2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. First Nation/Metis Settlement response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
				Project Specific Concerns and Responses - Piikani Nation from the March 2018 EIA: Upstream effects as a result of the Project are not anticipated. Some backup of flood water when the diversion structure is in operation is expected, however the backup would reach approximately 500m upstream from the diversion structure, Volume 3A, Section 18 Figure 18-3.			
				The purpose of the Project is to protect lands and communities downstream. The EIA details the potential effects on all valued components during both construction and dry operations and during a flood.			
				At the meetings held on September 18-19, 2018 Alberta Transportation discussed the upstream/downstream effects. There will be no difference to present conditions during dry operations. Flood condition effects will be lessened as a result of the excess flows being diverted into the off-stream reservoir.			
				At the meeting held on December 17, 2018, Alberta Transportation described that there may be some naturally occurring erosion from the flood flow, but they have designed the project so that the instream gates do not increase flows on the river and therefore erosion would not be increased. The diversion channel will have some armouring to prevent erosion at vulnerable spots.			
39		Flooding	Concern raised regarding the effect on the environment after a	Possible impacts and mitigation measures related to concerns raised by the Piikani Nation will be addressed as part of the EIA.	None at this time.	None at this time.	Ongoing: Working with First Nation.
	Alberta Transportation meeting with the Piikani Nation, Blood Tribe/Kainai, and Siksika Nation in Lethbridge, Alberta.	Downstream effects	flood, and what mitigation will occur when the area is flooded.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-6 SR1 Project Specific Concerns and Responses - Piikani Nation</i> from the March 2018 EIA: The potential effects on the environment after a flood are detailed in the EIA, Volume 3B, including mitigation measures for post flood activities. Follow up and monitoring will occur after a flood, the details of which are presented in the EIA, Volume 3C, section 2.			
40	February 22, 2017 The Piikani Nation delivered a Traditional Use Report	Surface water Downstream effects	Impact of the silt shadow on downstream forests and river valleys.	Alberta Transportation responded in a letter dated May 10, 2017: Possible impacts and mitigation measures related to concerns raised by the Piikani Nation (downstream effects) will be addressed as part of the EIA.	None at this time.	None at this time.	Ongoing: Working with First Nation
				On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-6 SR1 Project Specific Concerns and Responses - Piikani Nation</i> from the March 2018 EIA: Flood-operations would occur when suspended sediment concentrations in the Elbow River are already high. The Project would not substantially change these high concentrations during diversion. During the last few days of water release back into Elbow River, suspended sediment concentrations are predicted to increase in the low-level outlet and cause a short-term peak.			
				Suspended sediment concentrations are expected to be high during Elbow River floods and settle out of the water when the water is retained in the reservoir. Most of the settled sediment would stay in reservoir during water release.			
				At the meetings held on September 18-19, 2018, Alberta Transportation explained that sediment will remain in the reservoir after a flood and it is			

	1. Document or Meeting Reference	2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	Proponent Response on Effort to Avoid or Mitigate Concern expected that natural vegetation will re-establish. Grass seed can also be	5. First Nation/Metis Settlement response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
				applied.			
41	June 15, 2018 Piikani Nation Statement of Concern Springbank off-Stream Reservoir Project June 2018. June 15, 2018 Piikani Nation Technical Review of Alberta Transportation Springbank Off-Stream Reservoir Project Environmental Impact Study, prepared by Schaldemose & Associates Inc., dated June 2018.	Groundwater Traditional uses	Alberta Transportation should confirm that it has considered potential traditional groundwater use in any culturally sensitive areas and if traditionally used, develop mitigative measures to protect these sensitive areas. Alberta Transportation should also consult with community members to inform and participate in related monitoring activities. Clarify if potential traditional groundwater use in any culturally sensitive areas has been considered.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
42	June 15, 2018 Piikani Nation Statement of Concern Springbank off-Stream Reservoir Project June 2018. June 15, 2018 Piikani Nation Technical Review of Alberta Transportation Springbank Off-Stream Reservoir Project Environmental Impact Study, prepared by Schaldemose & Associates Inc., dated June 2018.	Groundwater Monitoring	Additional monitoring is required to validate assessment predictions to better understand potential effects on groundwater quality and quantity in the Regional Assessment Area (RAA). Adequate groundwater (levels and quality) monitoring during construction and dry operation of the Project will be necessary to confirm the localized effects on groundwater surface water interaction. Piikani Nation requests Alberta Transportation monitor the effects of dewatering during construction.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
43	June 15, 2018 Piikani Nation Technical Review of Alberta Transportation Springbank Off-Stream Reservoir Project Environmental Impact Study, prepared by Schaldemose & Associates Inc., dated June 2018.	Hydrogeology Water quality	Piikani Nation requests Alberta Transportation conduct additional water quality sampling from more wells, long-term monitoring of more wells, updates Piikani Nation of these results, and consults with Piikani Nation about mitigation plans should there be unexpected effects to groundwater quality in the RAA.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation During the meetings held on September 18-19, 2018, Alberta Transportation committed to responding to the technical review.

	1. Document or Meeting Reference	2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. First Nation/Metis Settlement response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
44	June 15, 2018 Piikani Nation Technical Review of Alberta Transportation Springbank Off-Stream Reservoir Project Environmental Impact Study, prepared by Schaldemose & Associates Inc., dated June 2018.	Hydrology	Piikani Nation requests clarification on the operation of the diversion channel when natural flows are between 160 m³/s and 200 m³/s (i.e., <1 in 10 year flood events).	At the meeting held on December 17, 2019, Alberta Transportation described how the project would be used when flows are over 160 m ³ /s.	None at this time.	None at this time.	Ongoing: Working with First Nation
45	June 15, 2018 Piikani Nation Statement of Concern Springbank off-Stream Reservoir Project June 2018. June 15, 2018 Piikani Nation Technical Review of Alberta Transportation Springbank Off-Stream Reservoir Project Environmental Impact Study, prepared by Schaldemose & Associates Inc., dated June 2018.	Water levels	Further monitoring of the existing network along with additional further water level monitoring at locations at further distances from the RAA are recommended to help verify model predictions and reduce uncertainty. Piikani Nation requests Alberta Transportation conduct additional water level monitoring and updates Piikani on the results.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
46	June 15, 2018 Piikani Nation Statement of Concern Springbank off-Stream Reservoir Project June 2018. June 15, 2018 Piikani Nation Technical Review of Alberta Transportation Springbank Off-Stream Reservoir Project Environmental Impact Study, prepared by Schaldemose & Associates Inc., dated June 2018.	Cyanobacteria Water quality	Alberta Transportation should provide an assessment of the potential for the off-stream reservoir to develop cyanobacterial blooms, which might result in the production of microcystin toxins that could be introduced downstream during water release to the Elbow River and the drinking water supply, Glenmore Reservoir and develop and communicate contingency plans. Concerns related to water quality, water quality monitoring, and cyanobacteria blooms.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
47	June 15, 2018 Piikani Nation Statement of Concern Springbank off-Stream Reservoir Project June 2018. June 15, 2018	Sediment deposition Sediment transport	Alberta Transportation should explain and clarify what measures will be in place to maintain coarse sediment and/or bedload transport downstream in the Elbow River downstream of the diversion channel; how storage capacity would be maintained on an annual basis	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation

	Piikani Nation Technical Review of Alberta Transportation Springbank Off-Stream Reservoir Project Environmental Impact Study, prepared by Schaldemose & Associates Inc., dated June 2018.	2. Project Specific Aspect of the Concern Expressed	when it might be reduced due to sediment deposition within the reservoir and how the integrity of the low-level outlet channel would be maintained. Clarify how coarse sediment transport downstream will be maintained if discharges >160 m³/s will no longer occur. Importance of sediment deposition and resuspension dynamics should be discussed. Clarify how reservoir storage capacity would be confirmed and maintained, as storage capacity may be reduced due to sediment deposition.	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. First Nation/Metis Settlement response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
48	June 15, 2018 Piikani Nation Technical Review of Alberta Transportation Springbank Off-Stream Reservoir Project Environmental Impact Study, prepared by Schaldemose & Associates Inc., dated June 2018.	Hydrology	Clarify how the low-level outlet channel would be designed to maintain the integrity of the existing channel, limit bank erosion, and maintain environmental values.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
49	June 15, 2018 Piikani Nation Statement of Concern Springbank off-Stream Reservoir Project June 2018. June 15, 2018 Piikani Nation Technical Review of Alberta Transportation Springbank Off-Stream Reservoir Project Environmental Impact Study, prepared by Schaldemose & Associates Inc., dated June 2018.	Contamination	Alberta Transportation should consider aquatic impacts related not only to herbicides applied to control vegetation during Project operations, but also any existing hydrocarbons including herbicides that are on lands within the full project footprint. Alberta Transportation should also assess the potential for methyl mercury to be produced within the flooded reservoir and transported to the Elbow River during water release; assesses the potential for methylmercury produced in the flooded reservoir to be bioaccumulated by fish to levels that might not otherwise occur (and that might exceed human consumption guidelines in the Elbow River). Monitoring should also include inorganic mercury and	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation

	1. Document or Meeting Reference	2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. First Nation/Metis Settlement response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
			methylmercury in reservoir sediments, in water overlying sediments, and at the low-level outlet during water release, as well as in fish tissue just prior to salvaging fish back to the Elbow River.				
			Concerns related to increased herbicide concentrations and other contaminants getting into the water during a flood.				
			Concerns regarding methylmercury, including potential for methylmercury to be transported into the Elbow River, bioaccumulation, and monitoring.				
50	February 22, 2017 The Piikani Nation delivered a Traditional Use Report	Air quality	General concerns related to effects on air quality from flood residue spread by the wind.	Alberta Transportation responded in a letter dated May 10, 2017: Possible impacts and mitigation measures related to concerns raised by the Piikani Nation (air quality) will be addressed as part of the EIA. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-6 SR1 Project Specific Concerns and Responses - Piikani Nation</i> from the March 2018 EIA: The only potential source of fugitive dust during post-flood operations is wind erosion of deposited sediments in the reservoir after they dry out, and when strong wind conditions occur. Because these emissions are ground based, the greatest air quality changes due to these emissions occur inside and near the project development area, decreasing to background levels with increasing distance from the project development area. The main finding of the modeling completed for the EIA is the potential for dust concentrations to be greater than the regulatory criteria outside the project development area. However, given the low recurrence of the floods that result in sediment deposition (i.e. 100 years and design flood [200 years]) and the proposed mitigation measures, it is expected that fugitive dust emissions would not have significant adverse effects on ambient air quality. At the meetings held on September 18-19, 2018, Alberta Transportation discussed the modelling that had been done for dust. Wind will move dust in a north westerly direction. Sediment sampling has shown that most of the sediment is not small enough to mobilized by wind.	None at this time.	None at this time.	Ongoing: Working with First Nation
51	June 15, 2018 Piikani Nation Statement of Concern Springbank off-Stream Reservoir Project June 2018. June 15, 2018	Disturbances	More effort is required to ensure that existing disturbance is incorporated into project footprints, especially for projects such as this that are in heavily fragmented areas that have few remaining areas with sufficient	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation

	1. Document or Meeting Reference	2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. First Nation/Metis Settlement response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
	Piikani Nation Technical Review of Alberta Transportation Springbank Off-Stream Reservoir Project Environmental Impact Study, prepared by Schaldemose & Associates Inc., dated June		interior habitat area to support undisturbed traditional use. Concerned that the Project footprint might not absorb enough existing disturbance. Request commitment to make				
	2018.		every effort to adapt current plans to minimize the development footprint. Request that Government of				
			Alberta develops relevant policies and criteria for assessing, guiding, and achieving disturbance minimization, and consults with Indigenous people regarding this.				
52	June 15, 2018 Piikani Nation Statement of Concern Springbank off- Stream Reservoir Project June 2018.	Cumulative effects	Alberta Transportation should compare Project cumulative effects to a pre-development Baseline and revise the significance ranking in the Vegetation and Wetlands section of the Cumulative Effects Assessment.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
53	June 15, 2018 Piikani Nation Technical Review of Alberta Transportation Springbank Off-Stream Reservoir Project Environmental Impact Study, prepared by Schaldemose & Associates Inc., dated June 2018. December 17, 2018 Meeting between Alberta Transportation, Stantec, and	Ceremony	Request at least three weeks' notice prior to disturbing these areas so Elders can be consulted and appropriate protocol, including ceremonies, can be planned before construction. The Piikani Nation would like to perform a ceremonial sweat at the site of the tipi rings and perform other ceremonies before construction.	At the meeting held on December 17, 2018, Alberta Transportation expressed their willingness to support ceremonies being performed.	None at this time.	Alberta Transportation will fund and participate in ceremonies, if requested.	No further action required.
54	Piikani Nation January 18, 2017 Alberta Transportation meeting with the Piikani Nation, Blood Tribe/Kainai, and Siksika Nation in	First Nations Involvement	The Piikani Nation and the remainder of the Blackfoot Confederacy indicated that they should have accompanied Stantec during their EIA work.	At the meeting held on January 18, 2017, Stantec responded that they are paying more attention to First Nations, and they want First Nation input on the EIA. The Blackfoot Nations had access to the SR-1 lands, and now Alberta Transportation and Stantec want to hear their concerns and the impact to their Treaty rights and traditional uses so they can include these in the EIA.	At the meetings held on September 18- 19, 2018, Piikani Nation expressed their desire to be involved in monitoring, land use planning, and educational programs for the Project.	None at this time.	Ongoing: Working with First Nation
	Lethbridge, Alberta.			At the meeting held on January 18, 2017, Alberta Transportation also responded that they were undertaking the work in accordance with the requirements of the regulatory process. Alberta Transportation indicated			

	1. Document or Meeting Reference	2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. First Nation/Metis Settlement response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
				that they did not have the authority to change the regulatory process and if the Piikani Nation wanted to be directly involved in the EIA process they would have to consult provincial agencies such as Alberta Environment and Parks (AEP), Indigenous Relations, and ACT.			
				On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-6 SR1 Project Specific Concerns and Responses - Piikani Nation</i> from the March 2018 EIA: Alberta Transportation funded and provided the opportunity for the Piikani Nation to visit the site. Nation members visited the site on 13 days. At the meetings held on September 18-19, 2018, Alberta Transportation and Piikani Nation discussed potential ways that Piikani Nation may be involved in the Project moving forward, including: monitoring; land use planning; and educational programs.			
55	February 22, 2017 The Piikani Nation delivered a Traditional Use Report	First Nation involvement Historical Resources	The proponents of the project need to revise the language regarding mitigation and consider participation of Siksikaitsitapii (Keepers of our Language) in the official assessment by the experts utilized to confirm the authenticity of the historic and archeological sites discovered. If the project proceeds to the stage of construction another stage of consultation needs to proceed with Siksikaitsitapii prior to actual excavation and removal of material from the sites of the diversion. Existence of many archaeological sites within the SR-1 area.	Alberta Transportation responded in a letter dated May 10, 2017: Concerns that fall out of Alberta Transportation's jurisdiction have been forwarded to the appropriate regulatory agencies. Concerns regarding historical resources have been forwarded to ACT and the Treaty 7 contact would be available to discuss concerns further. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-6 SR1 Project Specific Concerns and Responses - Piikani Nation</i> from the March 2018 EIA: ACT independently assesses the heritage value of historic resources, determines the need for, and scope of, any avoidance or mitigation measures, and issues Project approval under the <i>Historical Resources Act.</i> If the Project is approved Alberta Transportation will follow all the requirements for the protection of historic resources as determined by ACT. If the Project is approved, Alberta Transportation is willing to discuss possible monitoring opportunities with the Piikani First Nation. At the meetings held on September 18-19, 2018, Alberta Transportation discussed creating a map with Piikani Nation identified sites so specific risks and mitigation could be discussed at future meetings. At the meeting held on December 17, 2018, Alberta Transportation stated their willingness to discuss monitoring programs, and that this was a discussion they were also having with Alberta Environment and Parks (AEP) (the eventual owner and operator of SR1). At the meeting held on December 17, 2018, Alberta Transportation provided a map showing Piikani Nation identified sites in relation to the Project components. Alberta Transportation committed to discussing moving the tail of the floodplain berm with their engineers, as well as looking into the flows at the outflow channel and how that will affect the sites there.	At the meetings held on September 18-19, 2018, Piikani Nation agreed to having a map of TLU sites made as long as the map is kept confidential. At the meeting held on December 17, 2018, Piikani Nation requested that Alberta Transportation look into avoiding sites identified near the end of the floodplain berm. Piikani Nation also voiced concerns about protecting sites within the outflow channel requesting that flow control measures be looked into in that area.	None at this time.	Ongoing: Working with First Nation
56	September 18-19, 2018	Economic opportunities	Opportunities for Piikani Nation to purchase excess Crown land.	At the meetings held on September 18-19, 2018, Alberta Transportation committed to reviewing the process for selling and purchasing the excess Crown land and bringing that information back to Piikani Nation.	None at this time.	None at this time.	Ongoing: Working with First Nation

	1. Document or Meeting Reference Meetings between Alberta Transportation, Stantec, and Piikani Nation	2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. First Nation/Metis Settlement response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
57	September 18-19, 2018 Meetings between Alberta Transportation, Stantec, and Piikani Nation	Educational programs	Piikani Nation would like there to be education and cultural awareness programs, programs for youth.	At the meetings held on September 18-19, 2018, Alberta Transportation discussed cultural awareness programs with the Piikani Nation and committed to more discussions on the topic.	None at this time.	None at this time.	Ongoing: Working with First Nation
58	June 15, 2018 Piikani Nation Technical Review of Alberta Transportation Springbank Off-Stream Reservoir Project Environmental Impact Study, prepared by Schaldemose & Associates Inc., dated June 2018.	Monitoring	Concerned that monitoring will not include Indigenous communities and requests Alberta Transportation provide opportunities and financial capacity for communities to meaningfully participate in the planning and implementation of monitoring.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-6 SR1 Project Specific Concerns and Responses - Piikani Nation</i> from the March 2018 EIA: If the Project is approved, AT is willing to discuss possible monitoring opportunities with the Piikani First Nation. At the meeting held on December 17, 2018, Alberta Transportation stated their willingness to discuss monitoring programs, and that this was a discussion they were also having with Alberta Environment and Parks (AEP) (the eventual owner and operator of SR1).	None at this time.	None at this time.	Ongoing: Working with First Nation
59	September 15, 2016 Alberta Transportation meeting with the Piikani Nation, Blood Tribe/Kainai, and Siksika Nation at Head Smashed In Buffalo Jump June 15, 2018 Piikani Nation Statement of Concern Springbank off-Stream Reservoir Project June 2018. June 15, 2018 Piikani Nation Technical Review of Alberta Transportation Springbank Off-Stream Reservoir Project Environmental Impact Study, prepared by Schaldemose & Associates Inc., dated June 2018. December 17, 2018 Meeting between Alberta Transportation, Stantec, and Piikani Nation	Historic Resources Monitoring	Piikani Nation requested front line monitors be present throughout the SR-1 construction. Alberta Transportation should include the Piikani Nation in discussions with ACT related to further investigations of identified sites; present the results once all Baseline information is collected; and provide an opportunity to monitor construction activities near known cultural resources including the flats north of the berm location, the bottom of the Elbow riverbed and on a tributary creek channel off the Elbow River. Request opportunity to monitor construction activities near known cultural resources. The Piikani Nation would like to have monitors on site during construction and after a flood to see if any sites are unearthed.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-6 SR1 Project Specific Concerns and Responses - Piikani Nation</i> from the March 2018 EIA: If the Project is approved, Alberta Transportation is willing to discuss possible monitoring opportunities with the Piikani First Nation. At the meetings held on September 18-19, 2018, Alberta Transportation discussed that there will be monitoring opportunities throughout the phases of the Project. At the meeting held on December 17, 2018, Alberta Transportation stated their willingness to discuss monitoring programs, and that this was a discussion they were also having with Alberta Environment and Parks (AEP) (the eventual owner and operator of SR1).	None at this time.	None at this time.	Ongoing: Working with First Nation
60	June 15, 2018 Piikani Nation Statement of Concern Springbank off-	Monitoring Biodiversity	Alberta Transportation should provide a more detailed description of its wildlife monitoring program and provide capability for the Piikani Nation	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation

	1. Document or Meeting Reference	2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. First Nation/Metis Settlement response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
	Stream Reservoir Project June 2018.		to participate in the monitoring program.				
	June 15, 2018 Piikani Nation Technical Review of Alberta Transportation Springbank Off-Stream Reservoir Project Environmental Impact Study, prepared by Schaldemose & Associates Inc., dated June		It is Piikani Nation's view that monitoring plans for biodiversity should be completed as a condition for approval and that the plans should be submitted to the Piikani Nation for examination and input. Concerned that Piikani Nation				
	2018.		was not engaged in biodiversity planning and would like Piikani Nation involvement in decision making related to biodiversity reestablishment.				
			Concerned about lack of information regarding mitigation and monitoring for impacts to biodiversity. Requests development of biodiversity monitoring plans and Piikani Nation involvement.				
61	June 15, 2018 Piikani Nation Technical Review of Alberta Transportation Springbank Off-Stream Reservoir Project Environmental Impact Study, prepared by Schaldemose & Associates Inc., dated June 2018.	Soil Land use Monitoring	Concerned that there has been no discussion on how changes to terrain and soil might impact Indigenous land use. Requests a monitoring plan be developed with Piikani Nation to monitor impacts to soil conditions.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
62	June 15, 2018 Piikani Nation Statement of Concern Springbank off-Stream Reservoir Project June 2018. June 15, 2018 Piikani Nation Technical Review of Alberta Transportation Springbank Off-Stream Reservoir Project Environmental Impact Study, prepared by Schaldemose & Associates Inc., dated June 2018.	Plants Fish Wildlife Monitoring	Alberta Transportation should: discuss the availability of vegetation, fish and wildlife species for food, traditional medicinal and cultural purposes in the LSA and RSA in the Conservation and Reclamation plan; develop a monitoring plan with the Piikani to assess Project effects on hunting, trapping, fishing, plant harvesting and cultural use following Project development; develop Project-specific triggers and limits with Piikani for the Project's mitigation, management and monitoring plans that reflect Community	At the meeting held on December 17, 2018, Alberta Transportation stated their willingness to discuss monitoring programs, and that this was a discussion they were also having with Alberta Environment and Parks (AEP) (the eventual owner and operator of SR1).	None at this time.	None at this time.	Ongoing: Working with First Nation

	1. Document or Meeting Reference	2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. First Nation/Metis Settlement response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
			TEK and ecological and cultural values; and consider supporting Piikani's cultural retention strategies, including plans to establish community-based monitoring of key cultural species and practices.				
			Request Alberta Transportation considers supporting Piikani Nation's cultural retention strategies, including plans to establish community based monitoring of key cultural species and practices.				
			Request development of monitoring plan with Piikani Nation to assess Project effects on hunting, trapping, fishing, plant harvesting, and cultural use.				
			Request development with Piikani Nation of Project-specific triggers and limits for the Project's mitigation, management, and monitoring plans that reflect community traditional ecological knowledge and cultural values.				
63	June 15, 2018 Piikani Nation Statement of Concern Springbank off-Stream Reservoir Project June 2018. June 15, 2018 Piikani Nation Technical Review of Alberta Transportation Springbank Off-Stream Reservoir Project Environmental Impact Study, prepared by Schaldemose & Associates Inc., dated June 2018. September 18-19, 2018 Meetings between Alberta Transportation, Stantec, and Piikani Nation	Land access	Alberta Transportation should collaborate with Piikani Nation and other Indigenous communities to develop an access management plan (AMP) for roads and other linear access features associated with the Project with restrictions on non-essential access, and with reasonable allowances that give Indigenous communities access to traditional lands. It is not clear how access for Piikani Nation members would be coordinated such that they would be able to carry out ceremonies within the conservation area (Area A) or how the province would facilitate activities such as hunting within an area intended for multi-use	At the meetings held on September 18-19, 2018, Alberta Transportation and Piikani Nation discussed land use planning and committed to continued discussions on the topic. In a letter dated June 18, 2019, Alberta Transportation indicated they had created a draft post-construction land use document for the SR1 project that provides draft principles of future land use for the Project Development Area (PDA). The primary use of all lands within the PDA, including the LUA, is for flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses such as vegetation management and First Nations' traditional activities (including the exercise of treaty rights such as hunting) will be allowed within the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights and to engage in traditional uses.	None at this time.	None at this time.	Ongoing: Working with First Nation

	1. Document or Meeting Reference	2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. First Nation/Metis Settlement response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
			including access by recreational users.				
			Request collaboration with Piikani Nation to develop an access management plan for roads and other linear access features associated with the Project. Specifically, restrictions on non-essential access and allowances to allow Piikani Nation access to traditional lands.				
			Request co-development of an Access Management Plan for Area A.				
			Requests Alberta Transportation works with Piikani Nation to ensure cultural and spiritual values are integrated when developing access management plans.				
			Describe how the Project will align with existing land use documents, guidelines, and policies, and how Aboriginal rights and interests will be accommodated.				
			Piikani Nation would like to be involved in land use planning.				
64	September 18-19, 2018 Meetings between Alberta Transportation, Stantec, and Piikani Nation Access Ceremonies		Access to plants, animals, for bundles and ceremony.	At the meetings held on September 18-19, 2018, Alberta Transportation stated they will provide opportunities for First Nations to harvest traditional plants prior to construction. Alberta Transportation also offered to have a ceremony prior to construction if Piikani Nation is interested. Alberta Transportation and Piikani Nation discussed the long-term land use plan and committed to continued discussions on the topic.	None at this time.	None at this time.	Ongoing: Working with First Nation
				At the meeting held on December 17, 2018, Alberta Transportation expressed their willingness to support ceremonies being performed.			
				In a letter dated June 18, 2019, Alberta Transportation indicated they had created a draft post-construction land use document for the SR1 project that provides draft principles of future land use for the Project Development Area (PDA). The primary use of all lands within the PDA, including the LUA, is for flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses such as vegetation management and First Nations'			
				traditional activities (including the exercise of treaty rights such as hunting) will be allowed within the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in			

	Document or Meeting Reference	2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	Proponent Response on Effort to Avoid or Mitigate Concern a positive change to the ability to exercise Section 35 rights and to engage	5. First Nation/Metis Settlement response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
-	June 15, 2018 Piikani Nation Technical Review of Alberta Transportation Springbank Off-Stream Reservoir Project Environmental Impact Study, prepared by Schaldemose & Associates Inc., dated June 2018.	Traditional use	Requests discussions with Piikani Nation and other communities to consider constructing a permanent memorial dedicated to historical use and occupancy of these lands by Blackfoot people, and later Tsuut'ina and Stoney.	in traditional uses. None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation

Springbank SR1 - Specific Concerns and Response Table

First Nation or Metis Settlement: Siksika Nation

Date: AUGUST 2014 - AUGUST 2019

1. Document or Meeting Reference	3. Project Specific Aspect of the Concern Expressed	2. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. First Nation/Metis Settlement response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
1 May 20, 2016 Siksika Nation Letter to Alberta Transportation (DEMA) in support of their TUS budget request.	Traditional Use	The Siksika Nation stated the SR1 project proposed for the Elbow River can be reasonably expected to have substantial impacts on Siksika traditional use right and interests, and, heritage sites, protected by Section 35 of the Constitution. They can be expected to include both upstream and downstream impacts during the construction and operation of the SR1 control structure. Given that the Elbow River is a major transport corridor for Siksika members and has been for millennia, is expected that the impacts on Siksika traditional use and sites will be substantial.	Alberta Transportation provided funding for the Siksika Nation to conduct a Traditional Use Study (TUS) on the project lands (privately and publicly held). Siksika Nation conducted a TUS (10 field days) in summer/fall of 2016. The Siksika Nation delivered a Joint Interim Traditional Use Report on March 13, 2017 that was co-authored with the Blood Tribe. Following the completion of the Siksika Nation's site visits and Alberta Transportation's Historical Resource Impact Assessment a meeting was held at Head Smashed In Buffalo Jump with the Siksika Nation, the Blood Tribe, and the Piikani Nation on Sept 15, 2016, with a second meeting in Lethbridge on January 18, 2017. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of Table 7-5 SR1 Project Specific Concerns and Responses - Siksika Nation from the March 2018 EIA: Effects on potential or established Aboriginal or Treaty rights are addressed through the assessment of the current use of lands and resources for traditional purposes. By acknowledging a link between practice-based rights and current use, this assessment accepts that adverse residual effects on availability of traditional resources for current use, on access to traditional resources or areas for current use, or on sites or areas for current use will have a consequent effect on the ability of Indigenous groups to exercise potential or established Aboriginal and Treaty rights. Given that the residual effects for the Project on TLRU are predicted to be not significant, no effects on potential or established Aboriginal or Treaty rights is expected to occur as a result of the Project. On April 26, 2018, Alberta Transportation measures in Table 7-5 SR1 Project Specific Concerns and Responses - Siksika Nation. In response to Siksika Nation's additional concerns raised at the April 26, 2018 meeting, Alberta Transportation explained that the Project creates more Crown land than there was before, and there is a possibility of an agreemen	At the meeting held on April 26, 2018 to discuss concerns and responses, Siksika Nation responded that Treaty Rights are not just about plants and animals, but the lands should be looked at as a whole. Crown lands are getting smaller while the population gets bigger. At the meeting held on December 10, 2018, Siksika Nation expressed concerns regarding the viability of the land use plan and indicated they would want to see a land use plan before commenting on it. There were concerns that the Siksika Nation would be asked to consult and then their input would not be used in the final plan, leaving them without access to the landscape.	None at this time.	Ongoing: Working with First Nation

	1. Document or Meeting Reference	3. Project Specific Aspect of the Concern Expressed	2. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. First Nation/Metis Settlement response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
				(CEAA) IR2-01, IR2-02, and IR2-08. To date, Siksika Nation has not provided a response. In a letter dated June 18, 2019, Alberta Transportation indicated they had created a draft post-construction land use document for the SR1 project that provides draft principles of future land use for the Project Development Area (PDA). The primary use of all lands within the PDA, including the LUA, is for flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses such as vegetation management and First Nations' traditional activities (including the exercise of treaty rights such as hunting) will be allowed within the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights and to engage in traditional uses.			
2	October 27, 2014 Initial SR1 Meeting held in Siksika, Alberta.	Medicinal Plants Traditional Knowledge Traditional Use Studies	The Siksika Nation wanted to have their Elders involved when medicinal plants and Traditional Knowledge is being assessed. The Siksika Nation indicated they would like to complete a Traditional Use Study of the SR1 Project Area.	At the October 27, 2014 meeting, Alberta Transportation indicated there could be funding for Siksika Nation to do a Traditional Use Study (TUS). Alberta Transportation provided funding for the Siksika Nation to conduct a Traditional Use Study on the project lands (privately and publicly held). On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-5 SR1 Project Specific Concerns and Responses - Siksika Nation</i> from the March 2018 EIA: Alberta Transportation funded a Siksika Traditional Use Study (TUS). Siksika Nation spent 7 days in the field in 2016, and delivered an interim TUS co-authored with the Kainai Nation on March 13, 2017. The findings of the TUS study were incorporated into the EIA. On April 26, 2018, Alberta Transportation met with Siksika Nation to review their specific concerns and the responses and proposed mitigation measures in <i>Table 7-5 SR1 Project Specific Concerns and Responses - Siksika Nation</i> .	At the meeting held on April 26, 2018 to discuss concerns and responses, Siksika Nation stated they would discuss with the Blood Tribe/Kainai about getting a final TUS report submitted. To date, Siksika Nation has not submitted a final TUS.	None at this time.	Ongoing: Working with First Nation
3	April 26, 2018 Meeting between Siksika Nation, Alberta Transportation, and Stantec	Traditional Use Studies	Siksika Nation would like to do a traditional use survey of Area A.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
4	April 26, 2018 Meeting between Siksika Nation, Alberta Transportation, and Stantec	Traditional territory	Siksika Nation would like the description and representation of Stoney Nakoda Nation's traditional territory pulled from the filing, or an opportunity for Siksika Nation to present a thorough description.	At the meeting held on April 26, 2018, Alberta Transportation suggested Siksika Nation use the submission of their final TUS report to address traditional territory. Comments about the submission can also be made directly to CEAA. During a phone call on July 6, 2018, and in emails on July 16, 2018 and September 7, 2018, Alberta Transportation further explained the inclusion of the reference to the Stoney Nakoda Nation Statement of Claim. Alberta Transportation explained that the map and claim reference was provided by Stoney Nakoda Nation's legal counsel and maps of traditional territory were required by the regulator. Alberta Transportation's intent is not to substantiate or agree with the claim.	During the phone call on July 6, 2018, Siksika First Nation indicated they will discuss Alberta Transportation's response and let Alberta Transportation know what action, if any, Siksika Nation may require regarding this matter.	None at this time.	Ongoing: Working with First Nation
5	July 21, 2016	Historical Resources	The Siksika Nation Elders and Technicians on inspection of	Alberta Transportation requested the Siksika Nation's Traditional Use Study prior to the meeting on January 7, 2017 so they could review any	The Siksika Nation delivered a Joint Interim Traditional Use Report on	None at this time.	Ongoing: Working with First Nation

1. Document or Meeting Reference 3. Project Specific A of the Concern Expr		4. Proponent Response on Effort to Avoid or Mitigate Concern	5. First Nation/Metis Settlement response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
Site Visit August 10, 2016 Site Visit August 10, 2016 Site Visit September 15, 2016 Alberta Transportation meeting with the Siksika Nation, Blood Tribe/Kainai, and Piikani Nation at Head Smashed In Buffalo Jump January 18, 2017 Alberta Transportation meeting with the Siksika Nation, Blood Tribe/Kainai, and Piikani Nation in Lethbridge Alberta. March 13, 2017 The Siksika Nation delivered an "Interim" Traditional Use Report that was co-authored with the Blood Tribe.	Property #21 along the "unnamed creek" identified what they believed to be tipi rings on the north side of the unnamed creek, and indicated that it was a wintering ground for the Blackfoot many years ago. Siksika Nation expressed concern that the tipi rings are potentially located adjacent to the SR1 reservoir outfall along an unnamed creek into the Elbow River. The Siksika Nation Elders and Consultation technicians re- inspected the areas on SR1 properties #21 and #24. The Siksika Nation are concerned the evidence of wintering grounds and tipi rings will be lost if this area is excavated for the SR1 outfall to drain the dry reservoir after a flood event. The Siksika Nation Elders and Consultation technicians inspected the areas on SR1 properties #6 and #9. Concerns were expressed that the excavations for the diversion channels could have a serious impact on Blackfoot cultural items that might exist in these areas. Concerns emphasizing the need to protect artifacts and sites such as old camp sites, tipi rings, and other rock markers. Concerns were raised related to impacts on cultural sites by the SR1 during and after construction. Expressed concerns related to ceremonial locations and impacts to Blackfoot cultural sites.	detailed site-specific concerns and be prepared to discuss potential mitigation measures. Alberta Transportation brought Stantec (Alberta Transportation's consultant) to the January 18, 2017 meeting to share information on their EIA field data collection program and methodologies and to gain an understanding of the Traditional Knowledge and traditional uses component required in the EIA. In the letter dated May 10, 2017, Alberta Transportation indicated they took direction on mitigation for cultural and historical resources directly from ACT. Alberta Transportation forwarded Siksika Nation's concerns to ACT, and ACT's Treaty 7 advisor would be able to discuss further. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns and Responses - Siksika Nation from the March 2018 EIA: Project Specific Concerns and Responses - Siksika Nation from the March 2018 EIA: Project activities within the project development area would disturb 11 precontact period and 11 historic period archaeological sites. No traditional land use sites of very high heritage value, such as spiritual sites or human burials have been identified within the project development area. Identified sites include isolated finds, artifact scatters, campsites and historic remains such as homesteads and a school. Effects to historical resources are detailed in the EIA, Volume 3A and 3B, section 13. There will be some limited excavation at the outfall structure (18m) to reduce the speed of the water entering the natural channel. Beyond 18m from the outfall no excavation is proposed. ACT independently assesses the heritage value of historic resources, determines the need for, and scope of, any avoidance or mitigation measures, and issues Project approval under the Historical Resources Act. If the Project is approved Alberta Transportation will follow all the requirements for the protection of historical resources as determined by ACT. On April 26, 2018, Alberta Transportation met with Siksika Nation to review their specifi	March 13, 2017 that was co-authored with the Blood Tribe. At the meeting held on April 26, 2018 to discuss concerns and responses, Siksika Nation were still concerned about tipi rings and historical trails being destroyed. They requested more information on what will be impacted by construction. They were also concerned about burials in the area, as people may have been buried in tipis or in trees. Some of the tipi rings may represent burials. Siksika Nation suggested the flow at the outlet channel can be controlled to reduce potential effects on the campsites located there.		

	1. Document or Meeting Reference	3. Project Specific Aspect of the Concern Expressed	2. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. First Nation/Metis Settlement response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
6	April 26, 2018 Meeting between Siksika Nation, Alberta Transportation, and Stantec	Historical Resources	Concerns about the Blackfoot trail and campsites around Mary Robinson's property. Will they be impacted by construction?	At the meeting held on April 26, 2018, Alberta Transportation indicated that the log cabin would be affected, but the trail would not. Alberta Transportation will verify and respond. In an email on July 20, 2018, Alberta Transportation provided the following response: The Old Blackfoot Trail is located outside of the Project Development Area (PDA) and will not be affected by construction. Alberta Transportation is not aware of the locations of any campsites on Mary Robinson's property; none were identified on the property during the heritage resources survey of the Project Development Area. If specific locations are identified, Alberta Transportation will determine if the location is inside the PDA and therefore may be impacted by project construction. If the area falls within the PDA all necessary regulatory requirements, policies and procedures will be followed with respect to the site, which will including discussions with ACT.	None at this time.	None at this time.	Ongoing: Working with First Nation
7	September 15, 2016 Alberta Transportation meeting with the Siksika Nation, Blood Tribe/Kainai, and Piikani Nation at Head Smashed In Buffalo Jump January 18, 2017 Alberta Transportation meeting with the Siksika Nation, Blood Tribe/Kainai, and Piikani Nation in Lethbridge Alberta.	Historical Resources Information sharing	Siksika Nation requested archaeological information gathered during the SR1 Site investigations. Lack of sharing archaeological data for SR1 is a concern	At the meeting held on January 18, 2017, Alberta Transportation indicated that the impacts to historical resources is under ACT's jurisdiction, and Stantec/Alberta Transportation are not able to provide that information at this time. Requests for the archaeological studies would have to go through ACT. Should ACT approve the request for the information, Alberta Transportation could then share it. In the letter dated May 10, 2017, Alberta Transportation indicated they took direction on mitigation for cultural and historical resources directly from ACT. Alberta Transportation forwarded Siksika Nation's concerns to ACT, and ACT's Treaty 7 advisor would be able to discuss further. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-5 SR1 Project Specific Concerns and Responses - Siksika Nation</i> from the March 2018 EIA: Alberta Transportation is not authorized to disclose the information requested directly to the Siksika Nation. Alberta Transportation contacted Alberta Culture and Tourism and obtained the Treaty 7 representative contact details and passed those details to the Siksika Nation. The Siksika Nation can make their request for the information directly to this individual. On April 26, 2018, Alberta Transportation met with Siksika Nation to review their specific concerns and the responses and proposed mitigation measures in <i>Table 7-5 SR1 Project Specific Concerns and Responses - Siksika Nation</i> .	At the meeting held on April 26, 2018 to discuss concerns and responses, Siksika Nation stated that Alberta Transportation's response was "straightforward."	Proponent response satisfactory to First Nation.	No further action required.
8	October 27, 2014 Initial SR1 Meeting held in Siksika, Alberta.	Historical Resources Medicinal and ceremonial plants	Expressed concern on potential impact from the SR1 on Blackfoot artifacts, ceremonial and medicinal plants.	At the meeting held on October 27, 2014, Alberta Transportation indicated there could be funding for Siksika Nation to respond to the historical resources and environmental studies. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-5 SR1 Project Specific Concerns and Responses - Siksika Nation</i> from the March 2018 EIA: Project activities within the project development area would disturb 11 precontact period and 11 historic period archaeological sites. No traditional land use sites of very high heritage value, such as spiritual sites or human burials have been identified within the project development area. Identified sites include isolated finds, artifact scatters, campsites and	At the meeting held on April 26, 2018 to discuss concerns and responses, Siksika Nation were still concerned about tipi rings and historical trails being destroyed. They requested more information on what will be impacted by construction. They were also concerned about burials in the area, as people may have been buried in tipis or in trees. Some of the tipi rings may represent burials. Siksika Nation	None at this time.	Ongoing: Working with First Nation

1. Document or Meeting Reference	3. Project Specific Aspect of the Concern Expressed	2. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. First Nation/Metis Settlement response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
			historic remains such as homesteads and a school. Effects to historical resources are detailed in the EIA, Volume 3A and 3B, section 13.	suggested the flow at the outlet channel can be controlled to reduce potential		
			There will be some limited excavation at the outfall structure (18m) to reduce the speed of the water entering the natural channel. Beyond 18m from the outfall no excavation is proposed. Alberta Culture and Tourism's (ACT) independently assesses the heritage value of historic resources, determines the need for, and scope of, any avoidance or mitigation measures, and issues Project approval under the	effects on the campsites located there. At the meeting held on April 26, 2018 to discuss concerns and responses, Siksika Nation indicated they were open to transplanting, but would need more discussion and information, including where the plants would be		
			Historical Resources Act. If the Project is approved Alberta Transportation will follow all the requirements for the protection of historical resources as determined by ACT.	transplanted. Late May to late June would be the ideal time period to		
			Vegetation will be cleared from the project development area during construction. However, effects of the Project are not anticipated to result in the loss of traditionally used species in the local assessment area. The effects on plants and traditional use are assessed in the EIA in Volume 3A and 3B, sections 10 and 14.	conduct a study. Siksika Nation stated this was something they would need to caucus on. Siksika Nation would like to monitor before and after a flood to understand what is growing in the Project area.		
			Alberta Transportation would provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction.			
			On April 26, 2018, Alberta Transportation met with Siksika Nation to review their specific concerns and the responses and proposed mitigation measures in <i>Table 7-5 SR1 Project Specific Concerns and Responses - Siksika Nation</i> .			
			At the meeting held on April 26, 2018, Alberta Transportation indicated that while the flow at the outlet channel can be controlled to reduce potential erosion, the rate of release may be determined by many factors including but not limited to the need to prepare for another imminent flood.			
9 September 15, 2016 Alberta Transportation meeting with the Siksika Nation, Blood Tribe/Kainai, and Piikani Nation at Head Smashed In Buffalo Jump	Wildlife Vegetation Information sharing	Siksika Nation requested information on Species at Risk (Wildlife and Plants) gathered during the SR1 investigations.	Possible impacts and mitigation measures related to concerns raised by the Siksika Nation (Plant and Wildlife Species at Risk) will be addressed as part of the EIA. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-5 SR1 Project Specific Concerns and Responses - Siksika Nation</i> from the March 2018 EIA: Twenty-six species of management concern, including 15 birds and 11 mammals were observed during wildlife field surveys between 2015 and 2017. No plant species at risk were recorded during field surveys. Results of the field work are provided in the EIA; Volume 4, Appendix H and L, and Vol 3A sections 10 and 11. On April 26, 2018, Alberta Transportation met with Siksika Nation to review their specific concerns and the responses and proposed mitigation measures in <i>Table 7-5 SR1 Project Specific Concerns and Responses - Siksika Nation</i> . At the meeting held on December10, 2018, Alberta Transportation described some of the mitigation for wildlife that is present in the EIA. This includes: wildlife friendly fencing and vegetated and gentle slopes.	At the meeting held on April 26, 2018 to discuss concerns and responses, Siksika Nation indicated they were open to transplanting, but would need more discussion and information, including where the plants would be transplanted. Siksika Nation stated this was something they would need to caucus on. Siksika Nation would like to monitor before and after a flood to understand what is growing in the Project area. At the meeting held on April 26, 2018, Siksika Nation reiterated concerns about wildlife, and how the 2013 flood affected especially the deer population. They indicated they would have more comments on wildlife later.	None at this time.	Ongoing: Working with First Nation

	1. Document or Meeting Reference	3. Project Specific Aspect of the Concern Expressed	2. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. First Nation/Metis Settlement response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
10	January 18, 2017 Alberta Transportation	Wildlife	Concerns expressed on SR1 construction impact to animal	Possible impacts and mitigation measures related to concerns raised by the Siksika Nation (wildlife) will be addressed as part of the EIA.	None at this time.	None at this time.	Ongoing: Working with First Nation
	meeting with the Siksika Nation, Blood Tribe/Kainai, and Piikani Nation in Lethbridge Alberta.		homes, such as the beavers.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-5 SR1 Project Specific Concerns and Responses - Siksika Nation</i> from the March 2018 EIA: No beaver dams were identified during surveys conducted for the Project. It is not anticipated that the Project would affect beaver dams. In the event of a flood, effects to beaver dams may occur whether the Project is in place or not. The effects of the Project to wildlife and aquatic species are discussed in the EIA Volumes 3A and 3B, sections 8 and 11.			
				On April 26, 2018, Alberta Transportation met with Siksika Nation to review their specific concerns and the responses and proposed mitigation measures in <i>Table 7-5 SR1 Project Specific Concerns and Responses - Siksika Nation</i> .			
				At the meeting held on December10, 2018, Alberta Transportation described some of the mitigation for wildlife that is present in the EIA. This includes: wildlife friendly fencing and vegetated and gentle slopes.			
11	April 26, 2018	Wildlife	•	At the meeting held on April 26, 2018, Stantec indicated that water would back up regardless of whether the project was present or not.	None at this time.	None at this time.	Ongoing: Working with First Nation
	Meeting between Siksika Nation, Alberta Transportation, and Stantec		back up of water would occur.				
12	September 15, 2016 Alberta Transportation	Fish Habitat	Siksika Nation requested impact information on fish and fish	Possible impacts and mitigation measures related to concerns raised by the Siksika Nation (fish, fish habitat) will be addressed as part of the EIA.	discuss concerns and responses, Siksika Nation asked that the habitat be replaced/compensated with suitable habitat. They stated they would like to hear further from a fisheries expert as to what would be deemed suitable.		Ongoing: Working with First Nation
	meeting with the Siksika Nation, Blood Tribe/Kainai, and Piikani Nation at Head Smashed In Buffalo Jump	Iransportation with the Siksika Blood Tribe/Kainai, ani Nation at Head and In Buffalo Jump Hish Habitat Information sharing habitat resulting from the SR1 project.	_	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-5 SR1 Project Specific Concerns and Responses - Siksika Nation</i> from the March 2018 EIA: The Project will result in the permanent loss of 1,854 m² fish habitat at the diversion structure. This area has been identified as suitable foraging habitat for trout including, mountain whitefish, brown trout and			
				rainbow trout. The area that will be lost is small compared to the habitat available within the local assessment area, which is approximately 3,100,000 m². Given the limited extent of the habitat affected impacts to fish and fish habitat are predicted to be not significant. The assessment of effects to fish and fish habitat are provided in the EIA Volumes 3A and 3B, section 8.			
			On April 26, 2018, Alberta Transportation met with Siksika Nation to review their specific concerns and the responses and proposed mitigation measures in <i>Table 7-5 SR1 Project Specific Concerns and Responses - Siksika Nation</i> .				
			At the expla will be passed.	At the meeting held on December 10, 2018, Alberta Transportation explained the mitigation for fish that is in the EIA, and described that there will be a plan for a monitoring and fish rescue program after the foods had passed and the reservoir was releasing the water.			
				At the meeting held on April 26, 2018, Alberta Transportation said they will look into replacement or compensation for lost habitat. The Department of			

1. Document or Meeting Reference	3. Project Specific Aspect of the Concern Expressed	2. Specific Concern Expressed	Proponent Response on Effort to Avoid or Mitigate Concern Fisheries and Oceans is involved in reviewing replacing habitat or	5. First Nation/Metis Settlement response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
			compensation.			
Alberta Transportation meeting with the Siksika Nation, Blood Tribe/Kainai, and Piikani Nation at Head Smashed In Buffalo Jump December 10, 2018 Meeting between Siksika Nation, Alberta Transportation, and Stantec.	Fish	information on how the design of the SR1 is being undertaken to ensure that during a flood event that the mortality of fish is limited. Concerns were raised about fish entering the reservoir during a flood.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-5 SR1 Project Specific Concerns and Responses - Siksika Nation</i> from the March 2018 EIA: After a flood, the water flows in the diversion channel will be gradually reduced and the reservoir slowly drained to facilitate the movement of fish from the reservoir, back to the Elbow River with the receding water. The outlet will be designed and operated in a manner that allows fish egress out of the reservoir, downstream into the outlet channel. Drainage areas within the reservoir will be graded to reduce stranding of fish during release of stored flood water from the reservoir. During draining of the reservoir, monitoring will be undertaken to identify isolated pools and the potential that fish may become stranded. If potential fish stranding is identified, a fish rescue program will be undertaken to return the fish to the river.	At the meeting held on April 26, 2018 to discuss concerns and responses, Siksika Nation stated that Alberta Transportation's response answered their question.	Alberta Transportation's response satisfactory to First Nation. There will be a monitoring and rescue program for stranded fish in the reservoir after release of the water.	No further action required.
			On April 26, 2018, Alberta Transportation met with Siksika Nation to review their specific concerns and the responses and proposed mitigation measures in <i>Table 7-5 SR1 Project Specific Concerns and Responses - Siksika Nation</i> .			
			At the meeting held on December 10, 2018, Alberta Transportation explained the mitigation for fish that is in the EIA, and described that there will be a plan for a monitoring and fish rescue program after the foods had passed and the reservoir was releasing the water.			
14 March 13, 2017 The Siksika Nation delivered an "Interim" Traditional Use Report that was co-authored	Medicinal and ceremonial plants	Concerns expressed on the potential impact to medicinal and ceremonial plants. Stated that these will need to be	Alberta Transportation responded in a letter dated May 10, 2017: Possible impacts and mitigation measures related to concerns raised by the Siksika Nation about impacts to cultural and historical resources and other general concerns will be addressed as part of the EIA.	At the meeting held on April 26, 2018 to discuss concerns and responses, Siksika Nation indicated they were open to transplanting, but would need	None at this time.	Ongoing: Working with First Nation
with the Blood Tribe.		protected or relocated.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-5 SR1 Project Specific Concerns and Responses - Siksika Nation</i> from the March 2018 EIA: Vegetation will be cleared from the project development area during construction. However, effects of the Project are not anticipated to result in the loss of traditionally used species in the local assessment area. The effects on plants and traditional use are assessed in the EIA in Volume 3A and 3B, sections 10 and 14.	more discussion and information, including where the plants would be transplanted. Siksika Nation stated this was something they would need to caucus on. Siksika Nation would like to monitor before and after a flood to understand what is growing in the Project area.		
			Alberta Transportation would provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction.			
			On April 26, 2018, Alberta Transportation met with Siksika Nation to review their specific concerns and the responses and proposed mitigation measures in <i>Table 7-5 SR1 Project Specific Concerns and Responses - Siksika Nation</i> .			
15 March 13, 2017 The Siksika Nation delivered an "Interim" Traditional Use	Wetlands (sloughs)	Concerns expressed related to the protection of off-river sloughs as animals and fish in and around the Elbow River rely	Alberta Transportation responded in a letter dated May 10, 2017: Possible impacts and mitigation measures related to concerns raised by the Siksika Nation about off-river sloughs will be addressed as part of the EIA. On March 23, 2018, Alberta Transportation sent detailed responses to	At the meeting held on April 26, 2018 to discuss concerns and responses, Siksika Nation said that Alberta Transportation had responded to their	None at this time.	Ongoing: Working with First Nation
		on the sloughs.	specific concerns raised to date by providing a copy of <i>Table 7-5 SR1</i>	concern, but Siksika Nation also		

	1. Document or Meeting Reference Report that was co-authored with the Blood Tribe.	3. Project Specific Aspect of the Concern Expressed	2. Specific Concern Expressed	Project Specific Concerns and Responses - Siksika Nation from the March 2018 EIA: The Project would result in the loss of 8 ha of estimated high value wetland area and 13 ha of moderate wetland area in the local assessment area. Approximately 312 ha of the local assessment area contains wetland cover types. No vegetation and wetland land units are completely lost, and therefore no significant effects on vegetation and wetlands are predicted. Effects to wetlands are assessed in the EIA in Volumes 3A and 3B section 10. On April 26, 2018, Alberta Transportation met with Siksika Nation to review their specific concerns and the responses and proposed mitigation measures in Table 7-5 SR1 Project Specific Concerns and Responses - Siksika Nation. Alberta Transportation further explained that wetlands are replaced and compensated for under the current Alberta Wetland Policy.	5. First Nation/Metis Settlement response to Proponent's Effort to Avoid or Mitigate Concern expressed desire to do a TUS review for any wetland replacement.	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
	May 20, 2016 Siksika Nation Letter to Alberta Transportation (DEMA) in support of their TUS budget request. March 13, 2017 The Siksika Nation delivered an "Interim" Traditional Use Report that was co-authored with the Blood Tribe.	Upstream and downstream effects	Concerns regarding: The Downstream Discharge Channel from the reservoir to the Elbow River; Upstream high bank riparian impacts potentially related to the diversion structure; During flood, downstream seepage concerns; potentially caused by the project and not by normal flooding; Upstream surges when the flood gates are raised. Construction period and Instream work and potential riparian impacts. Concerns expressed related to upstream and downstream effects.	Ina letter dated May 10, 2017, Alberta Transportation indicated that potential impacts and mitigation measures related to concerns raised by the Siksika Nation will be addressed as part of the EIA. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-5 SR1 Project Specific Concerns and Responses - Siksika Nation</i> from the March 2018 EIA: Upstream effects as a result of the Project are not anticipated. Some backup of flood water when the diversion structure is in operation is expected, however the backup would reach approximately 500m upstream of the diversion structure. The purpose of the Project is to protect lands and communities downstream. The EIA details the potential effects on all valued components during both construction and dry operations and during a flood. On April 26, 2018, Alberta Transportation met with Siksika Nation to review their specific concerns and the responses and proposed mitigation measures in <i>Table 7-5 SR1 Project Specific Concerns and Responses - Siksika Nation</i> . In response to Siksika's additional concerns raised at the April 26, 2018 meeting, Alberta Transportation stated that the Project will help avoid a 2013 situation, but that these issues are out of the scope of this project and questions could be directed to Alberta Environment and Parks (AEP), and Alberta Transportation would forward these concerns to AEP.	At the meeting held on April 26, 2018 to discuss concerns and responses, Siksika Nation stated they were concerned about the impact to drinking water, in regard to sewage and farm run-off upstream of their reserve. Siksika Nation conditionally approved Alberta Transportation's response, but may request more information from Alberta Transportation as the regulatory process proceeds.	None at this time.	Ongoing: Working with First Nation
	April 26, 2018 Meeting between Siksika Nation, Alberta Transportation, and Stantec December 10, 2018 Meeting between Siksika Nation, Alberta Transportation, and Stantec.	Water quality	Expressed concerns about water quality (e.g., methylmercury) and drinking water concerns (e.g., sewage releases). Concerns were raised about water quality after a flood.	At the meeting held on April 26, 2018, Stantec answered that the water is not in the reservoir long enough to exceed problem levels and the water will be drained out before there is a problem. At the meeting held on December 10, 2018, Alberta Transportation noted that SR1 would not treat or have an effect on water quality after a flood.	None at this time.	None at this time.	Ongoing: Working with First Nation
18	April 26, 2018	Flood impacts to reserve	If the Project is built, what will be the change in water volume on	At the meeting held on April 26, 2018, Alberta Transportation explained the majority of the flooding on Siksika came from the Bow River. Alberta	None at this time.	None at this time.	Ongoing: Working with First Nation

	1. Document or Meeting Reference	3. Project Specific Aspect of the Concern Expressed	2. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. First Nation/Metis Settlement response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
	Meeting between Siksika Nation, Alberta Transportation, and Stantec		the Siksika Nation in the event of a flood?	Transportation said they would identify what percentage of the flood SR1 would have mitigated. There best guess at the time was around 17%.			
19	April 26, 2018 Meeting between Siksika Nation, Alberta Transportation, and Stantec	Debris	Debris left behind in the reservoir after a flood.	At the meeting held on April 26, 2018, Stantec replied that the management strategy is to leave the debris behind unless it is obstructing the future operation of the structure. In a letter dated June 18, 2019, Alberta Transportation provided an update on the debris deflector. Alberta Transportation received concerns regarding debris management during the Indigenous consultation and stakeholder engagement programs for the Project including concerns related to debris build up in the off-stream reservoir. The proposed debris deflector mitigates these concerns by reducing the potential for large debris entering the off-stream reservoir.	None at this time.	None at this time.	Ongoing: Working with First Nation
20	March 13, 2017 The Siksika Nation delivered an "Interim" Traditional Use Report that was co-authored with the Blood Tribe. April 26, 2018 Meeting between Siksika Nation, Alberta Transportation, and Stantec	Economic Mitigation	Establish ASAP the following: who will be employed in the development of the proposed project, what community benefits will be available, and what steps will be taken to address and accommodate future impacts to Siksika interests. Siksika Nation would like preferred contracting for the contract procurement process.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-5 SR1 Project Specific Concerns and Responses - Siksika Nation</i> from the March 2018 EIA: If the Project is approved, Alberta Transportation will follow government procurement policies and procedure with respect to labor, and goods and services. Alberta Transportation is willing to discuss possible economic opportunities with the Siksika First Nation. On April 26, 2018, Alberta Transportation met with Siksika Nation to review their specific concerns and the responses and proposed mitigation measures in <i>Table 7-5 SR1 Project Specific Concerns and Responses - Siksika Nation</i> . In a letter dated June 18, 2019, Alberta Transportation stated they are committed to Indigenous participation in the Project including training, employment, and contracting opportunities.	At the meeting held on April 26, 2018 to discuss concerns and responses, Siksika Nation said they want to be kept up to date on bidding opportunities. They want their archeologist involved. Siksika Nation also stressed the importance of preferred contracts.	None at this time.	Ongoing: Working with First Nation
21	August 10, 2016 Site Visit September 15, 2016 Alberta Transportation meeting with the Siksika Nation, Blood Tribe/Kainai, and Piikani Nation at Head Smashed In Buffalo Jump	Historical Resources Monitoring	The Siksika Nation Consultation team expressed an interest in having monitors in place during the construction so that they could observe the work being undertaken and to protect Blackfoot artifacts. Siksika Nation requested front line monitors be present throughout the SR1 construction.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-5 SR1 Project Specific Concerns and Responses - Siksika Nation</i> from the March 2018 EIA: If the Project is approved, Alberta Transportation is willing to discuss possible monitoring opportunities with the Siksika First Nation. On April 26, 2018, Alberta Transportation met with Siksika Nation to review their specific concerns and the responses and proposed mitigation measures in <i>Table 7-5 SR1 Project Specific Concerns and Responses - Siksika Nation</i> . At the meeting held on December 10, 2018, Alberta Transportation expressed their willingness to discuss monitoring opportunities with Siksika Nation.	At the meeting held on April 26, 2018 to discuss concerns and responses, Siksika Nation indicated they would develop a plan for monitoring and present it.	None at this time.	Ongoing: Working with First Nation
22	April 26, 2018 Meeting between Siksika Nation, Alberta Transportation, and Stantec	Monitoring	Siksika Nation would like to monitor before and after a flood to understand what is growing in the Project area. Some plants may not grow back. Do not want to over harvest. Transplanting makes sense but would need to	At the meeting held on December 10, 2018, Alberta Transportation expressed their willingness to discuss monitoring opportunities with Siksika Nation.	None at this time.	None at this time.	Ongoing: Working with First Nation

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		assess where suitable habitat is located.				
April 26, 2018 Meeting between Siksika Nation, Alberta Transportation, and Stantec	Land use	Request to hunt and harvest in Area B since it will become Crown land. Siksika Nation would like to explore uses of Area C (leasing options).	At the meeting held on December 10, 2018, Alberta Transportation put forward their desire to work with Siksika Nation to develop a land use plan that includes access for traditional use. In a letter dated June 18, 2019, Alberta Transportation indicated they had created a draft post-construction land use document for the SR1 project that provides draft principles of future land use for the Project Development Area (PDA). The primary use of all lands within the PDA, including the LUA, is for flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses such as vegetation management and First Nations' traditional activities (including the exercise of treaty rights such as hunting) will be allowed within the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights and to engage in traditional uses.	At the meeting held on December 10, 2018, Siksika Nation expressed concerns regarding the viability of the land use plan and indicated they would want to see a land use plan before commenting on it. There were concerns that the Siksika Nation would be asked to consult and then their input would not be used in the final plan, leaving them without access to the landscape. The community mentioned the Grassy Narrows case and the issues around use of the Majorville Medicine Wheel.		Ongoing: Working with First Nation
24 March 13, 2017 The Siksika Nation delivered an "Interim" Traditional Use Report that was co-authored with the Blood Tribe.	Site Access	Siksika Nation stated that access was not provided to areas the Siksika Nation wanted to visit.	Alberta Transportation responded in a letter dated May 10, 2017: Alberta Transportation approved all the Siksika Nation budgets for site visits to SR1 and facilitated access to private lands with landowners on all properties the Siksika Nation requested. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-5 SR1 Project Specific Concerns and Responses - Siksika Nation</i> from the March 2018 EIA: Alberta Transportation approved all the Siksika Nation budgets for site visits to SR1 and facilitated access to private lands with landowners on all properties the Siksika requested. On April 26, 2018, Alberta Transportation met with Siksika Nation to review their specific concerns and the responses and proposed mitigation measures in <i>Table 7-5 SR1 Project Specific Concerns and Responses - Siksika Nation</i> .	None at this time.	None at this time.	Ongoing: Working with First Nation
25 January 18, 2017 Alberta Transportation meeting with the Siksika Nation, Blood Tribe/Kainai, and Piikani Nation in Lethbridge Alberta.	Indigenous Involvement	Concern that the Blackfoot Nations were not involved in the EIA work.	At the meeting held on January 18, 2017, Stantec responded that they are paying more attention to First Nations, and they want First Nation input on the EIA. The Blackfoot Nations had access to the SR1 lands, and now Alberta Transportation and Stantec want to hear their concerns and the impact to their Treaty rights and traditional uses so they can include these in the EIA. At the meeting held on January 18, 2017, Alberta Transportation also responded that they were undertaking the work in accordance with the requirements of the regulatory process. Alberta Transportation indicated that they did not have the authority to change the regulatory process and if the Piikani Nation wanted to be directly involved in the EIA process they would have to consult provincial agencies such as Alberta Environment and Parks (AEP), Indigenous Relations, and ACT. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-5 SR1 Project Specific Concerns and Responses - Siksika Nation</i> from the March		None at this time.	Ongoing: Working with First Nation.

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			2018 EIA: Alberta Transportation has been engaged with Siksika since 2014 to understand how the Project potentially impacts rights, interests and traditional uses.			
			Alberta Transportation has provided funding to Siksika for a traditional use study. To facilitate the traditional use studies, Alberta Transportation arranged and facilitated 7 site visits by Siksika within the Project Development Area (PDA) over the period between the fall of 2016 to the late summer of 2017.			
			A joint interim TUS report was delivered by Siksika and Kainai First Nation on March 13, 2017. The TUS study was used in the environmental impact assessment (EIA). However, permission to use the spatial information from the TUS study has not been received by AT, therefore the information regarding sites and areas has been generalized for use in the EIA and exact locations, including those in the project development area, are not provided.			
			Alberta Transportation sent the link to the October 2017 EIS to Siksika on November 3, 2017. On December 5, 2017 Alberta Transportation requested feedback on the TLRU sections (Volumes 3A and 3B).			
			Project timelines for resubmission of the EIA were extended by 60 days in order to undertake further indigenous engagement activities.			
			Alberta Transportation provided Siksika with the revised draft TLRU sections for review and comment under correspondence dated February 6, 2018. Alberta Transportation also offered a workshop with the goal of better understanding potential impacts of the Project to Siksika and to provide responses to the concerns raised to date.			
			A workshop was held with Siksika on February 26, 2018 and was facilitated by CEAA. Verification of the meeting minutes from the workshops was not received prior to March 16, 2018 and therefore the TLRU sections in the EIA have not been updated to include information discussed.			
			Relevant information, concerns and recommendations received after the EIA has been filed in March 2018 will be used for project planning and implementation purposes, where applicable.			
			On April 26, 2018, Alberta Transportation met with Siksika Nation to review their specific concerns and the responses and proposed mitigation measures in <i>Table 7-5 SR1 Project Specific Concerns and Responses - Siksika Nation</i> .			
26 December 10, 2018 Meeting between Siksika Nation, Alberta Transportation, and Stantec.	Consultation Involvement	Concerns were raised regarding getting input from the Siksika Nation prior to construction so that areas of concern could be better avoided.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
		Concerns were raised that more departments within Siksika Nation need to be part of this conversation.				

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27	October 27, 2014 Initial SR1 Meeting held in Siksika, Alberta.	Flooding Information sharing	As the Siksika Nation had been severely impacted by the 2013 flood they were concerned and wanted their membership to be informed on the ongoing attempt to mitigate future floods.	At the meeting held on October 27, 2014, Alberta Transportation said they would be willing to undertake a presentation at a public meeting at Siksika. Alberta Transportation agreed to work closely with Siksika to provide a professionally developed article for the Siksika website and newspaper. An article was supplied to the Siksika Media Coordinator on November 6, 2014 for their publication. The article was published in the Siksika newspaper "Aitsiniki" in November 2014 (Volume 21, Issue 8). Alberta Transportation also held a workshop with Siksika members in Calgary on February 26, 2018 to discuss the TLRU section of the EIA, and are working with Siksika to reschedule a workshop on the Siksika reserve. Alberta Transportation met with Siksika Nation consultation team, community members, and Elders December 10, 2018 to discuss the project and Siksika Nation's concerns.	None at this time.	None at this time.	Ongoing: Working with First Nation.
28	October 27, 2014 Initial SR1 Meeting held in Siksika, Alberta.	Pipelines	Concerns expressed as to what would happen to the oil/gas pipelines that cross the SR1 site.	At the meeting held on October 27, 2014, Alberta Transportation responded the pipelines would probably be relocated, but at that time the information was not available. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-5 SR1 Project Specific Concerns and Responses - Siksika Nation</i> from the March 2018 EIA: The proposed project development area (PDA) currently contains active pipelines operated by third-parties. As a mitigation measure to reduce the likelihood of a potential pipeline rupture or adverse interaction with the Project, pipelines within the PDA of the off-stream reservoir will be re-located or retrofitted. On April 26, 2018, Alberta Transportation met with Siksika Nation to review their specific concerns and the responses and proposed mitigation measures in <i>Table 7-5 SR1 Project Specific Concerns and Responses - Siksika Nation</i> .	At the meeting held on April 26, 2018 to discuss concerns and responses, Siksika Nation stated they would like to do a site visit and monitor if/when pipelines are removed.	None at this time.	Ongoing: Working with First Nation
29	December 10, 2018 Meeting between Siksika Nation, Alberta Transportation, and Stantec.	Project selection	Concerns were raised regarding the decision of SR1 over the McLean Creek (MC1) option as a flood protection measure.	At the meeting held on December 10, 2018, Alberta Transportation explained why SR1 was chosen over MC1. MC1 would be located on Crown land instead of private land, would have more environmental effects, and the impacts to Treaty rights would be higher.	None at this time.	None at this time.	Ongoing: Working with First Nation
30	December 10, 2018 Meeting between Siksika Nation, Alberta Transportation, and Stantec.	Flood protection	There were concerns raised about flood protection along the Bow River in addition to the measures on the Elbow River.	At the meeting held on December 10, 2018, Alberta Transportation stated that flood protection measures were being looked into on the Bow River and that would be a separate project.	None at this time.	None at this time.	Ongoing: Working with First Nation

Springbank SR1 - Specific Concerns and Response Table

First Nation or Metis Settlement: Stoney Nakoda Nations

Date: AUGUST 2014 - AUGUST 2019

1. Document or Meeting Reference	2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. First Nation/Metis Settlement response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
October 20, 2014 Initial Meeting with the Stoney Nakoda Nations occurred at the Super 8 Hotel in Cochrane AB. May 4, 2016 Meeting with Stoney Nakoda Nations at the Chiniki Restaurant Meeting Room on HWY #1 at Morley. June 8, 2016 Letter from Bill Snow to Canadian Environmental Assessment Agency and Alberta Transportation	Cultural Resources Traditional Use Studies	Stoney Nakoda Nation confirmed the SR1 project is in their traditional territory. They want to be able to complete an internal Cultural Review of the project area with Elders. Bill Snow indicated that Aboriginal Relations policy does not apply to private lands. He also indicated that the Stoney Nakoda Nations will want to undertake a Cultural Assessment of the Springbank Project Area. The Stoney Nakoda representatives indicated the need to do research in the river valleys, the Bow River was mentioned as one area that the Stoney Nakoda Nations need to do more testing. The Stoney Nakoda Nation feel a Cultural Use Study, a Stoney Hydrology report, and a wildlife impacts study are required.	Alberta Transportation provided funding for the Stoney Nakoda Nations to conduct a Traditional Use Study (TUS) on the project lands (privately held). The Stoney Nakoda Nations conducted a TUS (11 field days) in the fall of 2016. The TUS report has not been received. The TUS would have been used to inform the Traditional Land and Resource Use (TLRU) section of the Environmental Impact Assessment (EIA) had it been received prior to submission. Stoney Nakoda Nations have not submitted a budget for a hydrology or wildlife study. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of Table 7-4 SR1 Project Specific Concerns and Responses - Stoney Nakoda Nations from the March 2018 EIA: Alberta Transportation has been engaged with Stoney Nakoda Nation since 2014 to understand how the Project potentially impacts rights, interests and traditional uses. Alberta Transportation has provided funding for the Stoney Nakoda Bearspaw, Chiniki, Wesley Nations to conduct a Traditional Use Study on the project lands. No report has been received to date, March 16, 2018. To facilitate the traditional use studies, Alberta Transportation arranged and facilitated 11 site visits by Stoney Nakoda Nations within the Project Development Area (PDA) in the fall of 2016. Alberta Transportation sent the link to the October 2017 EIA to Stoney Nakoda Nation on November 3, 2017. On December 5. 2017, Alberta Transportation requested feedback on the TLRU sections (Volumes 3A and 3B). Project timelines for resubmission of the EIA were extended by 60 days in order to undertake further indigenous engagement activities. Alberta Transportation provided Stoney Nakoda Nations with the revised draft TLRU sections for review and comment under correspondence dated February 6, 2018. Alberta Transportation also offered a workshop with the goal of better understanding potential impacts of the Project to Stoney Nakoda Nations and to provide responses to the concerns raised to date. A	At the meeting held on June 4, 2018, Stoney Nakoda Nations explained that they are currently being engaged on over 500 active projects and therefore capacity continues to be an issue for Stoney Nakoda Nations. They have done the site visits but have not written the report. The TUS is currently underway. Stoney Nakoda Nations is considering what additional work may be required. At the meeting held on June 4, 2018, Stoney Nakoda Nations said they would submit what they would like to do and where they would like to visit. At the meeting held on February 22, 2019, Stoney Nakoda Nations indicated they would not be submitting a TUS report or related budgets.	Stoney Nakoda Nations will not be submitting further budgets and no reports or studies are expected.	No further action required.

	1. Document or Meeting Reference	2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. First Nation/Metis Settlement response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
				Relevant information, concerns and recommendations received after the EIA has been filed in March 2018 will be used for project planning and implementation purposes, where applicable.			
				At the meeting held on June 4, 2018, Alberta Transportation expressed their willingness to assist in arranging land access if Stoney Nakoda Nations would like to undertake another site visit. Alberta Transportation also indicated that Stoney Nakoda Nations could submit a budget for further work.			
2	September 14, 2017 Meeting at Stoney Nakoda Resort between the Stoney Nakoda Nations, Alberta Transportation and the Canadian Environmental Assessment Agency	Site visits	Indicated desire to do a site visit with elders.	At the meeting held on September 14, 2017, Alberta Transportation explained they do not have access to the SR1 lands, and access will have to be requested on an owner by owner basis. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-4 SR1 Project Specific Concerns and Responses - Stoney Nakoda Nations</i> from the March 2018 EIA: At the time of the request Alberta Transportation's agreement with the landowners for access had expired. Any additional access would need to be requested on an owner by owner basis. At the meeting held on June 4, 2018, Alberta Transportation expressed their willingness to assist in arranging land access if Stoney Nakoda Nations would like to undertake another site visit. Alberta Transportation also indicated that Stoney Nakoda Nations could submit a budget for further work.	At the meeting held on June 4, 2018, the Stoney Nakoda Nations consultation team said they would speak with Elders to determine which areas to visit or revisit. Stoney Nakoda Nations said they would submit what they would like to do and where they would like to visit. At the meeting held on February 22, 2019, Stoney Nakoda Nations indicated they would likely not be submitting a budget or a TUS report.	Stoney Nakoda Nations will not be submitting further budgets and no reports or studies are expected.	No further action required.
3	June 4, 2018 Meeting between Stoney Nakoda Nations, Alberta Transportation, and Stantec to discuss Stoney Nakoda Nation's concerns and Alberta Transportation's responses as in Table 7-4.	Cultural assessment	The Stoney Nakoda would like to mark the importance of the cultural assessment and place animal and plant studies into one cultural assessment as these topics relate to certain stories and wildlife behaviour. This relates to using cultural studies to look at animals and plant instead of relying only on scientific techniques.	None at this time.	None at this time.	None at this time.	Ongoing: Working with the First Nation
4	June 8, 2016 Letter from Bill Snow to Canadian Environmental Assessment Agency and Alberta Transportation	Treaty and Traditional Rights Wildlife Fish Vegetation Wetlands	The Stoney Nakoda Nations expressed concerns to their Treaty Rights and traditional uses of lands in the Project area. Concerns were expressed for the Stoney Nakoda cultural practices, their current use of lands and resources for traditional purposes, the effect on water and wetlands for wildlife, fish, birds and vegetation.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-4 SR1 Project Specific Concerns and Responses - Stoney Nakoda Nations</i> from the March 2018 EIA: Effects on potential or established Aboriginal or Treaty rights are addressed through the assessment of the current use of lands and resources for traditional purposes. By acknowledging a link between practice-based rights and current use, this assessment accepts that adverse residual effects on availability of traditional resources for current use, on access to traditional resources or areas for current use, or on sites or areas for current use will have a consequent effect on the ability of Indigenous groups to exercise potential or established Aboriginal and Treaty rights. Given that the residual effects for the Project on TLRU are predicted to be not significant, no effects on potential or established Aboriginal or Treaty rights is expected to occur as a result of the Project.	At the meeting held on June 4, 2018, Stoney Nakoda Nations did not completely agree with the response, explaining that the lands that are available for traditional land and resource use are getting smaller and smaller over the years. This is a cumulative effect and habitat replacement is important. Stoney Nakoda Nations stated that an effect on wildlife results in an effect on Treaty rights.	None at this time.	Ongoing: Working with First Nation

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				In addition, a conservative assumption was made that Indigenous groups had access to the PDA to practice traditional use activities notwithstanding access to these private lands is limited.			
				In a letter dated June 18, 2019, Alberta Transportation indicated they had created a draft post-construction land use document for the SR1 project that provides draft principles of future land use for the Project Development Area (PDA). The primary use of all lands within the PDA, including the LUA, is for flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses such as vegetation management and First Nations' traditional activities (including the exercise of treaty rights such as hunting) will be allowed within the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights and to engage in traditional uses.			
5	May 4, 2016 Meeting with Stoney Nakoda Nations at the Chiniki Restaurant Meeting Room on HWY #1 at Morley.	Ceremony	The Stoney Nakoda representatives spoke of doing a ceremony in the SR1 project area.	Alberta Transportation response in table set March 23, 2018: At the request of Indigenous groups, Alberta Transportation will participate in ceremonies (if invited) prior to the start of construction, including making offerings.	At the meeting held on June 4, 2018, Stoney Nakoda Nations said they will confirm with CEAA regarding funding for holding a ceremony.	None at this time.	Ongoing: Working with First Nation
6	August 23, 2017 Meeting between Dallas Maynard and Bill Snow at Starbucks, West Hills Shopping Centre	Ceremony	Bill Snow discussed the Stoney Nakoda Nations funding from CEAA and the desire for their Consultation team and elders to undertake a ceremony on the SR1 lands. Bill explained the Stoney had a long-standing relationship with Mary Robinson's family. They wanted Alberta Transportation and CEAA to participate.	Alberta Transportation agreed to a meeting with the Stoney Nakoda Nations on September 14, 2017, which included CEAA, to discuss and work with the Stoney Nakoda Nation to respond to their requests. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-4 SR1 Project Specific Concerns and Responses - Stoney Nakoda Nations</i> from the March 2018 EIA: At the request of Indigenous groups, Alberta Transportation will participate in ceremonies (if invited) prior to the start of construction, including making offerings. At the meeting held on June 4, 2018, Alberta Transportation stated that if Stoney Nakoda Nations required funding for a ceremony to submit a budget to Alberta Transportation.	At the meeting held on June 4, 2018, Stoney Nakoda Nations said they will confirm with CEAA regarding funding for holding a ceremony. Stoney Nakoda Nations will reach out to a landowner to access their land in order to view some sites; Stoney Nakoda Nations' preference is to perform a ceremony pre-construction on or near their land as well, as there are tipi rings and sites present on the property.	None at this time.	Ongoing: Working with First Nation
7	May 4, 2016 Meeting with Stoney Nakoda Nations at the Chiniki Restaurant Meeting Room on HWY #1 at Morley. January 15, 2017 Letter sent via email to Shelly Boss, CEAA from Rae and	Hunting	Stated there are two different trap lines out there and their members use the area for trapping but did not specify their location. EIA reflects existence of at least two Stoney Nakoda traplines in project area, loss of harvesting opportunities will have to	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-4 SR1 Project Specific Concerns and Responses - Stoney Nakoda Nations</i> from the March 2018 EIA: Based on available information there are no registered traplines within the PDA. Alberta Transportation has requested the locations of the two traplines and were the Stoney members trap in order to determine if there is potential impact from the Project.	At the meeting held on June 4, 2018, Stoney Nakoda Nations confirmed that the traplines are located west of Bragg Creek and there are no active traplines in the Project area.	No further mitigation required as the traplines are not in the project area and will not be affected.	No further action required.
	Company on behalf of the Stoney Nakoda Nations	NACIALIS.	compensated	At the greating held on May 4, 0040, Alberta To	Charge Nalis de Netters	Name of this Con-	On pain as Market 19
8	May 4, 2016 Meeting with Stoney Nakoda Nations at the Chiniki	Wildlife	Asked if the SR1 project would include any wildlife crossings, and also inquired about fencing.	At the meeting held on May 4, 2016, Alberta Transportation responded that the SR1 diversion channels and the earthen dam would be designed to allow the passage of wildlife along the Elbow River. Alberta	Stoney Nakoda Nations expressed concerns that wildlife will not adapt to the new land configurations.	None at this time.	Ongoing: Working with First Nation

1. Document or Meeting Reference	2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. First Nation/Metis Settlement response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
Restaurant Meeting Room on HWY #1 at Morley. February 22, 2019 Meeting between Stoney Nakoda Nations, Alberta Transportation, and Stantec.		Emphasized the importance of wildlife crossings and was concerned that if not properly managed could be a problem for the SR1 project.	Transportation responded that there will likely be some fencing on the SR1 Project. Alberta Transportation response in table set March 23, 2018: Although the Project would result in additional anthropogenic features on the landscape that might hinder wildlife movement in the local assessment area, Alberta Transportation has made adjustments to accommodate wildlife movement such as revegetating the floodplain berm with materials conducive for ungulate movement. The EIA concluded that the project residual effects on wildlife movement are unlikely to pose a long-term threat to the persistence or viability of a wildlife species, including species at risk (EIA, Volume 3A and 3B section 11). At the meeting held on June 4, 2018, Stantec brought their wildlife biologist to answer questions. The wildlife biologist explained that they were revegetating the structure to make it easier for animals to walk across. Alberta Transportation also explained that the fencing would have smooth top and bottom wires to allow for wildlife going under and over the fence. At the meeting held on September 13, 2018, Alberta Transportation described that the underpasses that will be created by the diversion channel crossings of HWY 22 and Township Road 242 have not been designed as designated wildlife underpasses; but, the design has included measures to accommodate the passage of wildlife that would otherwise cross over HWY 22. The HWY 22 underpass will have 3:1 slopes and be 24 m wide at the bottom. Gaps in the riprap armour on the bottom of the channel will be filled and surfaced with gravel. At the meeting held on February 22, 2019, Alberta Transportation brought Stantec's wildlife biologist to present the mitigation measures in place for wildlife, including fencing, vegetating slopes, and a remote camera monitoring program that Stoney Nakoda Nation can provide input on. They also showed a drawing of the bridge under HWY 22 and how it will be modified to promote wildlife movement.	Stoney Nakoda Nations recommended that long-term/cumulative wildlife studies be conducted in the Project area. Stoney Nakoda Nations stated that it is important to do cultural studies on wildlife, fish, etc. rather than relying only on Western scientific techniques. At the meeting held on September 13, 2018 and in an email on September 14, 2018, Stoney Nakoda Nations further expressed concerns that there are no dedicated wildlife crossings for the SR1 project. Stoney Nakoda Nations would prefer overpasses for wildlife rather than underpasses. At the meeting held on February 22, 2019, Stoney Nakoda Nation indicated that Alberta Transportation's mitigation measures for wildlife alleviated some of Stoney Nakoda Nation's concerns, but they would still prefer overpasses.		
9 September 14, 2017 Meeting at Stoney Nakoda Resort between the Stoney Nakoda Nations, Alberta Transportation and the Canadian Environmental Assessment Agency June 4, 2018 Meeting between Stoney Nakoda Nations, Alberta Transportation, and Stantec to discuss Stoney Nakoda Nation's concerns and Alberta Transportation's responses as in Table 7-4.	Wildlife	The Stoney Nakoda Nation expressed concerns over wildlife passage through the SR1 area following construction. Inquired if there would be wildlife crossings built over HWY 22 or Highway 8. There is a concern with the lack of wildlife corridors and that the project will impact wildlife movement. Wildlife need space and the option to travel the corridors. This goes back to Elder memories because how the animals use the land today is similar to how they used the land in the past.	At the meeting held on September 14, 2017, Alberta Transportation responded that there was no plan to build wildlife overpasses. Alberta Transportation indicated that the diversion channel and dam were contoured to allow for wildlife passage through the SR1 area during non-flood times. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-4 SR1 Project Specific Concerns and Responses - Stoney Nakoda Nations</i> from the March 2018 EIA: There is no plan to build wildlife overpasses. The diversion channel and dam were contoured to allow for wildlife passage through the SR1 area during non-flood times. The channel will be directed under HWY 22 and Township Road 242. The area underneath the bridges will contain rip rap however, the rip rap under the bridges will be filled with gravel potentially enabling animals to move under the bridges and avoid crossing the roads. With respect to Project design, the side slopes and bottom of the diversion channel will be vegetated, with the following exceptions. Where the	At the meeting held on June 4, 2018, Stoney Nakoda Nations expressed ongoing concerns with infrastructure affecting wildlife passage and recommend the consideration of wildlife crossings, including overpasses. At the meeting held on June 4, 2018, Stoney Nakoda Nations continued to express concerns related to wildlife movement through the project area. Stoney Nakoda Nations recommended that long-term/cumulative wildlife studies be conducted in the Project area. Stoney Nakoda Nations stated that it is important to do cultural studies	None at this time.	Ongoing: Working with First Nation

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	February 22, 2019 Meeting between Stoney Nakoda Nations, Alberta Transportation, and Stantec.			diversion channel passes through bedrock, the channel would remain as an exposed bedrock cut. Articulated concrete matting will be provided in select areas of the channel where pipelines cross. Riprap erosion protection will be provided at critical areas including at bridge crossings, around the emergency spillway and for a 1.4 km stretch at the diversion channel outlet structure. The south portion, farthest from Elbow River, will be a 450-m earthen embankment vegetated with native grasses. The floodplain berm will also be covered with materials conducive to ungulate movement (see Volume 3A, Section 11). A remote camera program will be designed in consultation with Alberta Environment and Parks (AEP), to identify whether the diversion channel acts as a barrier to wildlife movement during dry operations, especially for ungulates, and determine the effectiveness of mitigation implemented throughout the diversion channel. The remote camera program will also include monitoring along the Elbow River to determine if wildlife use of the Key Wildlife and Biodiversity Zone (KWBZ) has been affected by the construction and operation of the Project. At the meeting held on June 4, 2018, Stantec brought their wildlife biologist to answer questions. The wildlife biologist explained that they were revegetating the structure to make it easier for animals to walk across. Alberta Transportation also explained that the fencing would have smooth top and bottom wires to allow for wildlife going under and over the fence. At the meeting held on September 13, 2018, Alberta Transportation described that the underpasses that will be created by the diversion channel crossings of HWY 22 and Township Road 242 have not been designed as designated wildlife underpasses; but, the design has included measures to accommodate the passage of wildlife that would otherwise cross over HWY 22. The HWY 22 underpass will have 3:1 slopes and be 24 m wide at the bottom. Gaps in the riprap armour on the bottom of the channel will be filled and surfaced w	on wildlife, fish, etc. rather than relying only on Western scientific techniques. At the meeting held on September 13, 2018 and in an email on September 14, 2018, Stoney Nakoda Nations further expressed concerns that there are no dedicated wildlife crossings for the SR1 project. Stoney Nakoda Nations would prefer overpasses for wildlife rather than underpasses. At the meeting held on February 22, 2019, Stoney Nakoda Nation indicated that Alberta Transportation's mitigation measures for wildlife alleviated some of Stoney Nakoda Nation's concerns, but they would still prefer overpasses.		
10	September 14, 2017 Meeting at Stoney Nakoda Resort between the Stoney Nakoda Nations, Alberta Transportation and the Canadian Environmental Assessment Agency	Wildlife	The Stoney Nakoda Nation expressed concerns that the fences that would be built around the SR1 site might impact wildlife passage through the area.	At the meeting held on September 14, 2017, Alberta Transportation explained the fences that were planned for the SR1 project would be similar to the farm fencing that already exists and should not have any additional impact to wildlife than currently exists. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-4 SR1 Project Specific Concerns and Responses - Stoney Nakoda Nations</i> from the March 2018 EIA: Fences that are planned for the SR1 project would be similar to the farm fencing that already exists and should not have any additional impact to wildlife than currently exists.	At the meeting held on June 4, 2018, Stoney Nakoda Nations stated that this type of fencing should be okay for wildlife.	Proponent response satisfactory to First Nation. Alberta Transportation will be using wildlife friendly fencing around the SR1 boundary that will allow wildlife to move under and over.	No further action required.

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				At the meeting held on June 4, 2018, Alberta Transportation explained that the fencing would have smooth top and bottom wires to allow for wildlife going under and over the fence.			
11	June 4, 2018 Meeting between Stoney Nakoda Nations, Alberta Transportation, and Stantec to discuss Stoney Nakoda Nation's concerns and Alberta Transportation's responses as in Table 7-4.	Wildlife	Concern that there is a lack of long-term wildlife studies on the cumulative impacts the SR1 project would have to wildlife. These studies should address animal movement in the area.	At the meeting held on June 4, 2018, Stantec brought their wildlife biologist, who explained there is a monitoring program planned with wildlife cameras to monitor long-term cumulative effects of the project on wildlife. At the meeting held on February 22, 2019, Alberta Transportation brought Stantec's wildlife biologist to present the mitigation measures in place for wildlife, including fencing, vegetating slopes, and a remote camera monitoring program that Stoney Nakoda Nation can provide input on.	At the meeting held on June 4, 2018, Stoney Nakoda Nations continued to express concerns related to wildlife movement through the project area, and said wildlife cameras do not catch everything.	None at this time.	Ongoing: Working with the First Nation
12	June 8, 2016 Letter from Bill Snow to Canadian Environmental Assessment Agency and Alberta Transportation	Wildlife Fish	Concerns that the SR1 project will act as a barrier to the migration of wildlife and fish. Concerns over the lack of wildlife crossings on the SR1 project.	Possible impacts and mitigation measures related to concerns raised by the Stoney Nakoda Nation (wildlife and fish) will be addressed as part of the EIA. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-4 SR1 Project Specific Concerns and Responses - Stoney Nakoda Nations</i> from the March 2018 EIA: Although the Project would result in additional anthropogenic features on the landscape that might hinder wildlife movement in the local assessment area, Alberta Transportation has made adjustments to accommodate wildlife movement such as revegetating the floodplain berm with materials conducive for ungulate movement. The EIA concluded that the project residual effects on wildlife movement are unlikely to pose a long-term threat to the persistence or viability of a wildlife species, including species at risk (EIA, Volume 3A and 3B section 11). During Project design it was recognized that the diversion structure could result in an increase in flow rates of the Elbow River at the structure and potentially affect the ability of fish to pass upstream. In order to avoid affecting fish passage design elements were incorporated to ensure that under normal river conditions flow rates are maintained within the range suitable for fish passage. At the meeting held on June 4, 2018, Stantec explained that fish can pass through the diversion structure during dry conditions and flood conditions. Stantec showed an engineering diagram of the reservoir and how it would affect fish. They also showed berms that will be installed to control the water speed and allow fish to move upstream. At the meeting held on June 4, 2018, Stantec brought their wildlife biologist to answer questions. The wildlife biologist explained that they were revegetating the structure to make it easier for animals to walk across. Alberta Transportation also explained that the fencing would have smooth top and bottom wires to allow for wildlife going under and over the fence.	At the meeting held on June 4, 2018, Stoney Nakoda Nations expressed concern about fish returning to the habitat once the coffer dam (used during construction) has been removed. The Stoney Nakoda Nations consultation team will discuss fish species of importance (including mountain whitefish, cutthroat, and bull trout) during the next Elder's meeting to understand potential effects and mitigation better. Stoney Nakoda Nations and Alberta Transportation discussed habitat replacement and confirmed that it will be replaced and this will be directed by Fisheries and Oceans Canada (DFO). Stoney Nakoda Nations requested that a discussion be held with Alberta Transportation regarding alternative options for fish salvage, beyond electrofishing. At the meeting held on September 13, 2018 and in an email on September 14, 2018, Stoney Nakoda Nations further expressed concerns that there are no dedicated wildlife crossings for the SR1 project. Stoney Nakoda Nations would prefer overpasses for wildlife rather than underpasses. At the meeting held on February 22, 2019, Stoney Nakoda Nation indicated that Alberta Transportation's mitigation measures for wildlife alleviated some of Stoney Nakoda Nation's concerns, but they would still prefer overpasses.	None at this time.	Ongoing: Working with First Nation

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				measures to accommodate the passage of wildlife that would otherwise cross over HWY 22. The HWY 22 underpass will have 3:1 slopes and be 24 m wide at the bottom. Gaps in the riprap armour on the bottom of the channel will be filled and surfaced with gravel.			
				At the meeting held on February 22, 2019, Alberta Transportation brought Stantec's wildlife biologist to present the mitigation measures in place for wildlife, including fencing, vegetating slopes, and a remote camera monitoring program that Stoney Nakoda Nation can provide input on. They also showed a drawing of the bridge under HWY 22 and how it will be modified to promote wildlife movement.			
13	June 8, 2016 Letter from Bill Snow to Canadian Environmental Assessment Agency and Alberta Transportation	Wildlife Fish	Concerns expressed that the proposed SR1 project will drive away or minimize the availability of birds, fish, and wildlife.	Possible impacts and mitigation measures related to concerns raised by the Stoney Nakoda Nation (wildlife and fish) will be addressed as part of the EIA. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-4 SR1 Project Specific Concerns and Responses - Stoney Nakoda Nations</i> from the March 2018 EIA: The Project will result in direct and indirect loss of wildlife habitat during construction and dry operations; however, the amount of wildlife habitat permanently affected (168 ha) is relatively small compared to the availability of wildlife habitat remaining in the local assessment area (4,860 ha). Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the regional assessment area is unlikely.	At the meeting held on June 4, 2018, Stoney Nakoda Nations recommended that long-term/cumulative wildlife studies be conducted in the Project area. Stoney Nakoda Nations stated that it is important to do cultural studies on wildlife, fish, etc. rather than relying only on Western scientific techniques.	None at this time.	Ongoing: Working with First Nation
14	June 4, 2018 Meeting between Stoney Nakoda Nations, Alberta Transportation, and Stantec to discuss Stoney Nakoda Nation's concerns and Alberta Transportation's responses as in Table 7-4.	Fish	Concerned that the rate of stabilization for fish will take longer than the expected three years and it will take a long time for them to acclimate to the conditions post-construction.	At the meeting held on June 4, 2018, Stantec explained there would be a disruption and habitat loss in that area. Alberta Transportation will engineer rocks/berms to give the fish areas of shelter. Stantec explained they would design the structure to ensure the fish have proper water speed and depth to move up-river.	None at this time.	None at this time.	Ongoing: Working with the First Nation
15	June 4, 2018 Meeting between Stoney Nakoda Nations, Alberta Transportation, and Stantec to discuss Stoney Nakoda Nation's concerns and Alberta Transportation's responses as in Table 7-4.	Fish	Native fish species (mountain white fish, bull trout and cutthroat trout) should be included in the discussion on fish and fish habitat. These are species that First Nations traditionally subsided on and lands in SR1 were used as camping spots to access these fish resources. In addition, the Stony Nakoda are noticing a decrease in water levels which will have a further impact on fish habitat.	At the meeting held on June 4, 2018, Stantec went over the fish species they found in the Elbow River and the proportion of each in different sections of the river.	At the meeting held on June 4, 2018, Stoney Nakoda Nations said they will discuss the topic at their next Elders meeting.	None at this time.	Ongoing: Working with the First Nation

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16	June 4, 2018 Meeting between Stoney Nakoda Nations, Alberta Transportation, and Stantec to discuss Stoney Nakoda Nation's concerns and Alberta Transportation's responses as in Table 7-4.	Fish	There is a concern using electrofishing and that fish will die during relocation. Stoney Nakoda Nations would like Alberta Transportation to explore other ways of retrieving and relocating the stranded fish.	At the meeting held on June 4, 2018, Alberta Transportation said they will look at methods of capturing fish and note the concern with electrofishing.	None at this time.	None at this time.	Ongoing: Working with the First Nation
17	September 14, 2017 Meeting at Stoney Nakoda Resort between the Stoney Nakoda Nations, Alberta Transportation and the Canadian Environmental Assessment Agency September 13, 2018 Meeting between Stoney Nakoda Nations and Alberta Transportation	Hydrology	The Stoney Nakoda Nation was concerned about the hydrology of the SR1 area. In particular cited the Elbow River vs. groundwater impacts.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-4 SR1 Project Specific Concerns and Responses - Stoney Nakoda Nations</i> from the March 2018 EIA: The EIA considered the effects of the Project on both surface water (Volume 3A and 3B, section 6) and groundwater, including the Alluvial Aquifer (Volumes 3A and 3B, section 5, Appendix I). The assessment used a complex numerical groundwater model (FEFLOW) to evaluate potential changes to the hydrogeologic system, including aquifer pressure, caused by floods and construction and operation of the Project. The results of a series of the modeling scenarios showed that the groundwater levels and flow patterns are altered within the vicinity of the proposed Project. Changes are observed within the reservoir area during flooding and recede toward pre-flood conditions following floods. Changes in the groundwater flow regime are also observed along the proposed diversion channel. The model results were used as the basis for the EIA. The assessment concluded that effects to groundwater quantity and quality would not be significant. The residual effects on groundwater quantity from the Project are assessed as not significant because they would not decrease the yield of groundwater supply wells to the point where they can no longer be used. The residual effects on groundwater quality from the Project are assessed as not significant because changes in groundwater quality at existing wells would not deteriorate to the point where it becomes non-potable or cannot meet the Guidelines for Canadian Drinking Water Quality for a consecutive period exceeding 30 days (for those parameters which don't already, under existing conditions, exceed those guidelines). Effects to groundwater would be limited to the local assessment area. At the meeting held on June 4, 2018, Stantec showed figures to help explain the hydrology of the SR1 project area. Alberta Transportation responded that hydrology information		None at this time.	Ongoing: Working with First Nation

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18	September 14, 2017 Meeting at Stoney Nakoda Resort between the Stoney Nakoda Nations, Alberta Transportation and the Canadian Environmental Assessment Agency June 4, 2018 Meeting between Stoney Nakoda Nations, Alberta Transportation, and Stantec to discuss Stoney Nakoda Nation's concerns and Alberta Transportation's responses as in Table 7-4. February 22, 2019 Meeting between Stoney Nakoda Nations, Alberta Transportation, and Stantec	Land replacement	The Stoney Nakoda Nation was concerned that Crown land should be set aside to replace lands taken for SR1. There is a concern from the Stoney Nakoda Nation that the land they can practise Aboriginal Treaty Rights on is getting smaller with an increase in development. This has an impact on Aboriginal Rights. There is a concern that the SR1 area was used in the past for traditional activities, such as hunting, and camping and that this activity would be permanently altered by the Project.	At the meeting held on September 14, 2017, Alberta Transportation responded that any wetlands impacted would be replaced however the overall SR1 lands would not be replaced. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-4 SR1 Project Specific Concerns and Responses - Stoney Nakoda Nations</i> from the March 2018 EIA: If approved, the project requires the acquisition of private land. Landowners would be provided monetary compensation. These private lands will not be replaced. At the meeting held on June 4, 2018, Alberta Transportation explained there will be more land access through the eastern area of the project area and this is a grazing lease. At the meeting held on February 22, 2019, Alberta Transportation presented on the proposed land use plan in which Stoney Nakoda Nations could participate. In a letter dated June 18, 2019, Alberta Transportation indicated they had created a draft post-construction land use document for the SR1 project that provides draft principles of future land use for the Project Development Area (PDA). The primary use of all lands within the PDA, including the LUA, is for flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses such as vegetation management and First Nations' traditional activities (including the exercise of treaty rights such as hunting) will be allowed within the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights and to engage in traditional uses.	At the meeting held on June 4, 2018, Stoney Nakoda Nations requested a discussion regarding compensation for the loss of access to Crown lands, since the Project area will become Crown land once it is purchased from private land owners.	None at this time.	Ongoing: Working wit First Nation
19	February 22, 2019 Meeting between Stoney Nakoda Nations, Alberta Transportation, and Stantec	Monitoring	Stoney Nakoda Nation is interested in participating in monitoring programs.	At the meeting held on February 22, 2019, Alberta Transportation committed to continued discussions on monitoring.	None at this time.	None at this time.	Ongoing: Working with the First Nation
20	October 20, 2014 Initial Meeting with the Stoney Nakoda Nations occurred at the Super 8 Hotel in Cochrane AB. February 22, 2019 Meeting between Stoney Nakoda Nations, Alberta Transportation, and Stantec	Pipelines	Inquired about the oil pipelines that cross the SR1 lands and what would happen to them as part of SR1.	At the meeting held on October 20, 2014, Alberta Transportation responded the oil pipelines would likely be relocated, but at the time that information was not available. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-4 SR1 Project Specific Concerns and Responses - Stoney Nakoda Nations</i> from the March 2018 EIA: The procedures for dealing with overhead and buried utilities located within constructions zones is highly regulated. All regulatory requirements will be strictly adhered to. Oil and gas pipelines operated by four companies (TransCanada Pipelines Ltd., Pengrowth Energy Corp., Veresen Inc., and Plains Midstream Canada) are located within the diversion channel, dam, and reservoir areas. Alberta Transportation are currently in contact with these utility owners and crossing agreements will be developed. Buried pipeline and overhead	At the meeting held on June 4, 2018, Stoney Nakoda Nations expressed concerns about emergency preparedness. Stoney Nakoda Nations requests reassurance that there will be an emergency response plan in place and that the regulator(s) will manage the response in the event of an incident, spill, release, etc. Stoney Nakoda Nations stated that a communication plan needs to be part of the response plan. At the meeting held on February 22, 2019, Stoney Nakoda Nation voiced concerns regarding any mercaptans that may have been added to the	None at this time.	Ongoing: Working with First Nation

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				utilities will be relocated, moved or lowered as required. Prior to any soil disturbance, utility locate sweeps will be done and buried lines and pipelines will be flagged and marked. Pipeline crossings will be designed and maintained as required by the utility owners and in strict compliance with regulations. Daily hazard assessments will be conducted before work is undertaken in the vicinity of utilities. In the event of damage to existing pipelines, project personnel would contact the pipeline company's emergency contacts to address pipeline emergency response. The implementation preventative measures and of daily hazard assessments will greatly reduce the risk of accidental contact with utilities. In the unlikely event of damage to existing pipelines, project personnel	contents of the pipelines around the SR1 Project.		
				would contact the pipeline company's emergency contacts to address and coordinate the emergency response. The implementation of preventative measures and of daily hazard assessments will greatly reduce the risk of accidental contact with utilities.			
				At the meeting held on February 22, 2019, Alberta Transportation showed a map with the current pipelines within the project area, what is in them, who owns them, and what would happen to them if the Project is approved. It was confirmed there was no sour gas in any of the lines. Alberta Transportation committed to looking into mercaptans.			
				In an email sent June 3, 2019 with the draft February 22, 2019 meeting minutes, Alberta Transportation responded further: The pipelines in the Project area are regulated by the Alberta Energy Regulator (AER) (with the exception of TransCanada's lines which are regulated by the National Energy Board (NEB)). Their jurisdiction over the lines will be maintained within the footprint of SR1. If there are requirements for mercaptans or other additives to be placed in the lines then these would be the jurisdiction of those regulatory bodies. Pipelines within the footprints of the structures will be removed, and any pipeline abandoned within the reservoir footprint will be purged, plugged, and capped as per standard regulatory requirements.			
21	June 4, 2018 Meeting between Stoney Nakoda Nations, Alberta Transportation, and Stantec to discuss Stoney Nakoda	Pipelines and utility lines Emergency response	There is a concern with emergency response preparedness and how emergencies would be communicated to the Stoney	At the meeting held on June 4, 2018, Alberta Transportation said they will get information on what pipelines and utility lines are in the area and who owns the lines. Alberta Transportation will review whether the regulator is AUC or the AER and investigate the emergency response plans of the utility companies.	At the meeting held on February 22, 2019, Stoney Nakoda Nation expressed concerns about general emergency response planning, including with regards to pipelines.	None at this time.	Ongoing: Working with the First Nation
	Nation's concerns and Alberta Transportation's responses as in Table 7-4.		Nakoda Nations (specifically for pipelines and utility lines).	At the meeting held on February 22, 2019, Alberta Transportation indicated the emergency response plans for pipelines were the responsibility of the pipeline owners.			
	February 22, 2019			In an email sent June 3, 2019 with the draft February 22, 2019 meeting minutes, Alberta Transportation responded further: The pipelines in the			
	Meeting between Stoney Nakoda Nations, Alberta Transportation, and Stantec			Project area are regulated by the AER (with the exception of TransCanada's lines which are regulated by the NEB). All standard processes for reporting of breaks/ruptures, as required by these regulatory bodies, will apply.			
22	January 15, 2017	Historic Trails	Questions about location of Calgary/Morleyville Trail, and if Alberta considers it a pre-	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation

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	Letter sent via email to Shelly Boss, CEAA from Rae and Company on behalf of the Stoney Nakoda Nations		existing trail prior to 1877 then an allowance for a right-of-way through the Proposed Development Area will have to be provided for.				
23	September 14, 2017 Meeting at Stoney Nakoda Resort between the Stoney Nakoda Nations, Alberta Transportation and the Canadian Environmental Assessment Agency	Mapping	The Stoney Nakoda Nation expressed concerns with the Stoney lack of mapping capability and requested some assistance understanding the SR1 mapping.	At the meeting held on September 14, 2017, Alberta Transportation agreed to provide a PDF and Google KMZ map of the test bore holes that Stantec completed during the site investigation phase at the SR1 project. Maps of the test bore hole locations were sent to Stoney Nakoda Nations September 17, 2017. In an email on October 6, 2017, Alberta Transportation recommended a company capable of doing GIS (geographic information system) mapping, and offered to look into what GIS data Stantec had that could be shared. On March 23, 2018, Alberta Transportation sent detailed responses to	At the meeting held on June 4, 2018, Stoney Nakoda Nations confirmed they had received the test bore hole location maps sent by Alberta Transportation.	Proponent response satisfactory to First Nation. The maps were provided to Stoney Nakoda Nations.	No further action required.
				specific concerns raised to date by providing a copy of <i>Table 7-4 SR1</i> Project Specific Concerns and Responses - Stoney Nakoda Nations from the March 2018 EIA: Alberta Transportation provided a PDF and Google KMZ map of the test Bore holes completed during the site investigation phase at the SR1 project.			
24	January 15, 2017 Letter sent via email to Shelly Boss, CEAA from Rae and Company on behalf of the Stoney Nakoda Nations	Mapping of Stoney IR 142, 143, 144.	Transportation has used incorrect maps of Stoney IR 142, 143, 144.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-4 SR1 Project Specific Concerns and Responses - Stoney Nakoda Nations</i> from the March 2018 EIA: The EIA has been updated to use the correct maps of the Stony Nakoda Nation Reserves 142, 143, 144. The map was sourced from the Natural Resources Canada, Lands and Minerals Sector – Geobase http://ftp.geogratis.gc.ca/pub/nrcan_rncan/vector/geobase_al_ta/	At the meeting held on June 4, 2018, Stoney Nakoda Nations indicated that the updated maps of IR 142, 143, and 144, included in the March 2018 EIA responded to the concern. The maps were included in the updated EIA.	Proponent response satisfactory to First Nation. The maps of IR 142, 143, and 144 were corrected in the March 2018 EIA.	No further action required.
25	January 15, 2017 Letter sent via email to Shelly Boss, CEAA from Rae and Company on behalf of the Stoney Nakoda Nations	Traditional territory	Provide map of location of traditional territory of Stoney Nakoda	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-4 SR1 Project Specific Concerns and Responses - Stoney Nakoda Nations</i> from the March 2018 EIA: The EIA provides a description of the Stoney Nakoda traditional territory from source - SIB 2014: Amended Statement of Claim, Court File Number 0301-19586.	At the meeting held on June 4, 2018, Stoney Nakoda Nations indicated that this responded to the concern.	Proponent response satisfactory to First Nation.	No further action required.
				This amended statement of claim was prepared and filed by Stoney Nakoda Nations in the context of Action Number 0301-19586. This source was used to provide background information for Stoney Nakoda Nations, including information on the traditional territory. The scope of the identified traditional territory is one of the issues in dispute in the context of this litigation.			
26	August 23, 2017 Meeting between Dallas Maynard and Bill Snow at Starbucks, West Hills Shopping Centre	Information sharing	Bill Snow explained there have recently been elections within the Stoney Nakoda Nations and he would like to request that Alberta Transportation organize a presentation on the SR1 to	Alberta Transportation followed up November 10, 2017 asking if Stoney Nakoda Nation were still interested in having a presentation for the newly elected officials and received no response. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-4 SR1 Project Specific Concerns and Responses - Stoney Nakoda Nations</i> from the March 2018 EIA: Alberta Transportation presented the SR1 Project to	None at this time.	None at this time.	Ongoing: Working with First Nation

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			update their Chiefs and CAOs on SR1.	the Stoney Nakoda Nation at the Stoney Nakoda Resort on February 12, 2018. A further workshop at the Stoney Nakoda Resort has been scheduled for February 20, 2018.			
				No further requests have been made by Stoney Nakoda Nation to present to Chief and Council.			
27	September 14, 2017 Meeting at Stoney Nakoda	Information sharing	Requested an on-reserve presentation on the SR1 project.	At the meeting held on September 14, 2017, Alberta Transportation said they would inquire about accommodating an on-reserve presentation.	At the meeting held on June 4, 2018, Stoney Nakoda Nations responded that	None at this time.	Ongoing: Working with First Nation
	Resort between the Stoney Nakoda Nations, Alberta Transportation and the Canadian Environmental Assessment Agency			On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-4 SR1 Project Specific Concerns and Responses - Stoney Nakoda Nations</i> from the March 2018 EIA: Alberta Transportation presented the SR1 Project to the Stoney Nakoda Nation at the Stoney Nakoda Resort on February 12, 2018. A further workshop at the Stoney Nakoda Resort has been scheduled for February 20, 2018.	they will discuss whether this concern has been met with other members of the consultation team.		
				To date, Alberta Transportation has met with Stoney Nakoda Nations a total of 11 times.			
28	September 14, 2018 Email from Bill Snow to Dallas Maynard.	Consultation	Alberta Transporting does not have a good record in accommodating First Nation project concerns or sharing information.	None at this time.	None at this time.	None at this time.	Ongoing: Working with the First Nation.
29	September 14, 2018	Consultation	Minister Mason's comments in June 2018 were inappropriate	At the meeting held on September 13, 2018, Alberta Transportation described that consultation with the Stoney Nakoda Nations had begun in	None at this time.	None at this time.	Ongoing: Working with the First Nation.
	Email from Bill Snow to Dallas Maynard.		and is seen as inadequate consultation.	October 2014, with multiple meetings and site visits occurring, as well as funding being provided for a TUS.			tile i list Nation.
30	May 22, 2019 Email from Dean Cherkas to Jennifer Hallson.	Consultation	From the Stoney Nakoda perspective, consultation has not started yet on this project.	In a letter dated May 30, 2019 Alberta Transportation responded to this statement. The letter detailed the consultation that has occurred since August 2014 with the Stoney Nakoda Nations, including 11 meetings and 11 days of site visits as well as providing the Record of Consultation logs. The letter also set out the main concerns raised by Stoney Nakoda Nations throughout the process, with the responses Alberta Transportation has provided at meetings. The letter stated Alberta Transportation was willing to meet to discuss Stoney Nakoda Nations' concerns further.	None at this time.	None at this time.	Ongoing: Working with the First Nation.
31	September 14, 2018	Funding	Administrative and financial	At the meeting held on September 13, 2018, Alberta Transportation	At the meeting held on February 22,	None at this time.	Ongoing: Working with
	Email from Bill Snow to Dallas Maynard.	I TIINDING DECOMPTION OF A PARTY	informed Stoney Nakoda Nations that there was money available from their TUS budget, which will be paid once the TUS is received. Alberta Transportation requested a budget for any additional work Stoney Nakoda Nations would like to do. Alberta Transportation again requested a budget for the additional work (another site visit) in an email December 18, 2018 as well as in person on December 19, 2018. No budget has been received.	2019, Stoney Nakoda Nations indicated they would not be submitting a TUS report or related budgets.		the First Nation.	
32	January 15, 2017	Project in relation to other flood measures	EIA and the project cannot be looked at in isolation from other	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-4 SR1</i>	At the meeting held on June 4, 2018, Stoney Nakoda Nations acknowledged	None at this time.	Ongoing: Working with First Nation
	Letter sent via email to Shelly Boss, CEAA from Rae and Company on behalf of the Stoney Nakoda Nations	nood mododioo	flood control measures	Project Specific Concerns and Responses - Stoney Nakoda Nations from the March 2018 EIA: Following the floods of June 2013, the government of Alberta assessed various flood mitigation measures as detailed in the	this response but did not provide further feedback.		. ASCINGUOII

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				Project Location Alternatives section of the Volume 1 Project Description of the EIA. The SR1 Project was selected as the preferred option.			
				In addition, flood mitigation projects for Bragg Creek and Redwood Meadows are underway.			
33	December 9, 2016 Email Comment from Bill Snow, Consultation Manager, Stoney Tribal Government related to receiving notification that that an environmental assessment was being completed at	Wildlife	In response to the McLean Creek (MC1) option environmental assessment notification, Bill Snow requested that the project designers also include wildlife crossing options into their assessment.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-4 SR1 Project Specific Concerns and Responses - Stoney Nakoda Nations</i> from the March 2018 EIA: There is no intention to complete historical/indigenous impact studies for the MC1 option. An assessment of the MC1 option was included as part of the Project Location Alternatives assessment in the EIA (Volume 1, Section 3, Volume 4, Supporting Documentation). Alberta Transportation is applying for the SR1 Project.	At the meeting held on June 4, 2018, Stoney Nakoda Nations indicated that the response in Table 7-4 responded to the concern.	Proponent response satisfactory to First Nation.	No further action required.
	McLean Creek as part of the SR1 project.			At the meeting held on June 4, 2018, it was reiterated that the MC1 option was not moving forward.			
34	January 15, 2017 Letter sent via email to Shelly Boss, CEAA from Rae and Company on behalf of the Stoney Nakoda Nations	McLean Creek	Asked when/how historical/indigenous impact studies will be conducted for the McLean Creek option.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-4 SR1 Project Specific Concerns and Responses - Stoney Nakoda Nations</i> from the March 2018 EIA: There is no intention to complete historical/indigenous impact studies for the MC1 option. An assessment of the MC1 option was included as part of the Project Location Alternatives assessment in the EIA (Volume 1, Section 3, Volume 4, Supporting Documentation). Alberta Transportation is applying for the SR1 Project.	At the meeting held on June 4, 2018, Stoney Nakoda Nations indicated that the Table 7-4 response on historical/indigenous impact studies responded to the concern.	Proponent response satisfactory to First Nation.	No further action required.
35	May 6, 2019 Letter from Chief Darcy Dixon, Bearspaw First Nation, Chief Aaron Young, Chiniki First Nation, Chief Clifford Poucette, Wesley First Nation to Jason Kenney, Premier	Objection	Stoney Nakoda Nations stated their objection to the SR1 project.	In a letter dated June 26, 2019, Alberta Transportation responded to the May 6, 2019 letter. The letter referenced Matthew Hebert's letter dated May 30, 2019, and that Alberta Transportation remains committed to consulting with the Stoney Nakoda Nations on the SR1 project and expressed the desire to meet to discuss the project.	None at this time.	None at this time.	Ongoing: Working with the First Nation.

Springbank SR1 - Specific Concerns and Response Table

First Nation or Metis Settlement: Tsuut'ina Nation

Date: AUGUST 2014 - AUGUST 2019

1. Document or Meeting Reference	2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. First Nation/Metis Settlement response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
1 May 30, 2016	Aboriginal and Treaty Rights	Our (Tsuut'ina) citizens are	On March 23, 2018, Alberta Transportation sent detailed responses to	At the meeting held on October 11, 2018,	None at this time.	Ongoing: Working with
Letter from Chief Roy	Hunting	currently able to exercise their	specific concerns raised to date by providing a copy of <i>Table 7-3 SR1</i>	Tsuut'ina Nation expressed their desire to have a		First Nation
Whitney to Canadian	Fishing	Treaty Rights on private lands surrounding our Reserve.	Project Specific Concerns and Responses - Tsuut'ina Nation from the March 2018 Environmental Impact Assessment (EIA): The EIA has	meeting to specifically discuss impacts to Treaty rights.		
Environmental	Wildlife	Further impacts to wildlife, fish	considered potential effects to wildlife, fish and birds, as well as the	ingrico.		
Assessment Agency		and birds, as well as exercise of	exercise of rights and traditional uses.			
April 3, 2018	Fish	Tsuut'ina Aboriginal, Treaty and	The Project will result in direct and indirect loss of wildlife habitat during			
Draft Tsuut'ina Traditional	Birds	inherent rights.	construction and dry operations; however, the amount of wildlife habitat			
Land Use Report for the Proposed Springbank Off-		Concerns about the impacts to	permanently affected (168 ha) is relatively small compared to the availability of wildlife habitat remaining in the local assessment area			
Stream Reservoir Project		hunting and fishing, including	(LAA) (4,860 ha). Although there would be temporary displacement and			
prepared by Trailmark		barriers to access, habitat loss, changes in wildlife/fish	disturbance to wildlife during construction, a measurable change in the			
Systems Inc.		behaviour, health,	abundance of wildlife in the regional assessment area is unlikely.			
September 21, 2018		abundance/availability,	The Project would result in temporarily unavailable wildlife habitat			
Meeting between Alberta		locations, change in health and flow of water, etc.	during flood operations and post-flood operations, with some potential permanent loss of wetlands due to sedimentation, which will result in its			
Transportation, Stantec, and Tsuut'ina Nation			conversion into upland communities. Vegetation lost during floods			
and isuatina Nation		Concerns about Tsuut'ina's ability to pursue traditional land	would eventually be replaced by self-propagation of native vegetation in			
		use practices and foreseeable	the surrounding area, or reestablished through hydroseeding. The			
		impacts on Tsuut'ina Nation reserve lands and water.	amount of wildlife habitat affected is relatively small compared to the availability of wildlife habitat remaining in the regional assessment area (102,817 ha).			
		Identified lack of access is the principle barrier to using their traditional lands, followed by environmental concerns regarding food.	The Project would result in direct and indirect alteration of fish habitat during construction and dry operations; however, the amount of fish habitat permanently affected (1,854 m²) is relatively small compared to the availability of fish habitat remaining in the local assessment area (3,100,000 m²).			
		Concerned that compounding impacts from the Project and ongoing development will compromise harvesters' ability to fish in certain areas of the Elbow River and its tributaries, and will also force harvesters to travel further away to hunt.	For the purposes of the EIA, effects on potential or established Aboriginal or Treaty rights are addressed through the assessment of the current use of lands and resources for traditional purposes. By acknowledging a link between practice-based rights and current use, the assessment accepts that adverse residual effects on the availability of traditional resources for current use, on access to traditional resources or areas for current use, or on sites or areas for current use will have a consequent effect on the ability of Indigenous groups to			
		Concern that changes to health and flow of Elbow River will affect their ability to harvest trout and whitefish.	exercise potential or established Aboriginal and Treaty rights. In addition, a conservative assumption was made that Indigenous groups had access to the PDA to practice traditional use activities notwithstanding access to these private lands is limited.			
		Concerned that bull trout, which are classified as Threatened under Alberta's Wildlife Act, will be affected by the Project.	At the meeting held on September 21, 2018, Alberta Transportation indicated they will complete pre-construction nest sweeps and buffer bird nests based on recommendations from Alberta Environment and Parkas (AEP).			

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			Concerned that the Project will disturb spawning areas in the Elbow River and tributaries.	At the meeting held on October 11, 2018, the impacts to fish and fish habitat, and wildlife and wildlife habitat, along with the proposed mitigation measures, were discussed.			
			The ability for Tsuut'ina Nation to continue to access healthy water and fish within their traditional territory is a significant concern. Concerned about the ability to exercise spiritual rights, such as hunting, fishing, and harvesting plants.	On November 23, 2018, Alberta Transportation provided its report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table. In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA for hunting, fishing, and traditional use, including: development of a land use plan; and mitigation measures for wildlife and fish. Alberta Transportation also met with Tsuut'ina Nation December 6, 2018 to discuss the response and mitigation table. At the meeting held on December 6, 2018, Alberta Transportation presented on their proposed plan for a land use plan that would include: access for traditional use, hunting, and harvesting; management during/after a flood; and ongoing monitoring programs. In a letter dated June 18, 2019, Alberta Transportation indicated they			
				had created a draft post-construction land use document for the SR1 project that provides draft principles of future land use for the Project Development Area (PDA). The primary use of all lands within the PDA, including the LUA, is for flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses such as vegetation management and First Nations' traditional activities (including the exercise of treaty rights such as hunting) will be allowed within the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights and to engage in traditional uses.			
2	December 6, 2018 Meeting between Tsuut'ina Nation, Alberta Transportation, and Stantec.	Methodology Treaty rights	Concerns about the methodology used in the Environmental Impact Assessment (EIA) and TUS Response regarding Treaty rights.	Under cover dated January 28, 2019, Alberta Transportation requested that Tsuut'ina Nation provide its views and perspectives on its Aboriginal and Treaty rights, cultural and experiential values, and country foods. The letter listed four specific topics that Alberta Transportation was requesting input on to help answer Canadian Environmental Assessment Agency (CEAA) IR2-01, IR2-02, and IR2-08. The specific information requests were attached as Appendix A. A deadline of February 28, 2019 was given for written feedback to be included in the IR responses. Feedback received after the deadline will be incorporated into regulatory submissions and project planning, as appropriate.	In a letter dated February 28, 2019, Tsuut'ina Nation responded to Alberta Transportation's January 28, 2019. Alberta Transportation received the CEAA IRs over five months prior to the date of the January 28, 2019 letter, but only provided Tsuut'ina Nation with four weeks to respond. Please explain the timing behind Alberta Transportation's request. The timing of Alberta Transportation's request is problematic given that the environmental assessment for the Project is not yet complete. Tsuut'ina has identified a number of information gaps in the environmental assessment, including with respect to issues relating to groundwater, surface water, vegetation and wetlands, wildlife, archaeological sites, and cumulative effects. This information is needed to understand how the Project will impact Tsuut'ina's Aboriginal and treaty rights and what mitigation or accommodation measures will be required to mitigate potential impacts.	None at this time.	Ongoing: Working with First Nation

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				In Tsuut'ina Nation's view, it is not a robust or respectful approach to the assessment of potential impacts to Tsuut'ina's Aboriginal and Treaty rights from the Project to expect that impacts can be identified and mitigated in the absence of the information that Tsuut'ina has identified as necessary and is still being collected. Should Alberta Transportation intend to submit its responses to the IRs without waiting for the outstanding information to be collected and assessed, Tsuut'ina requests the opportunity to review the draft IR responses before they are		
3 November 13, 2014 Initial SR1 Meeting with Tsuut'ina Nation, Alberta Transportation, and DEMA Land Services	Impact to Reserve Traditional Territory	Tsuut'ina Nation had concerns about the Elbow River and how the SR1 project would impact their Territory and Reserves.	Possible impacts and mitigation measures related to concerns raised by the Tsuut'ina Nation will be addressed as part of the EIA. Alberta Transportation provided funding for the Tsuut'ina Nation to conduct two Traditional Use Studies (TUS) and funded a Ceremony and Feast on the project lands (privately and publicly held). Alberta Transportation received the TUS, with permission to use, on April 3, 2018. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: The Tsuut'ina reserve lands have been included in the EIA. The potential effects of the Project have been assessed using three geographic areas. The Project Development Area (PDA), the Local Assessment Area (LAA) and the Regional Assessment Area (RAA). The PDA represents the project footprint i.e., immediate area of physical disturbance and construction activities (approximately 1440 ha). The PDA located on private land, north of the Elbow River, and this area is the same for all the valued components (VCs). The LAA is an area larger than the PDA and is considered to be the area where Project effects would be reasonably expected to occur and where effects can be predicted or measured with a reasonable degree of accuracy. The RAA is an area larger than the LAA and is an area within which Project effects may interact or accumulate with the effects of other projects or activities. The size of the LAA and RAA varies depending on the VC being assessed. In many cases the assessment areas include the Tsuut'ina Reserve. In addition to the assessment of VCs the EIA document also contains an assessment of the potential Project effects on Federal Lands,	submitted to CEAA so that they can provide their input. At the meetings held on May 14-15, 2018, Tsuut'ina Nation stated that the project is potentially adversely affecting the Nation socioeconomically, affecting their ability to harvest medicinal plants, wildlife, and affecting ceremony held at the powwow grounds. Tsuut'ina Nation questioned the boundaries of the various study areas in the EIA, and recommended the boundaries be enlarged to include the Tsuut'ina reserve. Tsuut'ina Nation requested that the boundaries for the hydrogeological model include the Tsuut'ina Nation reserve. At the meeting held on October 11, 2018, Tsuut'ina Nation expressed their desire to have a meeting to specifically discuss impacts to Treaty rights.	None at this time.	Ongoing: Working with First Nation

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				At the meetings held on May 14-15, 2018, Alberta Transportation committed to revising the hydrogeological model to include the Tsuut'ina Nation reserve.			
				In a letter dated July 20, 2018, Alberta Transportation advised Tsuut'ina Nation that, based on the comments by PGL Environmental, they are revisiting the hydrogeological modelling. The southern boundary is being extended to account for Tsuut'ina Nation's concerns regarding potential impact to groundwater on and near the reserve.			
				At the meeting held on August 8, 2018, Alberta Transportation provided an explanation of the additional work being done on the hydrogeological model. The study area has been expanded to include the Tsuut'ina reserve and well records from the reserve are being incorporated. A new baseline is being created and then the hydrogeological model will be re-run.			
				In a letter dated June 18, 2019, Alberta Transportation further provided an update on the additional hydrogeological modelling done. The hydrogeology (groundwater) assessment completed in March 2018 has been updated in response to concerns raised by Tsuut'ina Nation during the consultation process and expands upon the previous baseline assessment and numerical modelling presented in the EIA. The new simulations confirmed the original findings of the EIA: effects on groundwater would be limited to areas north of the Elbow River, near Project components including the diversion channel and offstream reservoir area. Effects on groundwater do not extend laterally southward beyond the Elbow River valley and in turn are not expected on the Tsuut'ina Nation Reserve. In order to provide ongoing monitoring of groundwater conditions during dry or flood operations, Alberta Transportation has developed a draft groundwater monitoring plan. A USB accompanied the June 18, 2019 letter that contained Alberta Transportation's responses to the Supplemental Information Requests (SIR), including the new hydrogeology reports and results.			
4	May 18, 2017 Letter by Violet Meguinis, Acting Consultation Director Tsuut'ina to the Honorable Brian Mason, Minister of Infrastructure and Transportation July 19, 2017	Location	Concerns regarding the selection of the SR1 site within 395 metres of the Tsuut'ina Reserve.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: The closest point of the project to the Tsuut'ina Reserve is 930 m. This is the distance from the reserve to the edge of back water on the river in the event of a flood of the 2013 flood magnitude. The closest point of a physical SR1 component to the Tsuut'ina Reserve is 1130 m, the distance from the Tsuut'ina Reserve to the flood plain berm, Volume 3A, Section 18, Figure 18-3.	At the meetings held on May 14-15, 2018, Tsuut'ina Nation requested confirmation that 930 m is the closest extent of the Project to the Tsuut'ina Nation reserve. Tsuut'ina Nation requested the opportunity to see the conceptual Project model.	None at this time.	Ongoing: Working with First Nation
	Letter from Chief Lee Crowchild to Alberta Environment and Parks			At the meetings held on May 14-15, 2018, Alberta Transportation provided the following clarification in relation to the map provided to Tsuut'ina Nation indicating potential water "back up" behind the diversion structure:			
				The blue line on the map indicates the anticipated surface water back up of flood water behind the diversion structure in a flood event when the gates are in operation and working correctly. This water back up reaches a point approximately 1680 m from the			

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				Tsuut'ina Nation reserve if measured following the active river channel or 1130 m if measured directly south over land.			
				2. The closest extent of the physical infrastructure to the Tsuut'ina reserve boundary is 1130 m.			
				3. The red dash line on the figure represents the Project Development Area. This line is a conservation buffer. It represents the maximum extent of potential surface water "back up" in the event the diversion structure malfunctions. Should the service spillway gates close but the diversion gates fail to open water would "back up" behind the service spillway and floodplain berm. The red line indicates the maximum extent to which water would back up before it reached the height of the flood plain berm. At this point the flood water would overtop the flood plain berm. The distance of 930 m indicated on the map was measured within the active channel.			
				At the meetings held on May 14-15, 2018, Alberta Transportation showed videos and images of the 1:16 model of the SR1 Project design to demonstrate the engineering of the Project and how water and debris would flow. A USB flash drive with these videos and images was sent to Tsuut'ina Nation under cover dated August 28, 2018.			
5	May 18, 2017 Letter by Violet Meguinis, Acting Consultation Director Tsuut'ina to the Honorable Brian Mason, Minister of Infrastructure and Transportation July 19, 2017 Letter from Chief Lee Crowchild to Alberta Environment and Parks	Traditional Territory	Concerns regarding the entire project lying within Tsuut'ina's traditional territory.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: The Tsuut'ina reserve lands have been included in the EIA. The potential effects of the Project have been assessed using three geographic areas. The Project Development Area (PDA), the Local Assessment Area (LAA) and the Regional Assessment Area (RAA). The PDA represents the project footprint i.e., immediate area of physical disturbance and construction activities (approximately 1440 ha). The PDA located on private land, north of the Elbow River, and this area is the same for all the valued components (VCs). The LAA is an area larger than the PDA and is considered to be the area where Project effects would be reasonably expected to occur and where effects can be predicted or measured with a reasonable degree of accuracy. The RAA is an area larger than the LAA and is an area within which Project effects may interact or accumulate with the effects of other projects or activities. The size of the LAA and RAA varies depending on the VC being assessed. In many cases the assessment areas include the Tsuut'ina Reserve. In addition to the assessment of VCs the EIA document also contains an assessment of the potential Project effects on Federal Lands, including the Tsuut'ina Reserve (Volume 3A and 3B, Chapter 18). At the meetings held on May 14-15, 2018, Alberta Transportation responded that CEAA requires maps of traditional territory, but out of respect, a map had not been included in the EIA because they wanted to use one approved by Tsuut'ina Nation.	At the meetings held on May 14-15, 2018, Tsuut'ina Nation asked about there not being a traditional territory map in the EIA.	None at this time.	Ongoing: Working with First Nation

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6	July 12, 2018 Springbank Offstream Reservoir Project EIS Technical Review and Information Requests by PGL Environmental Consultants, dated June 15, 2018.	Federal lands	Reassess effects to federal lands to include entirety of Tsuut'ina IR 145.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
7	April 21, 2016 Meeting with Tsuut'ina Nation, Alberta Transportation, and DEMA Land Services	Buffer zone	Tsuut'ina Consultation Office have concerns and made SR1 map inquiries related to the buffer zones around the SR1 Project, in particular impacts to their Reserve Lands.	At the meeting held on April 21, 2018, Alberta Transportation informed Tsuut'ina Nation that the areas not shown as buffer lands were areas where no access was available to the private lands. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: The potential effects of the Project have been assessed using three geographic areas. The Project Development Area (PDA), the Local Assessment Area (LAA) and the Regional Assessment Area (RAA). The LAA is generally an area larger than the PDA and is considered to be the area where Project effects would be reasonably expected to occur and where effects can be predicted or measured with a reasonable degree of accuracy. The RAA is an area larger than the LAA and is an area within which Project effects may interact or accumulate with the effects of other projects or activities. The LAA and RAAs are generally significantly larger than the PDA to ensure that Project effects are assessed beyond the project footprint. For example, in Aquatic Ecology, the PDA is 1440 ha, the LAA is 10,364 ha and represents an area from the Elbow Falls to the inlet of the Glenmore Reservoir, and the RAA is 125,438 ha and represents the Elbow River Watershed. In this case both the LAA and RAA intersect with the Tsuut'ina Reserve. The EIA document also contains an assessment of the potential Project effects on Federal Lands (Volume 3A and 3B, Chapter 18). At the meetings held On May 14-15, 2018, Alberta Transportation committed to revising the hydrogeological model to include the Tsuut'ina Nation reserve. In a letter dated July 20, 2018, Alberta Transportation advised Tsuut'ina Nation that, based on the comments by PGL Environmental, they are revisiting the hydrogeological modelling. The southern boundary is being extended to account for Tsuut'ina Nation's concerns regarding potential impact to groundwater on and near the r	At the meetings held on May 14-15, 2018, Tsuut'ina Nation questioned the boundaries of the study area for the hydrogeologic model in the EIA, and recommended the boundaries of the study area be enlarged to include the Tsuut'ina reserve. Especially noted concerns regarding the assessment not including water wells on the reserve. At the meeting held on October 11, 2018, At the meeting held on October 11, 2018, Tsuut'ina Nation requested further work to drill new wells on Tsuut'ina land believing it will result in the hydrogeologic model more accurately showing conditions on Tsuut'ina land.	None at this time.	Ongoing: Working with First Nation

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				incorporated. A new baseline is being created and then the hydrogeological model will be re-run.			
				At the meeting held on October 11, 2018, Alberta Transportation provided an update on the work being done on the hydrogeologic model. An additional 1850 wells from the Tsuut'ina reserve have been added. The additional work has confirmed the Elbow River as a hydrogeologic divide.			
8	May 30, 2016 Letter from Chief Roy Whitney to Canadian Environmental Assessment Agency August 8, 2018 Meeting between Tsuut'ina Nation, Alberta Transportation, and Stantec February 28, 2019 Letter from Tanis Onespot to Alberta Transportation	Traditional use	Concerned about how our other uses of the Elbow River will be affected, including for transportation and as the community's water source. Would like the river to be looked at as navigable waterway. The Elbow River is an important source of drinking water as it is connected to the groundwater on their reserve.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: The Project's effects on river transportation consists of the need to portage around the diversion structure. Alberta Environment and Parks, the final operator of the Project, will avoid the substantial interference with navigation of the Elbow River through design and best management practices. As part of construction, a permanent portage will be developed around the in-stream water intake components. Signs directing traffic to detours will be installed during construction of road realignments and modifications. Signs will be installed along the existing Elbow River channel and on the dam. Multiple signs will be placed upstream and downstream of the water intake components on both banks of the Elbow River. These signs would warn users on the Elbow River that they are approaching instream water intake components and of the associated danger with this infrastructure and to direct them to a portage location. A floating, high visibility boom will be in place upstream and downstream of the water intake component. Through the Indigenous engagement program, Tsuut'ina Nation identified Elbow River as a source of drinking water and noted the importance of the river's connection to groundwater. Tsuut'ina Nation also indicated that they depend on the groundwater in the Elbow River Alluvial Aquifer for the reserves' domestic drinking water. The Tsuut'ina noted that there are over 1500 wells on the reserve. The EIA concluded that with the application of standard construction mitigation measures potential effects of the Project on surface water quality and groundwater quality and quantity are not significant. In respect of these conclusions, it is anticipated that there will be no effects on the sources of drinking water identified by Tsuut'ina Nation, or the ability of other Indigenous groups to use E	At the meetings held on May 14-15, 2018, Tsuut'ina Nation questioned the boundaries of the study area for the hydrogeologic model in the EIA, and recommended the boundaries of the study area be enlarged to include the Tsuut'ina reserve. Especially noted concerns regarding the assessment not including water wells on the reserve.	None at this time.	Ongoing: Working with First Nation
				At the meeting held on August 8, 2018, Alberta Transportation provided an explanation of the additional work being done on the			

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				hydrogeological model. The study area has been expanded to include the Tsuut'ina reserve and well records from the reserve are being incorporated. A new baseline is being created and then the hydrogeological model will be re-run.			
9	April 21, 2016 Meeting with Tsuut'ina Nation, Alberta Transportation, and DEMA Land Services	TUS funding	Traditional use and other budgets and approvals.	Alberta Transportation provided funding for the Tsuut'ina Nation to conduct two TUS and funded a ceremony and feast on the project lands. Tsuut'ina Nation conducted two TUS (21 field days) in summer/fall of 2016/2017. The Tsuut'ina Nation delivered an updated version of their TUS report April 3, 2018 with permission to use it for the project. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: Alberta Transportation has provided funding to Tsuut'ina for a TUS. Budgets provided in July 2016 and July 2017 were approved by Alberta Transportation. To facilitate the traditional use studies, Alberta Transportation arranged and facilitated 21 site visits by Tsuut'ina within the PDA over the period between the fall of 2016 to the late summer of 2017. A TUS was not received in time to be incorporated in the EIA submitted in October 2017. A draft TUS has now been received however Tsuut'ina's permission to include the information from it in the revised EIA re-submission has not been received. Alberta Transportation has provided Tsuut'ina with the draft Traditional Land and Resource Use EIA (Volumes 3A and 3B) for review and comment under correspondence dated January 26, 2018 and arranged a 4-day workshop with Tsuut'ina from March 1, 5, 6 and 7, 2018. The workshop was facilitated by the Canadian Environmental Assessment Agency (CEAA) with the goal of better understanding potential impacts to Tsuut'ina from the Project and to provide responses to the concerns raised to date. Verification of the meeting minutes from the workshops was not received prior to March 16, 2018 and therefore the TLRU section has not been updated to include information discussed. Relevant information, concerns and recommendations received after the EIA has been filed in March 2018 will be used for project planning and implementation purposes, where applicable. As of October 3	At the meetings held on May 14-15, 2018, Tsuut'ina Nation stated that because a request for funding to conduct a hydrology study was not funded early in the Project, Tsuut'ina Nation is now having to catch up (with the support of PGL Environmental Consultants) to understand the potential effects on hydrology from the Project.	None at this time.	Ongoing: Working with First Nation
10	April 3, 2018 Draft Tsuut'ina Traditional Land Use Report for the Proposed Springbank Off- Stream Reservoir Project prepared by Trailmark Systems Inc.	Traditional Use Study	RECOMMENDATION: Tsuut'ina requires more time during spring/summer to observe waterfowl and plants.	On November 23, 2018, Alberta Transportation provided its report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table. In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA for wildlife. Subject to land access from the private landowners, Alberta Transportation agrees to a field visit – similar to the one conducted in October 2017 - with Elders in the spring of 2019 to observe waterfowl.	None at this time.	None at this time.	Ongoing: Working with First Nation

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				Alberta Transportation also met with Tsuut'ina Nation December 6, 2018 to discuss the response and mitigation table.			
11	July 12, 2018 Springbank Offstream Reservoir Project EIS	Traditional use	TUS reports for all First Nations should be incorporated into the baseline report and effects	At the meeting held on May 14-15, 2018, Alberta Transportation indicated the TUS report will be reviewed against the EIA and a written response will be provided to Tsuut'ina Nation.	None at this time.	None at this time.	Ongoing: Working with First Nation
	Technical Review and Information Requests by PGL Environmental		assessment.	At the meeting held on October 11, 2018, Alberta Transportation indicated that information from the TUS report will be used in the regulatory process.			
	Consultants, dated June 15, 2018.			On November 23, 2018, Alberta Transportation provided its report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table. As the TLRU Report was provided after the filing of the March 2018 EIA, TLRU information, concerns, and recommendations will be used for project planning, consultation and regulatory purposes, where applicable. Alberta Transportation also met with Tsuut'ina Nation December 6, 2018 to discuss the response and mitigation table.			
12	May 25, 2017 Letter from Violet Meguinis to the Honorable Minister Brian Mason, Minister of	Traditional Use Study Ceremony	Recommend an additional traditional land use study be done within blooming season. Need for a ceremony for the well being of all.	In a letter dated June 6, 2017 from Minister Mason, support in principle was provided for Tsuut'ina Consultation technical teams returning to the SR1 (in the blooming season), and the Minister thanked Tsuut'ina for submitting the budget for the site visits. The Minister indicated that his department were reviewing the budgets for the site visits and ceremony and feast.	At the meetings held on May 14-15, 2018, Tsuut'ina Nation indicated they held a ceremony involving a feast and a sweat in spring 2018.	None at this time.	Ongoing: Working with First Nation Tsuut'ina field work on the second TUS report commenced in early
	Transportation following a May 19, 2017 meeting			On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: Funding for a ceremony and feast was provided by Alberta Transportation in July 2016 and February 2018.			July 2017. A draft potion of their TUS was received in January 2018, but it was requested that it be kept confidential.
				Alberta Transportation has provided funding to Tsuut'ina for a traditional use study. Budgets provided in July 2016 and July 2017 were approved by Alberta Transportation. To facilitate the traditional use studies, Alberta Transportation arranged and facilitated 21 site visits by Tsuut'ina within the PDA over the period between the fall of 2016 to the late summer of 2017. A TUS was not received in time to be incorporated in the EIA submitted in October 2017. A draft TUS has now been received however Tsuut'ina's permission to include the information from it in the revised EIA re-submission has not been received.			An updated version of their TUS was received April 3, 2018 with permission to use it for the SR1 Project.

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				Alberta Transportation has provided Tsuut'ina with the draft Traditional Land and Resource Use EIS (Volumes 3A and 3B) for review and comment under correspondence dated January 26, 2018 and arranged a 4-day workshop with Tsuut'ina from March 1, 5, 6 and 7, 2018. The workshop was facilitated by CEAA with the goal of better understanding potential impacts to Tsuut'ina from the Project and to provide responses to the concerns raised to date. Verification of the meeting minutes from the workshops was not received prior to March 16, 2018 and therefore the TLRU section has not been updated to include information discussed.			
				Relevant information, concerns and recommendations received after the EIA has been filed in March 2018 will be used for project planning and implementation purposes, where applicable.			
				On November 23, 2018, Alberta Transportation provided its report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table. In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA for wildlife. Subject to land access from the private landowners, Alberta Transportation agreed to a field visit – similar to the one conducted in October 2017 - with Elders in the spring of 2019 to observe waterfowl. Alberta Transportation committed to funding and participating in ceremonies prior to the start of construction, if requested. Alberta Transportation also met with Tsuut'ina Nation December 6, 2018 to discuss the response and mitigation table.			
13	August 31, 2017 Meeting between Alberta Transportation and Tsuut'ina	Ceremony	Tsuut'ina Nation still has a desire to hold a ceremony and feast (the ceremony had been postponed earlier).	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: Funding for a ceremony and feast was provided by Alberta Transportation in February 2018.	At the meetings held on May 14-15, 2018, Tsuut'ina Nation indicated they held a ceremony involving a feast and a sweat in spring 2018.	Funding was provided by Alberta Transportation for a ceremony. Tsuut'ina Nation held the ceremony in spring 2018.	No further action required.
14	April 3, 2018 Draft Tsuut'ina Traditional Land Use Report for the Proposed Springbank Off- Stream Reservoir Project prepared by Trailmark Systems Inc.	Water Ceremony	Concern that the Project will change the relationship between Tsuut'ina and the water in their territory. If Project proceeds, need for a ceremony for the spirit of the water.	On November 23, 2018, Alberta Transportation provided its report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table. In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA for hydrology. Alberta Transportation committed to funding and participating in ceremonies prior to the start of construction, if requested. Alberta Transportation also met with Tsuut'ina Nation December 6, 2018 to discuss the response and mitigation table.	None at this time.	None at this time.	Ongoing: Working with First Nation
15	August 31, 2017 Meeting between Alberta Transportation and Tsuut'ina	Historical Resources Ceremony	The Tsuut'ina practiced tree burials with a cairn to mark the spot. Tsuut'ina do not want these cairns disturbed. A ceremony may be needed to properly respect those Tsuut'ina people who were part of the tree burials, but which sites cannot all be identified today.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: Funding for a ceremony and feast was provided by Alberta Transportation in July 2016 and February 2018. At the meetings held on August 8, 2018, September 21, 2018, and October 11, 2018, Alberta Transportation requested the GPS coordinates for the sites identified by Tsuut'ina Nation so they could be plotted against the project components and the potential impacts to the sites could be assessed.	At the meetings held on May 14-15, 2018, Tsuut'ina Nation indicated they held a ceremony involving a feast and a sweat in spring 2018. At meetings held on August 8, 2018, September 21, 2018, and October 11, 2018 Tsuut'ina Nation committed to providing the GPS coordinates to Alberta Transportation. To date, this data has not been provided.	None at this time.	Ongoing: Working with First Nation

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				At the meeting held on October 11, 2018, historical resources and possible mitigation measures, including following ACT's requirements, monitoring opportunities, using TUS report information, and the potential for more excavation per ACT's direction, were discussed.			
				On November 23, 2018, Alberta Transportation provided its report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table. In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA for cultural sites and historical resources, including minimizing disturbance and following ACT guidelines. Alberta Transportation will also maintain access to identified current use sites during construction and operations and develop a protocol for recovery, collection, reporting on, and possible repatriation of artifacts found in consultation with Indigenous groups. Alberta Transportation committed to funding and participating in ceremonies prior to the start of construction, if requested. Alberta Transportation also met with Tsuut'ina Nation December 6, 2018 to discuss the response and mitigation table.			
	May 14, 2018 Springbank Off-Stream Reservoir Project EIS – Selected Section: Second Sufficiency Review by PGL Environmental Group, dated April 16, 2018. Provided via email on May 14, 2018.	Spiritual practices	Effect of the project on experience of the land and spiritual practices has not been assessed.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
17	May 30, 2016 Letter from Chief Roy Whitney to Canadian Environmental Assessment Agency May 18, 2017 Letter by Violet Meguinis, Acting Consultation Director Tsuut'ina to the Honorable Brian Mason, Minister of Infrastructure and Transportation July 19, 2017 Letter from Chief Lee Crowchild to Alberta Environment and Parks April 3, 2018 Draft Tsuut'ina Traditional Land Use Report for the Proposed Springbank Off-	Historical Resources	Concerned about the potential for the Project to adversely affect the physical and cultural heritage resources in Tsuut'ina territory. Concerned about (Tsuut'ina) burial sites that would be destroyed should the reservoir be filled. Concerned about impacts to important cultural sites within the Project Area (tipi rings, fire pits, etc.). Concerned about impacts to grave sites on the dam outflow and intake/start of diversion channel as well as throughout undisturbed riparian areas. Feel strongly that grave sites need to be protected.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: An Historic Resources Impact Statement was conducted for the Project and submitted to Alberta Culture and Tourism (ACT) who submitted <i>Historical Resources Act</i> conditions for the Project on November 22, 2017. Existing conditions for historic resources were determined through desktop review and field assessments for archaeology and paleontology. During the historical resources impact assessment (HRIA), 262 shovel tests were completed in areas of high archaeological potential and 698 surface exposures were inspected. A total of 11 precontact period sites and 11 historic period sites were assessed within the PDA. In summary, the results of the HRIA indicate that the project area does contain some sites of moderate to high heritage value that would require mitigation. However, in general terms, much of the area has been affected previously by cultivation and none of the identified sites have sufficient heritage value to mandate complete avoidance, with the possible exception of the Our Lady Peace Mission site, but that is outside the PDA. ACT considers documentation of the site locations, photography, and collection of a sample of artifacts as sufficient mitigation for sites of low to moderate heritage value. For sites of moderate to high heritage value, avoidance or additional mitigation, such as detailed recording	At the meetings held on May 14-15, 2018, Tsuut'ina Nation requested information on the process that will occur in the event that a rock cairn, burial, or other significant find is found. Alberta Transportation noted that a protocol regarding site encounters should be established. Tsuut'ina Nation noted that this could potentially form part of a monitoring plan. Tsuut'ina Nation recommended that a monitoring plan be established with ACT. At meetings held on August 8, 2018, September 21, 2018, and October 11, 2018 Tsuut'ina Nation committed to providing the GPS coordinates to Alberta Transportation. To date, this data has not been provided.	None at this time.	Ongoing: Working with First Nation

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Stream Reservoir Project prepared by Trailmark Systems Inc. August 8, 2018 Tsuut'ina Nation Traditional Land Use Study Springbank Off- Stream Reservoir Project August 15, 2019 Meeting between Minister of Transportation and Tsuut'ina Nation August 29, 2019 Meeting between Tsuut'ina Nation and Alberta Transportation		RECOMMENDATION: Do not disturb cultural and burial sites, or archaeological sites. Tsuut'ina Nation undertook a site visit and identified tipi rings, a possible medicine wheel, possible campsites, and possible bison jumps (exact locations unclear). Concerns about traditional sites and features within the SR1 area. Tsuut'ina Nation is concerned about the destruction of sites within the project area.	and mitigative excavation to retrieve a larger sample of artifacts and obtain an improved understanding of the cultural affiliation may be required by ACT. Standard mitigation measures will be determined by ACT based on their review of the HRIA. The EIA found no significant effects of the Project on historic resources. A significant adverse residual environmental effect on historic resources is defined as one that results in an unauthorized project-related disturbance to, or destruction of, all or part of a historic resource considered by ACT to be of heritage value, and that is not mitigated or compensated as required by the regulators. The EIA found no significant effects of the Project on historic resources. At the meetings held on August 8, 2018, September 21, 2018, and October 11, 2018, Alberta Transportation requested the GPS coordinates for the sites identified by Tsuut'ina Nation so they could be plotted against the project components and the potential impacts to the sites could be assessed. At the meeting held on October 11, 2018, historical resources and possible mitigation measures, including following ACT's requirements, monitoring opportunities, using TUS report information, and the potential for more excavation per ACT's direction, were discussed. On November 23, 2018, Alberta Transportation provided its report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table. In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA for cultural sites and historical resources, including minimizing disturbance and following ACT guidelines. Alberta Transportation will also maintain access to identified current use sites during construction and operations and develop a protocol for recovery, collection, reporting on, and possible repatriation of artifacts found in consultation with Indigenous groups. Alberta Transportation also met with Tsuut'ina Nation December 6, 2018 to discuss the response and mitigation table.			

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18	May 30, 2016 Letter from Chief Roy Whitney to Canadian Environmental Assessment Agency	Historical Resources	Concern on project impacts to tipi sites, rock cairns, portions of a medicine wheel.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: As noted in response to the concern above, a full assessment of the effects of the Project on historic resources was carried out and submitted to ACT. The EIA found no significant effects of the Project on historic resources. A significant adverse residual environmental effect on historic resources is defined as one that results in an unauthorized project-related disturbance to, or destruction of, all or part of a historic resource considered by ACT to be of heritage value, and that is not mitigated or compensated as required by the regulators. ACT will define the required mitigation measures required for the Project based on their review of the HRIA, and inform Alberta Transportation of those requirements. At the meetings held on August 8, 2018, September 21, 2018, and October 11, 2018, Alberta Transportation requested the GPS coordinates for the sites identified by Tsuut'ina Nation so they could be plotted against the project components and the potential impacts to the sites could be assessed. At the meeting held on October 11, 2018, historical resources and possible mitigation measures, including following ACT's requirements, monitoring opportunities, using TUS report information, and the potential for more excavation per ACT's direction, were discussed. On November 23, 2018, Alberta Transportation provided its report, <i>Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table</i> . In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA for cultural sites and historical resources, including minimizing disturbance and following ACT guidelines. Alberta Transportation will also maintain access to identified current use sites during construction and operations and develop a protocol for recovery, collect	At the meetings held on May 14-15, 2018, Tsuut'ina Nation requested information on the process that will occur in the event that a rock cairn, burial, or other significant find is found. Alberta Transportation noted that a protocol regarding site encounters should be established. Tsuut'ina Nation noted that this could potentially form part of a monitoring plan. Tsuut'ina Nation recommended that a monitoring plan be established with ACT. At meetings held on August 8, 2018, September 21, 2018, and October 11, 2018 Tsuut'ina Nation committed to providing the GPS coordinates to Alberta Transportation. To date, this data has not been provided.	None at this time.	Ongoing: Working with First Nation
19	August 8, 2018 Meeting between Tsuut'ina Nation, Alberta Transportation, and Stantec	Historic resources	Historic trails and pathways.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
20	April 21, 2016 Meeting with Tsuut'ina Nation, Alberta	Historical Resources	Concerns that their artifacts are not protected.	After the meeting held on October 28, 2016, Alberta Transportation obtained the information for the Treaty 7 contact at Alberta Culture and Tourism (ACT) that Tsuut'ina Nation could contact directly to request	At the meetings held on May 14-15, 2018, Tsuut'ina Nation requested information on the process that will occur in the event that a rock cairn, burial, or other significant find is found.	None at this time.	Ongoing: Working with First Nation

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	Transportation, and DEMA Land Services		Concerned with the protection of historic resource sites.	archaeological information. The contact information was included in the draft meeting notes sent December 12, 2016.	Alberta Transportation noted that a protocol regarding site encounters should be established.		
	September 21, 2018 Meeting between Alberta Transportation, Stantec, and Tsuut'ina Nation			On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: ACT independently assesses the heritage value of historic resources, determines the need for, and scope of, any avoidance or mitigation measures, and issues Project approval under the Historical Resources Act. If the Project is approved Alberta Transportation will follow all the requirements for the protection of historic resources as determined by ACT.	Tsuut'ina Nation noted that this could potentially form part of a monitoring plan. Tsuut'ina Nation recommended that a monitoring plan be established with ACT. At meetings held on August 8, 2018, September 21, 2018, and October 11, 2018 Tsuut'ina Nation committed to providing the GPS coordinates to Alberta Transportation. To date, this data has not been provided.		
				At the meetings held on August 8, 2018, September 21, 2018, and October 11, 2018, Alberta Transportation requested the GPS coordinates for the sites identified by Tsuut'ina Nation so they could be plotted against the project components and the potential impacts to the sites could be assessed.			
				At the meeting held on October 11, 2018, historical resources and possible mitigation measures, including following ACT's requirements, monitoring opportunities, using TUS report information, and the potential for more excavation per ACT's direction, were discussed.			
				On November 23, 2018, Alberta Transportation provided its report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table. In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA for cultural sites and historical resources, including minimizing disturbance and following ACT guidelines. Alberta Transportation will also maintain access to identified current use sites during construction and operations and develop a protocol for recovery, collection, reporting on, and possible repatriation of artifacts found in consultation with Indigenous groups. Alberta Transportation also met with Tsuut'ina Nation December 6, 2018 to discuss the response and mitigation table.			
21	October 28, 2016	Historic Resources	The Tsuut'ina Nation requested	At the meeting held on October 28, 2016, the Stantec archaeologist	None at this time.	None at this time.	Ongoing: Working with First Nation
	Meeting with the Tsuut'ina Nation Consultation Office, Alberta Transportation, Stantec, and DEMA Land Services	Information Sharing	that they be informed on all archaeological work being completed on the SR1.	stated that they were bound by the direction of Alberta Culture and Tourism and any release of information would require their permission. As the archaeological work was still ongoing no information could be released. After the meeting Alberta Transportation obtained and passed on the information for the Treaty 7 contact at ACT that Tsuut'ina Nation could contact directly to request archaeological information. The contact information was included in the draft meeting notes sent December 12, 2016.			FIISL INALION
				On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: At this time, no further archaeological work is being done on SR1. Work done to date is included in the Historic Resources Section of the revised EIA submission and will be available for review once submitted to and posted by the regulators.			

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22	August 31, 2017 Meeting between Alberta Transportation and Tsuut'ina	Historical Resources Information Sharing	Requested the Historical Resource Impact Assessment.	At the meeting held on August 31, 2017, Alberta Transportation responded that the HRIA is the responsibility of ACT, and Tsuut'ina Nation can make the request through ACT. At the meetings held on May 14-15, 2018, Alberta Transportation committed to contacting ACT to ask them to meet with Tsuut'ina Nation. Alberta Transportation emailed ACT on July 12, 2018, stating that Tsuut'ina Nation would like to meet with ACT. ACT replied July 13, 2018 that they will contact Tsuut'ina Nation.	At the meetings held on May 14-15, 2018, Tsuut'ina Nation indicated they were having difficulty getting in contact with ACT. Tsuut'ina Nation said they would follow up with ACT to request a meeting.	None at this time.	Ongoing: Working with First Nation
23	May 30, 2016 Letter from Chief Roy Whitney to Canadian Environmental Assessment Agency August 8, 2018 Meeting between Tsuut'ina Nation, Alberta Transportation, and Stantec	Wildlife	Project area is an environmentally sensitive area and includes key wildlife and biodiversity zone and environmentally significant areas. Long term viability of wildlife, species at risk, and biodiversity.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: The presence of the Key Wildlife and Biodiversity Zone (KWBZ) along the Elbow River is recognized and addressed in the EIA, as detailed below. The local and regional assessment areas selected for the assessment of effects on wildlife and wildlife habitat overlap areas identified as KWBZs (AEP 2016b), including the Elbow River to the south and the Bow River to the north. KWBZs represent areas along river valleys that are a combination of important winter ungulate (e.g., deer, elk) habitat and areas of high potential for biodiversity (ESRD 2015a; AEP 2016b). KWBZs are areas that protect productive, key ungulate winter ranges and river corridors, protect locally and regionally significant wildlife movement corridors and habitat types, and protect key hiding and thermal cover for wildlife (ESRD 2015a). Information available for the KWBZs was used in the EIA to establish the baseline conditions upon which the effects of the Project would be determined, see Volume 3A and 3B, section 11, and Volume 4, Appendix H. At the meeting held on October 11, 2018, the impacts to wildlife and wildlife habitat were discussed, along with proposed mitigation measures. On November 23, 2018, Alberta Transportation provided its report, <i>Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table</i> . In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA for wildlife, including mitigation measures for prior to, during, and following construction. Where possible, temporary workspaces will be in areas that avoid wildlife features and construction activities during the restricted activity periods for the KWBZ will be avoided or reduced. A remote camera program will be designed to determine the effectiveness of mitigation implemente	None at this time.	None at this time	Ongoing: Working with First Nation
24	May 30, 2016 Letter from Chief Roy	Wildlife habitat	Adverse impacts to the habitat of species of cultural	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the	None at this time.	None at this time.	Ongoing: Working with First Nation
	Whitney to Canadian			March 2018 EIA: One bald eagle nest was observed in the local	SD1 SDECIEIC CONCEDNS AND DESS		

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	Environmental Assessment Agency April 3, 2018 Draft Tsuut'ina Traditional Land Use Report for the Proposed Springbank Off- Stream Reservoir Project prepared by Trailmark Systems Inc. September 21, 2018 Meeting between Alberta Transportation, Stantec, and Tsuut'ina Nation		significance including bald eagles and grizzly bears. Concerns for how changes to the landscape, including wetlands, will affect deer, grizzly bears, wolves, lynx, bobcat, cougar, bald eagles, beavers, and other species. Concerned about potential impacts to cultural keystone species including beavers, bald eagles, and grizzly bears. Concerned with impacts to wildlife, and wildlife habitat. Animal species are necessary for offerings, prayers, and ceremony. Species Tsuut'ina Nation is concerned about include grizzly bear, black bear, elk, and various other species.	assessment area near the low-level outlet. A pre-construction survey of the area will be carried out and if the nest is active, the provincially regulated setback distance of 1000m will be observed during the nesting period. The majority (90.4%) of the local assessment area consists of low and very low to nil suitability spring feeding habitat for grizzly bear. Almost all (98.9%) of the local assessment consists of low and very low to nil suitability spring feeding habitat for grizzly bear. High suitability spring feeding habitat for grizzly bear occurs in small areas (<5% of the local assessment area) along the Elbow River, outside of the project development area. No high suitability summer feeding habitat was mapped within the local assessment area. Landowners have observed grizzly bear in the project development area. Radio collared grizzly have been observed in the local and regional assessment areas. Most observations show grizzly using areas west of the Project i.e., Bragg Creek, Jumping Pound and Sibbald Creek. Grizzly bears have large home ranges, so although the Project would reduce suitable spring and summer feeding habitat in the local assessment area, higher suitability grizzly bear habitat occurs west of the Project in the regional assessment area. The construction period will be relatively short, and portions of the construction area would be reclaimed, which would reduce residual effects on spring feeding habitat during dry operations. Most high and moderate suitability feeding habitat in the local assessment area exists along the Elbow River, with patches of moderate suitability habitat existing within the project development area. During a design flood grizzly habitat within the project development area would be temporarily unavailable. During post-flood operations, sediment left behind in the reservoir could reduce forage quality, and partial removal of sediment and sensory disturbance from other maintenance activities would result in displacement of grizzly bear from feeding habitat; howev			
25	May 30, 2016 Letter from Chief Roy Whitney to Canadian	Wildlife habitat	Construction of the Project may cause loss of wintering ungulate habitat and increase	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: The Key Wildlife and Biodiversity Zone along the	At the meeting held on October 11, 2018, Tsuut'ina Nation discussed where the elk are within the area, and noted that "ungulates do not care about fences."	None at this time.	Ongoing: Working with First Nation

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	Environmental Assessment Agency		habitat fragmentation in the project area.	Elbow River provides key ungulate habitat. Habitat modeling undertaken for the EIA determined that approximately 74.5% of the			
	May 18, 2017		Concerned about the impact	local assessment area consists of low and very low to nil suitability winter feeding habitat for elk, with the remainder represented by			
	Letter by Violet Meguinis, Acting Consultation Director Tsuut'ina to the		that the SR1 would have on the migratory herds of elk that pass through Tsuut'ina territory.	223.0 ha (4.6%) of high and 1,016.7 ha (20.9%) of moderate suitability habitat. High suitability winter feeding habitat occurs in discrete areas east and west of Highway 22 and along the Elbow River.			
	Honorable Brian Mason, Minister of Infrastructure and Transportation		Concerns over how disruptions to landscape may affect elk (calving grounds, migration routes, water crossings, and	Construction activities are predicted to result in both a permanent loss of habitat due to the infrastructure footprint and a temporary loss of ungulate habitat due to construction activities and sensory disturbance.			
	July 19, 2017 Letter from Chief Lee		critical habitat). Tsuut'ina members regularly hunt these	A total of approximately 117 ha of high and 377 ha of moderate winter elk feeding habitat would be affected by the Project.			
	Crowchild to Alberta Environment and Parks		elk for food and ceremony purposes.	At the meeting held on October 11, 2018, the impacts to wildlife and wildlife habitat were discussed, along with proposed mitigation			
	April 3, 2018		Provide regional data and traditional use data as a context	measures. Internal fencing currently within the Project area will be removed. Wildlife friendly fencing will be used around the boundaries of			
	Draft Tsuut'ina Traditional Land Use Report for the Proposed Springbank Off- Stream Reservoir Project prepared by Trailmark Systems Inc.		for the baseline study results for elk. Potential for project to influence elk movement patterns.	the Project. Under cover dated November 23, 2018, Alberta Transportation provided their report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table. In the mitigation table, Alberta Transportation provided the mitigation			
	July 12, 2018		Justify the 250 metre and 500 metre road buffers for elk.	measures proposed in the EIA for wildlife, including how ungulate and other wildlife movement will be facilitated. Where possible, temporary			
	Springbank Offstream Reservoir Project EIS Technical Review and Information Requests by PGL Environmental Consultants, dated June 15, 2018.		More detail needed regarding population trends and threats to elk. Concerns about the wildlife corridor.	workspaces will be in areas that avoid wildlife features and construction activities during the restricted activity periods will be avoided or reduced. A remote camera program will be designed to determine the effectiveness of mitigation implemented throughout the diversion channel. Alberta Transportation also met with Tsuut'ina Nation December 6, 2018 to discuss the response and mitigation table.			
26	May 30, 2016 Letter from Chief Roy Whitney to Canadian Environmental Assessment Agency	Wildlife habitat	Habitat damage including sensitive fescue grassland and wetland ecosystems which could result from contaminated sediments from flood waters.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: Residual effects on vegetation and wetlands after a flood would not result in the loss of sensitive native upland and wetland plant communities, or wetland functions from the local assessment area, because no vegetation and wetland land units are completely lost, and no lasting effects to vegetation and wetlands would be anticipated as a result of a 1:10 year, 1:100 year or design flood. Effects on one rare plant - slender cress (Rorippa tenerrima) as well as the potential for effects on unidentified plant species of management concern (SOMC) could occur. It is likely that habitat for plant SOMC	None at this time.	None at this time.	Ongoing: Working with First Nation
				exists elsewhere in the RAA as affected vegetation and wetland land units exist elsewhere in the RAA (see Volume 3A, Section 10.4). Effects on plant communities of management concern are not anticipated, because none were identified within the RAA.			

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				At the meeting held on October 11, 2018, the impacts to wildlife and wildlife habitat, and wetlands were discussed, along with proposed mitigation measures.			
				On November 23, 2018, Alberta Transportation provided its report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table. In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA for water quality, for both surface and groundwater, and how potential contaminant-related effects will be mitigated. Alberta Transportation also met with Tsuut'ina Nation December 6, 2018 to discuss the response and mitigation table.			
27	April 3, 2018 Draft Tsuut'ina Traditional Land Use Report for the Proposed Springbank Off- Stream Reservoir Project prepared by Trailmark Systems Inc.	Wildlife	Concern that the un-named tributary the Project proposes to use to drain the dam is in a low-lying and sheltered valley that is currently used by animals.	On November 23, 2018, Alberta Transportation provided its report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table. In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA for wildlife. Alberta Transportation also met with Tsuut'ina Nation December 6, 2018 to discuss the response and mitigation table.	None at this time.	None at this time.	Ongoing: Working with First Nation
28	July 12, 2018 Springbank Offstream Reservoir Project EIS Technical Review and Information Requests by PGL Environmental Consultants, dated June 15, 2018.	Wildlife	Provide details on monitoring program to monitor project effects on wildlife. Location of remote cameras not provided.	At the meeting held on October 11, 2018, the impacts to wildlife and wildlife habitat were discussed, along with proposed mitigation measures. Alberta Transportation also indicated they were looking for feedback on the mitigation measures including where remote cameras should be located.	None at this time.	None at this time.	Ongoing: Working with First Nation
29	July 12, 2018 Springbank Offstream Reservoir Project EIS Technical Review and Information Requests by PGL Environmental Consultants, dated June 15, 2018.	Wildlife	Justify why a 15 kilometre buffer of the project area was chosen for the RAA for wildlife. Clarify why average home range for female grizzly bear was chosen as the RAA for vegetation and wetlands.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
30	July 12, 2018 Springbank Offstream Reservoir Project EIS Technical Review and Information Requests by PGL Environmental Consultants, dated June 15, 2018.	Wildlife	Explain why elevation and aspect was not included in the grizzly bear habitat suitability model. Explain why a 500 metre buffer of industrial developments was used in the grizzly bear habitat suitability model.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
31	July 12, 2018 Springbank Offstream Reservoir Project EIS Technical Review and	Wildlife habitat	Recommend a habitat compensation plan be developed.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation

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	Information Requests by PGL Environmental Consultants, dated June 15, 2018.						
32	Springbank Offstream Reservoir Project EIS Technical Review and Information Requests by PGL Environmental Consultants, dated June 15, 2018.	Wildlife Wildlife habitat	Definition of significance should include wildlife habitat and biodiversity. Concern that the conclusion of significance is discussed at a high level for wildlife and is not done for each species.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
33	Springbank Offstream Reservoir Project EIS Technical Review and Information Requests by PGL Environmental Consultants, dated June 15, 2018.	Wildlife	Summary of the wildlife and biodiversity cumulative effects needed.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
34	Letter by Violet Meguinis, Acting Consultation Director Tsuut'ina to the Honorable Brian Mason, Minister of Infrastructure and Transportation July 19, 2017 Letter from Chief Lee Crowchild to Alberta Environment and Parks September 21, 2018 Meeting between Alberta Transportation, Stantec, and Tsuut'ina Nation	Fish Habitat Wildlife Habitat	Concerned about the destruction of critical fish and wildlife habitat. Concerned about the impacts to fish habitat.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: The Project will result in direct and indirect loss of wildlife habitat during construction and dry operations; however, the amount of wildlife habitat permanently affected (168 ha) is relatively small compared to the availability of wildlife habitat remaining in the LAA (4,860 ha). Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the regional assessment area is unlikely. The Project would result in temporarily unavailable wildlife habitat during flood operations and post-flood operations, with some potential permanent loss of wetlands due to sedimentation, which will result in its conversion into upland communities. Vegetation lost during floods would eventually be replaced by self-propagation of native vegetation in the surrounding area, or reestablished through hydroseeding. The amount of wildlife habitat affected is relatively small compared to the availability of wildlife habitat remaining in the regional assessment area (102,817 ha). The Project would result in direct and indirect alteration of fish habitat during construction and dry operations; however, the amount of fish habitat permanently affected (1,854 m²) is relatively small compared to the availability of fish habitat remaining in the local assessment area (3,100,000 m²). At the meeting held on October 11, 2018, the impacts to fish and fish habitat, along with the proposed mitigation measures, were discussed.	At the meetings held on May 14-15, 2018, Tsuut'ina Nation expressed concerns regarding the suitability of new habitat when it is established to compensate for the loss of habitat.	None at this time.	Ongoing: Working with First Nation

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				Canada. The impacts to wildlife and wildlife habitat were also discussed, along with proposed mitigation measures.			
				On November 23, 2018, Alberta Transportation provided its report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table. In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA for fish and wildlife, including mitigation measures for prior to, during, and following construction. Alberta Transportation also met with Tsuut'ina Nation December 6, 2018 to discuss the response and mitigation table.			
35	May 30, 2016 Letter from Chief Roy Whitney to Canadian Environmental Assessment Agency	Fish habitat	Impacts to spawning beds, used by various trout species. Concerns related to significant changes to these waterbodies and local ecosystem and the	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: The EIA addressed potential impacts to spawning beds by considering the potential impact to fish habitat.	At the meetings held on May 14-15, 2018, Tsuut'ina Nation expressed concerns regarding the suitability of new habitat when it is established to compensate for the loss of habitat.	None at this time.	Ongoing: Working with First Nation
	Assessment Agency	permanent destruction of fish habitat.	The Project will result in the permanent loss of 1,854 m² fish habitat at the diversion structure. This area has been identified as suitable foraging habitat for trout including, mountain whitefish, brown trout and rainbow trout. The area that will be lost is small compared to the habitat available within the local assessment area, which is approximately 3,100,000 m².				
				At the meeting held on October 11, 2018, the impacts to fish and fish habitat, along with the proposed mitigation measures, were discussed. There will be habitat compensation, regulated by Fisheries and Oceans Canada.			
				On November 23, 2018, Alberta Transportation provided its report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table. In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA for fish and fishing, including mitigation measures prior to, during, and following construction. Alberta Transportation also met with Tsuut'ina Nation December 6, 2018 to discuss the response and mitigation table.			
36	May 30, 2016 Letter from Chief Roy Whitney to Canadian Environmental Assessment Agency	Fish Habitat	Impacts to overwintering habitat to fish that includes scoured pools in the Elbow River.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: Hydrological modeling, undertaken for the EIA, indicates that during dry operations, there would be no changes to flows in the Elbow River and no changes to the pattern of erosion and deposition in bars or pools. Given this there would be no changes expected to the maintenance of spawning or overwintering habitat in the Elbow River for salmonid species. Hydrological modelling also indicates that there would be no significant changes in sediment transport (Volume 3A, Section 6.5.3 of the EIA), and therefore that there would be no alterations to the quality of fish habitat, including for fish that support Aboriginal fisheries. At the meeting held on October 11, 2018, the impacts to fish and fish habitat, along with the proposed mitigation measures, were discussed.	None at this time.	None at this time.	Ongoing: Working with First Nation

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				On November 23, 2018, Alberta Transportation provided its report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table. In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA for fish and fishing, including mitigation measures prior to, during, and following construction. Alberta Transportation also met with Tsuut'ina Nation December 6, 2018 to discuss the response and mitigation table.			
37	May 30, 2016 Letter from Chief Roy Whitney to Canadian Environmental Assessment Agency	Fish	Concerns fish may not be able to pass through diversion channel during operation.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: During Project design it was recognized that the diversion structure could result in an increase in flow rates of the Elbow River at the structure and potentially affect the ability of fish to pass upstream. In order to avoid affecting fish passage design elements were incorporated to ensure that under normal river conditions flow rates are maintained within the range suitable for fish passage. At the meeting held on October 11, 2018, the impacts to fish and fish	None at this time.	None at this time.	Ongoing: Working with First Nation
				habitat, along with the proposed mitigation measures, were discussed. During flood scenarios, fish will be able to pass through the diversion channel. Post-flood monitoring for stranded fish and fish rescue will occur if needed.			
				On November 23, 2018, Alberta Transportation provided its report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table. In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA for fish and fishing, including mitigation measures for prior to, during, and following construction. Drainage areas within the reservoir will be graded to reduce stranding of fish. A monitoring program will be undertaken to identify if fish passage is impeded. Alberta Transportation also met with Tsuut'ina Nation December 6, 2018 to discuss the response and mitigation table.			
38	May 30, 2016 Letter from Chief Roy Whitney to Canadian Environmental Assessment Agency August 8, 2018 Meeting between Tsuut'ina Nation, Alberta Transportation, and Stantec	Fish	Fish could be carried into the Diversion Structure and into the Reservoir and become stranded when water released. Fish and fish habitat: mitigation for salvaging; if there is fish rescue will the Nation be included; alteration and destruction of fish habitat; Treaty right to fish must be protected.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: During a flood event it is anticipated that fish will pass into the diversion structure and into the reservoir. After a flood, the water flows in the diversion channel will be gradually reduced and the reservoir slowly drained to facilitate the movement of fish from the reservoir, back to the Elbow River with the receding water. The outlet will be designed and operated in a manner that allows fish egress out of the reservoir, downstream into the outlet channel. Drainage areas within the reservoir will be graded to reduce stranding of fish during release of stored flood water from the reservoir. During draining of the reservoir, monitoring will be undertaken to identify isolated pools and the potential that fish may become stranded. If potential fish stranding is identified, a fish rescue program will be undertaken to return the fish to the river. At the meeting held on October 11, 2018, the impacts to fish and fish	At the meetings held on May 14-15, 2018, Tsuut'ina Nation requested training and communication plans in the event of fish stranding.	None at this time.	Ongoing: Working with First Nation
				habitat, along with the proposed mitigation measures, were discussed.			

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				During flood scenarios, fish will be able to pass through the diversion channel. Post-flood monitoring for stranded fish and fish rescue will occur if needed.			
				On November 23, 2018, Alberta Transportation provided its report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table. In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA for fish and fishing, including mitigation measures for prior to, during, and following construction. Drainage areas within the reservoir will be graded to reduce stranding of fish. A monitoring program will be undertaken to identify if fish passage is impeded. Mitigation also includes development of a land use plan. Alberta Transportation also met with Tsuut'ina Nation December 6, 2018 to discuss the response and mitigation table.			
39	May 30, 2016 Letter from Chief Roy Whitney to Canadian Environmental Assessment Agency	Fish	Disruption to fish migration in Elbow River during construction of the Diversion Structure.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: In compliance with Regulatory requirements (Fisheries Act and the Water Act) and to allow construction of the Diversion structure in the dry, the current river channel flow will be routed around the construction work by excavating a bypass channel and temporarily diverting the river flow through this channel. This will provide unimpeded fish passage both upstream and downstream of the construction work.	None at this time.	None at this time.	Ongoing: Working with First Nation
				At the meeting held on October 11, 2018, the impacts to fish and fish habitat, along with the proposed mitigation measures, were discussed. A channel will be put in to ensure fish passage during construction. During construction, the extent and duration of instream work will be minimized.			
				On November 23, 2018, Alberta Transportation provided its report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table. In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA for fish and fishing, including mitigation measures prior to, during, and following construction. Restricted Activity Periods will be adhered to during construction and the Elbow River will be temporarily diverted during instream construction to allow for fish passage. A monitoring program will be undertaken to identify if fish passage is impeded. Alberta Transportation also met with Tsuut'ina Nation December 6, 2018 to discuss the response and mitigation table.			
40	May 30, 2016 Letter from Chief Roy Whitney to Canadian Environmental Assessment Agency	Fish	Impact to fish migration while reservoir is holding water.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: During the diversion of flood water from Elbow River to the off-stream reservoir, it is assumed that fish, at any of their lifestages present, may encounter the diversion structure. During floods, flows of approximately 160 m³/s, which are close to the 1:10 year flood would continue in Elbow River downstream of the	None at this time.	None at this time.	Ongoing: Working with First Nation

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				diversion structure. These flows are considered channel forming and would shift bed materials which would maintain overwintering and spawning habitat and shallow side-channel and nearshore rearing habitats. Brown trout, brook trout, and mountain whitefish spawn in the fall, and therefore should not be undergoing migration movements during the potential operational period of the diversion structure (May-June of a flood year), although immature individuals may encounter the diversion when young disperse to rearing habitats.			
				Given the low probability of the design flood and the 1:100 year flood, the reduction in magnitude of erosion and deposition is unlikely to occur at a frequency to negatively affect overwintering habitat, such as the scouring of pools and deeper runs for trout species, nor negatively affect spawning habitat in the in Elbow River. Because flows in Elbow River would be less during active water diversion (compared to flows without the Project), fish migration in Elbow River at the diversion structure should not be impeded any more than during the dry operation condition, which has been modelled to show that upstream fish passage is possible.			
				During natural flooding, fish species may seek side channels and lower velocity flooded riparian areas, then return to the main river channel as flood water recedes. It is unlikely that fish are migrating upstream during the high flow situations when the diversion would be operational.			
				The Elbow River would return to normal flow patterns over the summer period, and with gradually reducing water levels in the reservoir and grading that avoids the formation of pooled areas, fish should be able to move out of the reservoir with receding water.			
				At the meetings held on May 14-15, 2018, a discussion was held regarding boulder berms that would be placed near the diversion structure to aid fish movement.			
				At the meeting held on October 11, 2018, the impacts to fish and fish habitat, along with the proposed mitigation measures, were discussed. During flood scenarios, fish will be able to pass through the diversion channel. Post-flood monitoring for stranded fish and fish rescue will occur if needed. There will be instream components (e.g., boulder clusters) to slow the water and allow fish to move upstream.			
				On November 23, 2018, Alberta Transportation provided its report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table. In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA for fish and fishing, including mitigation measures for prior to, during, and following construction. Drainage areas within the reservoir will be graded to reduce stranding of fish. A monitoring program will be undertaken to identify if fish passage is impeded. Alberta Transportation also met with Tsuut'ina Nation December 6, 2018 to discuss the response and mitigation table.			
41	May 30, 2016	Fish Habitat	Diversion of Highway 22 and bridge construction could lead	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the	None at this time.	None at this time.	Ongoing: Working with First Nation

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	Letter from Chief Roy Whitney to Canadian Environmental Assessment Agency		to impacts to fish and fish habitat.	March 2018 EIA: The optimal design option for Highway 22 does not involve diversion of the Highway. The Highway will be raised to above the design flood level, and culverts inserted to prevent the highway from flooding. A new bridge will be required where Highway 22 crosses the diversion channel. The effects of the highway modifications and bridge have been considered within the EIA. With the implementation of mitigation measures no impacts to fish and fish habitat are predicted.			
				At the meeting held on October 11, 2018, the impacts to fish and fish habitat, along with the proposed mitigation measures, were discussed.			
				On November 23, 2018, Alberta Transportation provided its report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table. In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA for fish and fishing, including mitigation measures for prior to, during, and following construction. Restricted Activity Periods will be adhered to during construction and the Elbow River will be temporarily diverted during instream construction to allow for fish passage. Alberta Transportation also met with Tsuut'ina Nation December 6, 2018 to discuss the response and mitigation table.			
42	May 30, 2016	Fish	Temperature changes to the Elbow River from water being	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1</i>	None at this time.	None at this time.	Ongoing: Working with First Nation
	Letter from Chief Roy Whitney to Canadian Environmental Assessment Agency		released from the reservoir could be harmful to fish.	Project Specific Concerns and Responses - Tsuut'ina Nation from the March 2018 EIA: There is a potential that the temperature of the flood water held within the reservoir may increase during the time the water is retained within the reservoir. The amount of temperature change would depend upon a number of factors including water volume, air temperature, wind regime and residency time. As the water from the reservoir is then released, it would mix with Elbow River water and potentially increase water temperature in the river. If a change in temperature did occur, it would be expected to be temporary and localized due to the rapid mixing with the Elbow River water. Effects to fish as a result of any localized and temporary changes in water temperature are not predicted.			
				At the meeting held on October 11, 2018, the impacts to fish and fish habitat, along with the proposed mitigation measures, were discussed.			
43	May 14, 2018 Springbank Off-Stream Reservoir Project EIS – Selected Section: Second Sufficiency Review by PGL Environmental Group, dated April 16, 2018. Provided via email on May 14, 2018.	Fish habitat	Baseline distribution for available fish habitat has not been provided.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
44	December 6, 2018 Meeting between Tsuut'ina Nation, Alberta	Fish	Concerned about the spread of whirling disease.	At the meeting held on December 6, 2018, Alberta Transportation responded that there is an Alberta Environment and Parks policy in	None at this time.	None at this time.	Ongoing: Working with First Nation

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	Transportation, and Stantec.			effect to prevent basin to basin transfer of whirling disease. Alberta Transportation will comply with this policy for the SR1 project.			
45	May 30, 2016 Letter from Chief Roy Whitney to Canadian Environmental Assessment Agency	Birds Bird Habitat	Debris left after floods may result in loss of bird habitat, or contamination of habitat.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: During a design flood, sediment modeling predicts that 3.7% (192.6 ha in the reservoir) of the local assessment area would be covered by sediment that is less than 3 cm deep, and 0.8% (37.4 ha) would be covered by sediment between 3 cm and 10 cm. Details of the sediment modeling is provided in the EIA. The quality of vegetation and wetlands post- flood would differ from baseline conditions, however, changes to overall wildlife habitat abundance and suitability would be minor under these conditions. Sediment less than 3 cm thick would have little to no effect on vegetation and wetlands, whereas sediment 3-10 cm deep could result in small shifts in plant species composition within upland ecosites, but complete changes to upland communities would not be expected. For wetlands, sediment 3-10 cm deep would likely alter plant composition and abundance resulting in wetlands changing to upland sites, however as noted above this level of sediment deposition would occur in less than 1% of the local assessment area.	None at this time.	None at this time.	Ongoing: Working with First Nation
46	July 12, 2018 Springbank Offstream Reservoir Project EIS Technical Review and Information Requests by PGL Environmental Consultants, dated June 15, 2018.	Birds	Explain using a seven day window for conducting a nest survey.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
47	May 30, 2016 Letter from Chief Roy Whitney to Canadian Environmental Assessment Agency September 21, 2018 Meeting between Alberta Transportation, Stantec, and Tsuut'ina Nation	Birds Wetlands	Use of the Storage Dam would cause loss of migratory bird nests and temporarily reduce wetland habitat for breeding, nesting while flood water is stored in Reservoir. Concerned with possible impacts to bird nests along the river.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: The design flood, (i.e. 1 in 200 year) is predicted to cover 816 ha in the reservoir. Flood operations during the design flood would temporarily impact 14.8% (234.2 ha) of breeding and foraging habitat in native upland vegetation, and 23.7% (70.3 ha) of wetland habitat in the LAA. Although these habitats would be temporarily unavailable to wildlife, the regional assessment area provides grassland, shrubland, tame pasture, and wetland habitat in other locations. Overall, the design flood would cover less than 3% of available native grassland (27,916 ha) and tame pasture (9,716 ha), and less than 1% of available wetland habitat (973 ha) in the regional assessment area. At the meeting held on September 21, 2018, Alberta Transportation indicated they will complete pre-construction nest sweeps and buffer bird nests based on recommendations from AEP. At the meeting held on October 11, 2018, the impacts to wetlands and proposed mitigation measures were discussed.	None at this time.	None at this time.	Ongoing: Working with First Nation

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48	May 30, 2016 Letter from Chief Roy Whitney to Canadian Environmental Assessment Agency	Wetlands	Construction of the Diversion Channel and Reservoir in wetland areas could cause loss of those wetlands. Noted Alberta Wetlands Policy indicating the preferred response for mitigation is to avoid all impacts on wetlands.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: Wetlands are widely dispersed in the local assessment area, but most occur along drainages and adjacent to the Elbow River. A large wetland occurs just north of Highway 1, a temporary marsh; however, most graminoid marshes are small scattered ponds with an average size of 0.68 ha, occurring mainly in agriculture land. Approximately 312 ha of the local assessment area contains wetland cover types. Wetland ecological function (i.e., wildlife habitat and plant diversity) would be altered due to vegetation clearing for permanent structures. Dry operations would result in the loss of 8 ha of estimated high value wetland area and 13 ha of moderate wetland area in the local assessment area. No vegetation and wetland land units are completely lost, and therefore no significant effects on vegetation and wetlands are predicted. At the meeting held on October 11, 2018, the impacts to wetlands and proposed mitigation measures were discussed. Wetlands will be compensation as per the Alberta Wetlands Policy. On November 23, 2018, Alberta Transportation provided its report, <i>Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table</i> . In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA for wetlands, including avoiding natural vegetation such as wetlands where possible, and reclaiming temporary work spaces with native species. Alberta Transportation also met with Tsuut'ina Nation December 6, 2018 to discuss the response and mitigation table.	At the meetings held on May 14-15, 2018, Tsuut'ina Nation requested that wetlands be considered within the hydrology assessment.	None at this time.	Ongoing: Working with First Nation
49	May 30, 2016 Letter from Chief Roy Whitney to Canadian Environmental Assessment Agency	Wetlands	Wetlands and sensitive ecosystems including grasslands, could be adversely affected. Changes to wetlands from construction or operations of the Project may affect how the wetlands function.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: During a flood event it is predicted that wetlands within the project development area will be temporarily inundated with flood water. A design flood i.e., maximum flood, is predicted to temporarily affect: 3.7ha of high value wetland habitat, 7.1 ha of moderate value habitat and 1.2 ha of low value habitat. The wetland functions of habitat, plant and wildlife, and hydrology would likely be reduced in these areas as plant composition may be changed and cover reduced, at least for a growing season, and lower-class marsh and swamp wetlands would be flooded for a duration and depth beyond natural variation, i.e., a few days to a few weeks. Residual Project effects to community diversity, traditional plant use and wetland functions are not anticipated because plant communities are expected to recover once the reservoir has been drained. Residual effects on vegetation and wetlands after a flood would not result in the loss of native upland and wetland plant communities, or wetland functions from the local assessment area. At the meeting held on October 11, 2018, the impacts to wetlands and proposed mitigation measures were discussed.	At the meetings held on May 14-15, 2018, Tsuut'ina Nation requested that wetlands be considered within the hydrology assessment.	None at this time.	Ongoing: Working with First Nation

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				On November 23, 2018, Alberta Transportation provided its report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table. In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA for wetlands, including avoiding natural vegetation such as wetlands where possible, and reclaiming temporary work spaces with native species. Alberta Transportation also met with Tsuut'ina Nation December 6, 2018 to discuss the response and mitigation table.			
50	May 14, 2018 Springbank Off-Stream	Wetlands	Wetlands of concern to Tsuut'ina Nation have not been	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
	Reservoir Project EIS – Selected Section: Second Sufficiency Review by PGL Environmental Group, dated April 16, 2018. Provided via email on May 14, 2018.		identified.				
51	July 12, 2018 Springbank Offstream Reservoir Project EIS Technical Review and	Wetlands	How is direct/indirect loss or alteration of surface or groundwater flow patterns being measured with respect to wetland function?	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
	Information Requests by PGL Environmental Consultants, dated June 15, 2018.						
52	July 12, 2018 Springbank Offstream Reservoir Project EIS Technical Review and Information Requests by PGL Environmental	Vegetation Wetlands	Confirm if a monitoring plan for post-construction and post-flood conditions will be developed to monitor reclaimed areas (vegetation and wetlands).	On November 23, 2018, Alberta Transportation provided its report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table. Alberta Transportation will participate in discussions regarding possible monitoring opportunities. Temporary work spaces will be reclaimed incorporating input on native species to be used for reclamation from Tsuut'ina Nation and other	None at this time.	None at this time.	Ongoing: Working with First Nation
	Consultants, dated June 15, 2018.			Indigenous groups. Alberta Transportation also met with Tsuut'ina Nation December 6, 2018 to discuss the response and mitigation table.			
53	July 12, 2018 Springbank Offstream Reservoir Project EIS Technical Review and Information Requests by	Vegetation	Planting native shrub and tree species should be considered to mitigate the change in species diversity and loss of native vegetation communities.	At the meeting held on October 11, 2018, the mitigation measure of using native seed mixes for reclamation was discussed.	None at this time.	None at this time.	Ongoing: Working with First Nation
	PGL Environmental Consultants, dated June 15, 2018.		Mitigation should include developing management plan to prevent spread of regulated weeds.				
			Provide an invasive species management plan.				
54	July 12, 2018	Vegetation	Clarify the claim that native communities may be altered but	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation

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	Springbank Offstream Reservoir Project EIS Technical Review and Information Requests by PGL Environmental Consultants, dated June 15, 2018.		areas would not be lost as a result of filling and draining the reservoir.				
55	July 12, 2018 Springbank Offstream Reservoir Project EIS Technical Review and Information Requests by PGL Environmental Consultants, dated June 15, 2018.	Vegetation Traditional use	Long term loss of traditional use plants in flooded areas not considered. Justify assessment of potential loss of rare plants.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
56	April 21, 2016 Meeting with Tsuut'ina Nation, Alberta Transportation, and DEMA Land Services April 3, 2018 Draft Tsuut'ina Traditional Land Use Report for the Proposed Springbank Off- Stream Reservoir Project prepared by Trailmark Systems Inc.	Plants Medicinal and ceremonial plants	abundance/availability, etc.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction. Vegetation will be cleared from the project development area during construction. However, effects of the Project are not anticipated to result in the loss of traditionally used species in the local assessment area. The effects on plants and traditional use are assessed in the EIA in Volume 3A and 3B, sections 10 and 14. At the meetings held on September 21, 2018 and October 11, 2018, Alberta Transportation discussed future land use planning and asked Tsuut'ina Nation to think about how they would like to see the lands used. At the meeting held on October 11, 2018, the mitigation measure of allowing opportunities for Indigenous groups to harvest traditional plants prior to construction was discussed. On November 23, 2018, Alberta Transportation provided its report, <i>Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table</i> . In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA for vegetation and plant harvesting, including providing access to harvest plants prior to construction, maintaining access to current use sites during construction and operations, and avoiding native vegetation, where possible. Alberta Transportation also met with Tsuut'ina Nation December 6, 2018 to discuss the response and mitigation table.	None at this time.	None at this time.	Ongoing: Working with First Nation
57	May 30, 2016 Letter from Chief Roy Whitney to Canadian	Plants Traditional use	Impact to plant harvesting, including medicinal plants that grow on sensitive riparian areas	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: Some plant species would be removed from the	None at this time.	None at this time.	Ongoing: Working with First Nation

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	Environmental Assessment Agency		of the Elbow River, its tributaries and wetlands.	project development area during clearing activities. There is potential for a reduction in riparian and wetland areas as well as altered wetland conditions due to clearing. However, the effects of the Project are not anticipated to result in a loss of species or a loss in wetland function overall within the local assessment area. Although individual plants would be removed from the project development area, none of the traditionally used species identified, during the aboriginal engagement program and through publicly available traditional ecological knowledge reports, would be lost in the local assessment area, nor would vegetation communities supporting traditionally used plants be lost from the project development area. In the event of a flood, there would be mortality of traditional plant use species found in upland plant communities within the flooded area of the reservoir. Because these species are common and widespread, and based on visual observance of plant recovery lost as a result of previous flood events, re-establishment of these species will occur by natural recruitment over time. Therefore, permanent loss of traditional plant use species is not anticipated. At the meeting held on October 11, 2018, the mitigation measure of allowing opportunities for Indigenous groups to harvest traditional plants prior to construction was discussed. On November 23, 2018, Alberta Transportation provided its report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table. In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA for vegetation and plant harvesting, including providing access to current use sites during construction and operations, and avoiding native vegetation, where possible. Alberta Transportation also met with Tsuut'ina Nation December 6, 2018 to discuss the response and			
58	May 14-15, 2018 Meeting between Tsuut'ina Nation, Alberta Transportation, and Stantec to discuss Tsuut'ina Nation's specific concerns and Alberta Transportation's responses and proposed mitigation.	Soil Odour	Tsuut'ina Nation expressed concerns that following a flood there will be a smell in the dry reservoir and the soil will be dried and crack.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
59	April 3, 2018 Draft Tsuut'ina Traditional Land Use Report for the Proposed Springbank Off- Stream Reservoir Project	Disturbance	Concern that the few unaltered forested areas within the project area provide important habitat and shelter for wildlife. Extremely important that undisturbed areas remain untouched for future	On November 23, 2018, Alberta Transportation provided its report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table. In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA for vegetation, including avoiding native vegetation, where possible. Temporary work spaces will be reclaimed incorporating input on native species to be used for reclamation from Tsuut'ina Nation and other	None at this time.	None at this time.	Ongoing: Working with First Nation

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	prepared by Trailmark Systems Inc.		generations and to ensure Tsuut'ina culture is not erased.	Indigenous groups. Alberta Transportation also met with Tsuut'ina Nation December 6, 2018 to discuss the response and mitigation table.			
			RECOMMENDATION: Do not disturb few remaining forested areas.				
60	May 30, 2016	Groundwater	Concerns that the SR1 Project	At the meeting held on November 1, 2017, Stantec's river engineer	At the meetings held on May 14-15, 2018,	None at this time.	Ongoing: Working with
	Letter from Chief Roy	Spring water	may impact groundwater in the Elbow River Alluvial Aquifer.	discussed the concern with Tsuut'ina Nation. The height of the diversion structure and floodplain berm, and the gradient of the Elbow	Tsuut'ina Nation questioned the boundaries of the study area for the hydrogeologic model in the		First Nation
	Whitney to Canadian Environmental Assessment Agency	Hydrology	Concerns water stored in the Reservoir may cause an	River in that area combine to ensure that flood water could not back up onto the Tsuut'ina reserve as a result of operating the diversion.	EIA, and recommended the boundaries of the study area be enlarged to include the Tsuut'ina		
	May 18, 2017 Letter by Violet Mequinis,		increase in aquifer pressures, altering local groundwater flow regime.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the	reserve. Especially noted concerns regarding the assessment not including water wells on the reserve.		
	Acting Consultation Director Tsuut'ina to the Honorable Brian Mason, Minister of Infrastructure		Concerns related to SR1 on Tsuut'ina's ground and surface water.	March 2018 EIA: The EIA considered the effects of the Project on both surface water (Volume 3A and 3B, section 6) and groundwater, including the Alluvial Aquifer (Volumes 3A and 3B, section 5, Appendix I).	At the meetings held on May 14-15, 2018, Tsuut'ina Nation recommended that a Water Needs Assessment be conducted to understand the potential effects from the Project; Tsuut'ina		
	and Transportation July 19, 2017		Concerned about groundwater effects to Tsuut'ina land.	The assessment used a complex numerical groundwater model	Nation noted that this should be conducted with the standards of a Parkland Management Zone,		
			Concerned about impacts to	(FEFLOW) to evaluate potential changes to the hydrogeologic system, including aquifer pressure, caused by floods and construction and	not industry standards.		
	Letter from Chief Lee Crowchild to Alberta Environment and Parks November 1, 2017		spring and groundwater, including contamination and barriers to access at traditional gathering sites.	operation of the Project. The results of a series of the modeling scenarios showed that the groundwater levels and flow patterns are altered within the vicinity of the proposed Project. Changes are observed within the reservoir area during flooding and recede toward	Tsuut'ina Nation requested that more information on the hydrogeological sensitivity analyses that were conducted be shared.		
	Technical overview for the EIA with Tsuut'ina Nation, Alberta		Concern for the spring water within the Project Area.	pre-flood conditions following floods. Changes in the groundwater flow regime are also observed along the proposed diversion channel. The model results were used as the basis for the EIA. The assessment	Tsuut'ina Nation recommended a revenue package in the event that water is affected. Tsuut'ina Nation stated that once a baseline		
	Transportation, and Stantec.		Concern that Project will further reduce and otherwise impact water flow on reserve lands.	concluded that effects to groundwater quantity and quality would not be significant.	assessment that understands the potential effects on Tsuut'ina Nation has been completed, only then can there be discussions regarding		
	April 3, 2018 Draft Tsuut'ina Traditional		Concerns regarding the	The residual effects on groundwater quantity from the Project are assessed as not significant because they would not decrease the yield	monitoring, further mitigation, etc.		
	Land Use Report for the Proposed Springbank Off- Stream Reservoir Project prepared by Trailmark		hydrogeology model. The rationale behind spatial scoping decisions was insufficient.	of groundwater supply wells to the point where they can no longer be used. The residual effects on groundwater quality from the Project are assessed as not significant because changes in groundwater quality at existing wells would not deteriorate to the point where it becomes non-potable or cannot meet the Guidelines for Canadian Drinking	Tsuut'ina Nation recommended that a rescoping of the hydrogeology regional assessment area be completed to include the Tsuut'ina Nation reserve.		
	Systems Inc.		Hydrogeologic model does not include Tsuut'ina lands.	Water Quality for a consecutive period exceeding 30 days (for those parameters which don't already, under existing conditions, exceed	At the meeting held on October 11, 2018, Tsuut'ina Nation requested further work to drill		
	October 11, 2018 Meeting between Alberta Transportation, Stantec,		Impacts to groundwater resources have not been	those guidelines). Effects to groundwater would be limited to the local assessment area.	new wells on Tsuut'ina land believing it will result in the hydrogeologic model more accurately showing conditions on Tsuut'ina land.		
	and Tsuut'ina Nation		assessed on Tsuut'ina lands. Groundwater model needs to	At the meetings held On May 14-15, 2018, Alberta Transportation committed to revising the hydrogeological model to include the	At the meeting held on February 21, 2019, Tsuut'ina Nation remained concerned with the		
	May 14, 2018 Springbank Off-Stream	be improved to predict potential	Tsuut'ina Nation reserve. In a letter dated July 20, 2018, Alberta Transportation advised Tsuut'ina	use of the data from the wells on reserve in the numeric modelling. They feel the data lacks the			
	Reservoir Project EIS – Selected Section: Second Sufficiency Review by PGL Environmental		Groundwater model fails to predict potential effects on Tsuut'ina IR 145 and	Nation that, based on the comments by PGL Environmental, they are revisiting the hydrogeological modelling. The southern boundary is	accuracy to be used for the hydrogeological model. Tsuut'ina Nation would like new wells to be drilled on reserve so the hydrogeologic model		

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Group, dated April 16, 2018. Provided via email on May 14, 2018. July 12, 2018 Springbank Offstream Reservoir Project EIS Technical Review and Information Requests by PGL Environmental Consultants, dated June 15, 2018. February 21, 2019 Meeting between Tsuut'ina Nation and Alberta Transportation February 28, 2019 Letter from Tanis Onespot to Alberta Transportation April 2, 2019 Letter from Chief Lee Crowchild to Catherine McKenna, Minister of Environment and Climate Change.	contradicts current understanding of the Elbow River watershed. The perimeter boundary conditions are not well described. The southern boundary should be expanded to include Tsuut'ina IR 145 and numerical groundwater model reconstructed. Install monitoring wells on Tsuut'ina IR 145 to calibrate numerical groundwater model. Conduct water well survey of Tsuut'ina private water wells and monitor prior to and during construction and dry operations, to assess well interference. Run numerical groundwater model simulations that predicts potential effects from construction dewatering. Uncertainty analyses should be completed in the revised numerical groundwater model report. Add bedrock heterogeneities and fractured bedrock to the conceptual hydrostratigraphic framework. Alberta Transportation's proposed approach of using existing borehole data (for the hydrogeological model) is not sufficient as these records are not complete, reliable, or up to date. This work needs to be completed before impacts can be understood and addressed. Tsuut'ina Nation continues to have concerns about impacts from the project, including to groundwater and well productivity, as well as increased flood risk.	being extended to account for Tsuut'ina Nation's concerns regarding potential impact to groundwater on and near the reserve. At the meeting held on August 8, 2018, Alberta Transportation provided an explanation of the additional work being done on the hydrogeological model. The study area has been expanded to include the Tsuut'ina reserve and well records from the reserve are being incorporated. A new baseline is being created and then the hydrogeological model will be re-run. At the meeting held on October 11, 2018, Alberta Transportation provided an update on the work being done on the hydrogeologic model. An additional 1850 wells from the Tsuut'ina reserve have been added. The additional work has confirmed the Elbow River as a hydrogeologic divide. On November 23, 2018, Alberta Transportation provided its report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table. In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the ElA for surface water, groundwater, hydrogeology, and hydrology, and how potential contaminant-related effects will be mitigated. Alberta Transportation also provided the mitigation measures proposed in the ElA for traditional use, including development of a land use plan. Alberta Transportation also provided the mitigation table. At the meeting held on February 21, 2019, Alberta Transportation detailed the additional work that has been done with the hydrogeological model. Results of the updated modelling will be provided to Tsuut'ina Nation. Alberta Transportation and Stantec have initiated the groundwater monitoring plan and the plan is currently in development. Alberta Transportation explained their reasoning for choosing the wells they did, and committed to providing information on the wells and information used to Tsuut'ina Nation. In a letter dated June 18, 2019, Alberta Transportation further provided an update on the additional hydrogeological modelling one. The hydrogeology (groundwater) a	is more accurate, and for pre- and post-flood monitoring.		

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61	May 14-15, 2018 Meeting between Tsuut'ina Nation, Alberta Transportation, and Stantec to discuss Tsuut'ina Nation's specific concerns and Alberta Transportation's responses and proposed mitigation. May 14, 2018 Springbank Off-Stream Reservoir Project EIS – Selected Section: Second Sufficiency Review by PGL Environmental Group, dated April 16, 2018. Provided via email on May 14, 2018. July 12, 2018 Springbank Offstream Reservoir Project EIS Technical Review and Information Requests by PGL Environmental Consultants, dated June 15, 2018.	Hydrogeology	Tsuut'ina Nation expressed concern that the potential impacts to Tsuut'ina Nation have not been adequately predicted and sensitivity models were not done. A full hydrogeological modelling report with sensitivity analyses has not been provided. Remodel flood simulations and conduct sensitivity analysis on the model results by introducing high permeability windows into the reservoir base. Conduct and report particle tracking simulations and conduct sensitivity analyses on the particle tracking using high permeability windows.	At the meetings held on May 14-15, 2018, Alberta Transportation indicated that they had done some sensitivity analyses, and these are explained in the hydrology report. Alberta Transportation also indicated that in some areas doing increased sensitivity analysis does not provide increased value. Alberta Transportation committed to looking into further sensitivity models. At the meeting held on October 11, 2018, Stantec indicated they are working on the sensitivity analysis for the hydrogeological modelling. At the meeting held on February 21, 2019, Alberta Transportation detailed the additional work that has been done with the hydrogeological model. A sensitivity analysis was done for the original model, and in response to concerns raised by PGL Environmental, will be conducted on the new expanded model. The results will be presented in the addendum report to be filed with the SIR responses.	At the meetings held on May 14-15, 2018, Tsuut'ina Nation indicated they recommend further sensitivity analyses.	None at this time.	Ongoing: Working with First Nation
62	May 30, 2016 Letter from Chief Roy Whitney to Canadian Environmental Assessment Agency	Groundwater	Concerns that there is no plan to line the Reservoir, which causes concerns that any contaminants would seep into the groundwater.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: Given the nature of the Project, the hydrogeological conditions in the area and the sediment composition within the reservoir area, the potential for contamination of groundwater sources as a result of seepage from flood waters is not predicted. Accordingly, there is no plan to line the reservoir.	At the meetings held on May 14-15, 2018, Tsuut'ina Nation requested that the region be modelled over a 20-30 year life cycle to understand the long-term effects of erosion.	None at this time.	Ongoing: Working with First Nation
63	May 30, 2016 Letter from Chief Roy Whitney to Canadian Environmental Assessment Agency May 18, 2017 Letter by Violet Meguinis, Acting Consultation Director Tsuut'ina to the Honorable Brian Mason,	Hydrology	Concerns that the permanent structure in the Elbow River will permanently change the flow of the river and tributaries. Concerned SR1 would permanently change the flow of the Elbow River. The project will permanently change the course of the Elbow River.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: The Diversion Structure will have minimal effect on the flow of the Elbow River or its course downstream when constructed. The three additional streams refer to small ephemeral streams that flow only part of the time. During construction of the diversion channel, the unnamed tributary (ID 1350) would be diverted into the diversion channel. Approximately 1,200 m of the tributary would be destroyed, with the lowest 300 m being fish habitat that would be lost. The loss of the 300 m of habitat in the tributary could be offset by the enhancement	At the meetings held on May 14-15, 2018, Tsuut'ina Nation requested that wetlands be considered within the hydrology assessment.	None at this time.	Ongoing: Working with First Nation

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	Minister of Infrastructure and Transportation			or construction of side channel habitat on the Elbow River that could provide rearing habitat for salmonids and cover for small-bodied fish.			
	July 19, 2017 Letter from Chief Lee Crowchild to Alberta Environment and Parks February 28, 2019			The Project is designed to reduce the changes to the course of the river during extreme floods. The channel of the Elbow River experiences seasonal changes in flows. Such changes are greater during flood events. As discussed in Volume 3B, Section 6.4.4, the presence of the Project would decrease the amount of deposition and erosion of the channel bed during extreme flood events, compared to changes without			
	Letter from Tanis Onespot to Alberta Transportation			the Project. Channel form and bedload (river bed particles) movement during extreme floods would remain the same with or without the Project. The Project is assessed as not resulting in significant changes to the Elbow River or local ecosystem. The diversion structure is designed to allow fish passage under all conditions.			
64	August 8, 2018 Meeting between Tsuut'ina Nation, Alberta Transportation, and Stantec	Riparian areas	What is the plan for riparian areas.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
65	August 8, 2018 Meeting between Tsuut'ina Nation, Alberta Transportation, and Stantec	Downstream effects	Downstream effects during drainage.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
66	August 8, 2018 Meeting between Tsuut'ina Nation, Alberta Transportation, and Stantec	Construction Water	Impacts to water during construction.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
67	August 8, 2018 Meeting between Tsuut'ina Nation, Alberta Transportation, and Stantec June 6, 2019 Letter from Chief Lee Crowchild to Jason Kenney, Premier	Water quality	Water quality during drawdown. Many risks have not been sufficiently addressed, including risks to water quality.	On November 23, 2018, Alberta Transportation provided its report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table. In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA for water quality, for both surface and groundwater, and how potential contaminant-related effects will be mitigated. Alberta Transportation also met with Tsuut'ina Nation December 6, 2018 to discuss the response and mitigation table.	None at this time.	None at this time.	Ongoing: Working with First Nation
68	May 30, 2016 Letter from Chief Roy Whitney to Canadian Environmental Assessment Agency	Debris and contamination from flood Impacts to Reserve	Potential for flood waters to back up onto the Reserve, including debris or contamination. This occurred in in the 2013 flood. Potential for flood waters to spill over the Floodplain Berm and onto the reserve, carrying with	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: No back up of water onto Tsuut'ina Reserve is expected, including debris and contamination. The Project will provide flood protection for communities and lands downstream of the diversion structure, including the northeastern part of the Tsuut'ina Reserve that is located downstream of the diversion	At the meetings held on May 14-15, 2018, Tsuut'ina Nation requested confirmation that 930 m is the closest extent of the Project to the Tsuut'ina Nation reserve. Tsuut'ina Nation requested the opportunity to see the conceptual Project model.	None at this time.	Ongoing: Working with First Nation

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			them any contamination and debris. With global warming, higher flood volumes, or more frequent flood events, than predicted in the Project Description are possible.	structure. During a flood event, it is expected that some water will "back-up" upstream of the diversion structure. However, modeling studies have shown that the "back-up" of water would not reach the Tsuut'ina Reserve upstream even in a 2013 design flood event. At its closest point the back-up water would be approximately 1,130 m from the Reserve Volume 3A, Section 18, Figure 18-3.			
				In the event the diversion structure does not operate properly, and water continually backs up behind the structure, the auxiliary spillway and floodplain berm have been designed with a low point that will allow flood water to pass over the berm and continue downstream, thereby preventing back up flooding.			
				At the meetings held on May 14-15, 2018, Alberta Transportation provided the following clarification in relation to the map provided to Tsuut'ina Nation indicating potential water "back up" behind the diversion structure:			
				 The blue line on the map indicates the anticipated surface water back up of flood water behind the diversion structure in a flood event when the gates are in operation and working correctly. This water back up reaches a point approximately 1680 m from the Tsuut'ina Nation reserve if measured following the active river channel or 1130 m if measured directly south over land. 			
				The closest extent of the physical infrastructure to the Tsuut'ina reserve boundary is 1130 m.			
				3. The red dash line on the figure represents the Project Development Area. This line is a conservation buffer. It represents the maximum extent of potential surface water "back up" in the event the diversion structure malfunctions. Should the service spillway gates close but the diversion gates fail to open water would "back up" behind the service spillway and floodplain berm. The red line indicates the maximum extent to which water would back up before it reached the height of the flood plain berm. At this point the flood water would overtop the flood plain berm. The distance of 930 m indicated on the map was measured within the active channel.			
				At the meetings held on May 14-15, 2018, Alberta Transportation showed videos and images of the 1:16 model of the SR1 Project design to demonstrate the engineering of the Project and how water and debris would flow. A USB flash drive with these videos and images was sent to Tsuut'ina Nation under cover dated August 28, 2018.			
69	April 3, 2018 Draft Tsuut'ina Traditional Land Use Report for the Proposed Springbank Off-	Contamination Impact to Reserve Traditional territory	Concerned that impacts to reserve lands from contaminated flood waters will include changes to health and cleanliness of traditional	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: No back up of water onto Tsuut'ina Reserve is expected, including debris and contamination.	None at this time.	None at this time.	Ongoing: Working with First Nation
	Stream Reservoir Project prepared by Trailmark Systems Inc.	Fish Wildlife	resources of reserve lands.	The Project will provide flood protection for communities and lands downstream of the diversion structure, including the northeastern part	SD1 SDECIEIC CONCEDNS AND DESI		

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		Vegetation	Concerns about the quality of floodwaters that may be diverted through Tsuut'ina traditional territory and held by the project (e.g., chemicals from farms in the area). Concerns that stranding water in the reservoir could contaminate plants, animals, fish, and threaten Tsuut'ina food and cultural food security.	of the Tsuut'ina Reserve that is located downstream of the diversion structure. During a flood event, it is expected that some water will "back-up" upstream of the diversion structure. However, modeling studies have shown that the "back-up" of water would not reach the Tsuut'ina Reserve upstream even in a 2013 design flood event. At its closest point the back-up water would be approximately 1,130 m from the Reserve Volume 3A, Section 18, Figure 18-3. In the event the diversion structure does not operate properly, and water continually backs up behind the structure, the auxiliary spillway and floodplain berm have been designed with a low point that will allow flood water to pass over the berm and continue downstream, thereby preventing back up flooding. On November 23, 2018, Alberta Transportation provided its report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table. In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA for water quality, for both surface and groundwater, and how potential contaminant-related effects will be mitigated. Alberta Transportation also met with Tsuut'ina Nation December 6, 2018 to discuss the response and mitigation table.			
70	May 18, 2017 Letter by Violet Meguinis, Acting Consultation Director Tsuut'ina to the Honorable Brian Mason, Minister of Infrastructure and Transportation July 19, 2017 Letter from Chief Lee Crowchild to Alberta Environment and Parks	Debris	Concerns regarding debris and contamination following a flood event.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: During a design flood, sediment modeling predicts that 3.7% (192.6 ha in the reservoir) of the local assessment area would be covered by sediment that is less than 3 cm deep, and 0.8% (37.4 ha) would be covered by sediment between 3 cm and 10 cm. Details of the sediment modeling is provided in the EIA. The quality of vegetation and wetlands post- flood would differ from baseline conditions, however, changes to overall wildlife habitat abundance and suitability would be minor under these conditions. Sediment less than 3 cm thick would have little to no effect on vegetation and wetlands, whereas sediment 3-10 cm deep could result in small shifts in plant species composition within upland ecosites, but complete changes to upland communities would not be expected. For wetlands, sediment 3-10 cm deep would likely alter plant composition and abundance resulting in wetlands changing to upland sites, however as noted above this level of sediment deposition would occur in less than 1% of the local assessment area. Given the nature of the project, the hydrogeological conditions in the area and the sediment composition within the reservoir area, the potential for contamination of groundwater sources as a result of seepage from flood waters is not predicted. Accordingly, there is no plan to line the reservoir. At the meetings held on May 14-15, 2018, Alberta Transportation showed videos and images of the 1:16 model of the SR1 Project design to demonstrate the engineering of the Project and how water and	At the meetings held on May 14-15, 2018, Tsuut'ina Nation requested the opportunity to see the conceptual Project model.	None at this time.	Ongoing: Working with First Nation

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				debris would flow. A USB flash drive with these videos and images was sent to Tsuut'ina Nation under cover dated August 28, 2018.			
				On November 23, 2018, Alberta Transportation provided its report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table. In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA for water quality, for both surface and groundwater, and how potential contaminant-related effects will be mitigated. The service spillway is designed to pass debris during flood operations and will be monitored. Alberta Transportation also met with Tsuut'ina Nation December 6, 2018 to discuss the response and mitigation table. At the meeting held on December 6, 2018, Alberta Transportation			
				indicated that the future land use in SR1 will include debris and sedimentation management. Alberta Transportation indicated it wants to work with Indigenous groups to determine how the area is reclaimed.			
				In a letter dated June 18, 2019, Alberta Transportation provided an update on the debris deflector. Alberta Transportation received concerns regarding debris management during the Indigenous consultation and stakeholder engagement programs for the Project including concerns related to debris build up in the off-stream reservoir. The proposed debris deflector mitigates these concerns by reducing the potential for large debris entering the off-stream reservoir.			
71	May 30, 2016 Letter from Chief Roy Whitney to Canadian Environmental Assessment Agency	Contamination Upstream and downstream effects	Potential for methylmercury contamination both upstream and downstream.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: Filling the off-stream reservoir with water would initiate the process of mercury methylation; however, accumulation of methylmercury in aquatic environments to levels that are hazardous can take many years and depends on several factors (e.g., net methylation rates, sources of mercury, and sources of organic matter for microbial activity). Large, permanent reservoirs and dams are known for having elevated concentrations of methylmercury because of increased conversion rates. Elevated levels of methylmercury combined with bioaccumulation can lead to higher health hazards for wildlife, especially piscivorous (fish-eating) species. However, as the Project is a dry dam with limited water residency times when in use, methylmercury accumulation is not considered to be a risk. Modeling of low and high uptake rates of methylmercury in all Project flood scenarios are below the CCME Canadian Water Quality Guideline for the Protection of Aquatic Life. The reservoir area is not expected to continue to contribute methylmercury after it is drained.	At the meetings held on May 14-15, 2018, Tsuut'ina Nation indicated that the response in Table 7-3 responds to the concern.	Proponent response satisfactory to First Nation.	No further action required.
				On November 23, 2018, Alberta Transportation provided its report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table. In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA for water quality, for both surface and groundwater, and how potential contaminant-related effects will be mitigated. Alberta Transportation			

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			also met with Tsuut'ina Nation December 6, 2018 to discuss the response and mitigation table.			
May 30, 2016 Letter from Chief Roy Whitney to Canadian Environmental Assessment Agency	Sediment	Downstream sedimentation in the Elbow River and tributaries during construction and operation.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: A site-specific Erosion and Sediment Control Plan will be developed by the selected construction contractor as part of the project-specific construction plan, and implemented during the various phases of the Project's construction and should include site-specific mitigation measures to suit the site and finalized design and construction plans.	None at this time.	None at this time.	Ongoing: Working with First Nation
			During operation suspended sediment in the Elbow River would be expected to decrease slightly as water is diverted into the reservoir. Suspended sediment concentration in the diverted water decreases rapidly, and most suspended sediment would remain in the reservoir after discharge back to Elbow River. Suspended sediment concentration is predicted to increase during the last few days of discharge because of sediment re-mobilization in the reservoir and sediment mobilization in the low-level outlet. However, it is anticipated that this increase in suspended sediment concentration can be mitigated with the operation of the low-level outlet and with physical sediment barriers.			
May 30, 2016 Letter from Chief Roy Whitney to Canadian Environmental Assessment Agency October 11, 2018 Meeting between Alberta Transportation, Stantec, and Tsuut'ina Nation	Noise Dust Air Pollution	Noise, dust and air pollution during construction. Sediment and dust after a flood.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: Noise, dust and air pollution levels will be monitored in compliance with regulatory requirements and the Project specific ECO Plan. The effects of noise, dust and air pollution during construction are also addressed in the EIA, Volumes 3A and 3B sections 3 and 4. At the meetings held on May 14-15, 2018, Alberta Transportation indicated they can share a copy of the ECO Plan framework, but noted that a project-specific ECO plan is developed by the successful construction contractor. At the meeting held on October 11, 2018, Alberta Transportation responded that there will be sediment deposition in the reservoir after a flood.	At the meetings held on May 14-15, 2018, Tsuut'ina Nation reported that members living near the Project area will not be used to these types of changes and inquired whether there will be compensation for residents affected by this.	None at this time.	Ongoing: Working with First Nation
May 30, 2016 Letter from Chief Roy Whitney to Canadian Environmental Assessment Agency June 6, 2019 Letter from Chief Lee Crowchild to Jason Kenney, Premier	Air Quality	Concern of potential impacts to air quality from the Project, including the potential for contaminated dry dust (for example with raw sewage) to be carried by the wind from the Project area. Many risks have not been sufficiently addressed, including risks to air quality.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: Air quality data was collected for the Project and an air quality assessment was carried out as part of the EIA. The results, presented in Volumes 3A and 3B, Section 3, found the Project would have no significant effects on air quality. The main sources of air emissions due to the Project construction are vehicle exhaust and fugitive. As these emissions result from ground based sources, the greatest air quality changes due to these emissions	At the meetings held on May 14-15, 2018, Tsuut'ina Nation noted that Indigenous Inclusion planning and monitoring should be included as part of the Project and recommended that Tsuut'ina Nation formulate a "compliance verification model" to mitigate and monitor the region over the life-cycle of the Project. This would include, but not be limited to, monitoring for air quality, emissions, medicinal plants, wildlife corridors, and habitat, and would work	None at this time.	Ongoing: Working with First Nation
	May 30, 2016 Letter from Chief Roy Whitney to Canadian Environmental Assessment Agency May 30, 2016 Letter from Chief Roy Whitney to Canadian Environmental Assessment Agency October 11, 2018 Meeting between Alberta Transportation, Stantec, and Tsuut'ina Nation May 30, 2016 Letter from Chief Roy Whitney to Canadian Environmental Assessment Agency June 6, 2019 Letter from Chief Lee	May 30, 2016 Letter from Chief Roy Whitney to Canadian Environmental Assessment Agency May 30, 2016 Letter from Chief Roy Whitney to Canadian Environmental Assessment Agency October 11, 2018 Meeting between Alberta Transportation, Stantec, and Tsuut'ina Nation May 30, 2016 Letter from Chief Roy Whitney to Canadian Environmental Assessment Agency October 11, 2018 Meeting between Alberta Transportation, Stantec, and Tsuut'ina Nation May 30, 2016 Letter from Chief Roy Whitney to Canadian Environmental Assessment Agency June 6, 2019 Letter from Chief Lee Crowchild to Jason	May 30, 2016 Letter from Chief Roy Whitney to Canadian Environmental Assessment Agency Meeting between Alberta Transportation, Stantec, and Tsuut'ina Nation May 30, 2016 Letter from Chief Roy Whitney to Canadian Environmental Assessment Agency October 11, 2018 Meeting between Alberta Transportation, Stantec, and Tsuut'ina Nation May 30, 2016 Letter from Chief Roy Whitney to Canadian Environmental Assessment Agency October 11, 2018 Meeting between Alberta Transportation, Stantec, and Tsuut'ina Nation Air Quality Concern of potential impacts to air quality from the Project, including the potential for contaminated dry dust (for example with raw sewage) to be carried by the wind from the Project area. Many risks have not been sufficiently addressed, including from the Project and from the Project and the project and the project and the project and the project area. Many risks have not been sufficiently addressed, including	Assessment Agency Colorer 11, 2018 Noise Dust Agency 2016 Noise Noise Dust Agency 2016 Noise 2016	May 30, 2016 Latter from Chief Rgy Whitney to Canadian What Same and Canadian Agency May 30, 2016 Latter from Chief Rgy Whitney to Canadian Control of Rgy	May 30, 2016 Lefter from Chef Roy White you Consider Agenty Assessment Agenty More Accessed in Production American Chef Roy White you Consider Agenty American Chef Roy White you Consider Agenty

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				background levels with increasing distance from the project development area. The main finding is the potential for dust concentrations to be greater than the regulatory criteria outside the project development area. Since estimated dust emissions are rated "indeterminate", the assessment does indicate the need for ambient monitoring during construction to confirm if the adopted dust control mitigation is adequate. On this basis, Alberta Transportation plans to implement an air quality monitoring and record keeping program to provide appropriate mitigation. The only potential source of fugitive dust during post-flood operations is wind erosion of deposited sediments in the reservoir after they dry out, and when strong wind conditions occur. Because these emissions are ground based, the greatest air quality changes due to these emissions occur inside and near the project development area, decreasing to background levels with increasing distance from the project development. The main finding of the modeling is the potential for dust concentrations to be greater than the regulatory criteria outside the project development area. However, given the low recurrence of the floods that result in sediment deposition (i.e. 100 years and design flood [200 years]) and the proposed mitigation measures, it is expected that fugitive dust emissions would not have significant adverse effects on ambient air quality.			
				To some extent, natural mitigation with respect to future potential fugitive dust emissions has already occurred. The 2013 flood removed an appreciable portion of fine sediment (e.g., clay and fine silt) from the upstream Elbow River drainage basin. The remaining surficial materials in the stream bed and on the banks of the Elbow River and its tributaries that may be prone to mobilization during a future flood would comprise mostly larger material (e.g., sand). Hence, most of the sediment deposited in the reservoir during future floods would be dominated by sand, not fine silt. The sand is less prone to result in fugitive dust during dry windy meteorological conditions. A primary mitigation for wind erosion in the reservoir would be the reestablishment of vegetation cover (e.g., native grasses) after reservoir draining. Natural revegetation success, however, is not assured, given initial high moisture contents and reduced energy input in the autumn. Should wind erosion occur and natural revegetation prove to be ineffective, a tackifier may be applied where required. Tackifiers are a sprayable erosion control product that bonds with the soil surface and creates a porous and absorbent erosion resistant blanket that can last for up to 12 months.			
75	August 8, 2018 Meeting between Tsuut'ina Nation, Alberta Transportation, and Stantec	Air quality	Requested on reserve air quality assessment.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation

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76	May 14-15, 2018 Meeting between Tsuut'ina Nation, Alberta Transportation, and Stantec to discuss Tsuut'ina Nation's specific concerns and Alberta Transportation's responses and proposed mitigation. September 21, 2018 Meeting between Alberta Transportation, Stantec, and Tsuut'ina Nation	Precipitation Climate change	Tsuut'ina Nation inquired whether precipitation, specifically fog, has been considered in Project planning, noting that climate change has resulted in a lot of fog, ice, wind, heat, and other weather patterns. Concerned with the impact climate change may have.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
77	October 28, 2016 Meeting with the Tsuut'ina Nation Consultation Office, Alberta Transportation, Stantec, and DEMA Land Services August 8, 2018 Meeting between Tsuut'ina Nation, Alberta Transportation, and Stantec September 21, 2018 Meeting between Alberta Transportation, Stantec, and Tsuut'ina Nation	Monitoring	The Tsuut'ina Nation have requested that they be allowed to have their Field Monitors on the SR1 site throughout the construction to ensure that any heritage sites that may be impacted would be respected. Capacity for monitoring for the life cycle of the Project. Tsuut'ina Nation would like to see monitoring before, during, and after construction.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: Alberta Transportation is willing to discuss possible monitoring opportunities with the Tsuut'ina Nation. At the meetings held on September 21, 2018 and October 11, 2018, Alberta Transportation discussed that they would like to build a long term monitoring plan with Tsuut'ina Nation, and asked for them to think about how they would like to be involved. At the meeting held on October 11, 2018, historical resources and possible mitigation measures, including following ACT's requirements, monitoring opportunities, using TUS report information, and the potential for more excavation per ACT's direction, were discussed. Monitoring during construction and post-flood was presented as a possible mitigation measure. On November 23, 2018, Alberta Transportation provided its report, <i>Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table</i> . Alberta Transportation will participate in discussions regarding possible monitoring opportunities. Alberta Transportation also met with Tsuut'ina Nation December 6, 2018 to discuss the response and mitigation table.	At the meetings held on May 14-15, 2018, Tsuut'ina Nation requested information on the process that will occur in the event that a rock cairn, burial, or other significant find is found. Alberta Transportation noted that a protocol regarding site encounters should be established. Tsuut'ina Nation noted that this could potentially form part of a monitoring plan. Tsuut'ina Nation recommended that a monitoring plan be established with ACT.	None at this time.	Ongoing: Working with First Nation
78	April 3, 2018 Draft Tsuut'ina Traditional Land Use Report for the Proposed Springbank Off- Stream Reservoir Project prepared by Trailmark Systems Inc.	Monitors Vegetation Community-based water monitoring	RECOMMENDATION: Tsuut'ina is strongly against project proceeding. If it does, Tsuut'ina requires, at minimum: Tsuut'ina monitors on-site during pre-construction and construction phases; for every tree removed, same type of tree should be replanted by First Nations close to where it was removed; and support for Tsuut'ina to develop their own	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: Alberta Transportation is willing to discuss possible monitoring opportunities with the Tsuut'ina Nation. At the meetings held on September 21, 2018 and October 11, 2018, Alberta Transportation discussed that they would like to build a long term monitoring plan with Tsuut'ina Nation, and asked for them to think about how they would like to be involved.	None at this time.	None at this time.	Ongoing: Working with First Nation

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			community-based water monitoring program.	At the meeting held on October 11, 2018, monitoring during construction and post-flood was presented as a possible mitigation measure for historical resources.			
				On November 23, 2018, Alberta Transportation provided its report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table. In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA. To maintain the integrity of permanent structures, trees will not be permitted to grow on the diversion system, the diversion channel, or the dam structure. Temporary work spaces will be reclaimed incorporating input on native species to be used for reclamation from Tsuut'ina Nation and other Indigenous groups. Alberta Transportation will discuss possible monitoring opportunities with Tsuut'ina Nation and other Indigenous groups. Alberta Transportation also met with Tsuut'ina Nation December 6, 2018 to discuss the response and mitigation table.			
79	May 14-15, 2018 Meeting between Tsuut'ina Nation, Alberta Transportation, and Stantec to discuss Tsuut'ina Nation's specific concerns and Alberta Transportation's responses and proposed mitigation.	Climate change Monitoring Cumulative effects	Tsuut'ina Nation recommended that a work plan be established to consider resource revenue sharing, cumulative effects, climate change, construction monitoring, and long-term monitoring (for the life of the Project).	At the meetings held on May 14-15, 2018, Alberta Transportation expressed their willingness to discuss monitoring, and to work together on a plan to move forward. At the meetings held on September 21, 2018 and October 11, 2018, Alberta Transportation discussed that they would like to build a long term monitoring plan with Tsuut'ina Nation, and asked for them to think about how they would like to be involved. On November 23, 2018, Alberta Transportation provided its report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table. Alberta Transportation will participate in discussions regarding possible monitoring opportunities. Alberta Transportation also met with Tsuut'ina Nation December 6, 2018 to discuss the response and mitigation table.	None at this time.	None at this time.	Ongoing: Working with First Nation
80	September 21, 2018 Meeting between Alberta Transportation, Stantec, and Tsuut'ina Nation	Post-flood clean-up	Tsuut'ina Nation would like to be involved in managing and co-managing the post-flood clean-up.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
81	May 30, 2016 Letter from Chief Roy Whitney to Canadian Environmental Assessment Agency May 18, 2017 Letter by Violet Meguinis, Acting Consultation Director Tsuut'ina to the Honorable Brian Mason, Minister of Infrastructure and Transportation July 19, 2017	Economic Impacts Impacts to Reserve	Concern about project impacts to Tsuut'ina economic interests at Redwood Meadows such as the Golf and Country Club in the NW section of the Reserve. Concerns about the economic losses if flood waters back up onto the Reserve. Concerns the SR1 may impact land development on the Reserve. Concerns about flood issues Tsuut'ina has experienced in the past at Redwood Meadows.	In a letter dated June 6, 2017 from Minister Brian Mason, Minister Mason proposed creating a small working committee of technical representatives from the Government of Alberta and Tsuut'ina Nation for the purpose of reviewing and identifying any additional flood protection requirements for Redwood Meadows. No response has been received from Tsuut'ina Nation. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: The Project will have no effects on the Redwood Meadows Golf and Country Club (the "Club"). The Club is outside of the Project development area and upstream of the Project components. During a flood event, it is expected that some water will "back-up" upstream of the diversion structure. Modeling studies have shown that the "back-up" of water would not reach the	At the meetings held on May 14-15, 2018, Tsuut'ina Nation indicated they did not agree with this response in full, stating that engagement with Tsuut'ina Nation to discuss planning and understanding the potential environmental effects to Redwood Meadows is still ongoing. Tsuut'ina Nation also reiterated the importance of looking at SR1 cumulatively with the other flood mitigation projects in the area.	None at this time.	Ongoing: Working with First Nation

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	Letter from Chief Lee Crowchild to Alberta Environment and Parks August 23, 2017 Meeting between Alberta Transportation, Stantec, and Tsuut'ina Nation leadership.			Tsuut'ina Reserve upstream or the Redwood Meadows Golf and Country Club located on the reserve. At its closest point the back-up water would be approximately 1,100m from the Reserve. In the event the diversion structure does not operate properly, and water continually backs up behind the structure, the auxiliary spillway and floodplain berm have been designed with a low point that will allow flood water to pass over the berm and continue downstream, therefore preventing back up flooding. A flood mitigation project for Bragg Creek is being funded by Alberta Government through Rocky View County. Alberta Transportation is also engaged with Tsuut'ina regarding flood mitigation for Redwood Meadows. Alberta Transportation has contacted Tsuut'ina and a technical committee has been formed to assess flood mitigation options. Alberta Transportation is awaiting a response from Tsuut'ina in order to get the Redwood Meadows flood protection project planning underway. At the meeting held on May 15, 2018, Alberta Transportation provided Tsuut'ina Nation with copies of the June 6, 2017 letter from Minister Brian Mason to Chief Lee Crowchild. On July 21, 2018, Alberta Transportation funded Tsuut'ina Nation to			
				conduct an assessment of flood mitigation options for Redwood Meadows. Tsuut'ina Nation and Alberta Transportation met on September 21, 2018 to discuss Aquatic Resource Management Ltd.'s report on flood mitigation for Redwood Meadows.			
				At the meeting held on February 21, 2019, Alberta Transportation brought Wim Veldman to present his review of Aquatic Resource Management Ltd.'s proposal for flood protection at Redwood Meadows. Alberta Transportation committed to meeting again once Tsuut'ina Nation and their consultants had a chance to review the information.			
82	April 3, 2018 Draft Tsuut'ina Traditional Land Use Report for the Proposed Springbank Off- Stream Reservoir Project prepared by Trailmark Systems Inc.	Tsuut'ina Nation economic opportunities	RECOMMENDATION: Members of Tsuut'ina should be field crew for all archaeological and other field work.	On November 23, 2018, Alberta Transportation provided its report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table. In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA for monitoring and employment opportunities. Alberta Transportation will commit to a requirement for contractors to employ qualified Indigenous field assistants on archaeological fieldwork. Alberta Transportation will discuss opportunities for qualified Indigenous field assistants to participate on other project-related fieldwork as practical. Alberta Transportation also met with Tsuut'ina Nation December 6, 2018 to discuss the response and mitigation table.	None at this time.	None at this time.	Ongoing: Working with First Nation
				In a letter dated June 18, 2019, Alberta Transportation stated they are committed to Indigenous participation in the Project including training, employment, and contracting opportunities.			
83	April 21, 2016 Meeting with Tsuut'ina Nation, Alberta	Access to lands	Confirmation of SR1 Access.	At the meeting held on April 21, 2016, it was explained that access agreements were signed with most SR1 landowners.	At the meetings held on May 14-15, 2018, Tsuut'ina Nation confirmed they had spent 21 days on the site.	Proponent response satisfactory to First Nation.	No further action required.

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	Transportation, and DEMA Land Services			Alberta Transportation committed to continue sharing information and providing access to the public and private lands where mutual access agreements had been negotiated.			
				Tsuut'ina Nation spent 21 field days on SR1 lands in 2016/2017.			
84	May 30, 2016 Letter from Chief Roy Whitney to Canadian Environmental Assessment Agency	Land access Traditional uses	The Environmental Assessment must consider how the Project may impact Tsuut'ina's ability to access the lands and waters used for traditional activities.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: For the purposes of the EIA, effects on potential or established Aboriginal or Treaty rights are addressed through the assessment of the current use of lands and resources for traditional purposes. By acknowledging a link between practice-based rights and current use, the assessment accepts that adverse residual effects on the availability of traditional resources for current use, on access to traditional resources or areas for current use, or on sites or areas for current use will have a consequent effect on the ability of Indigenous groups to exercise potential or established Aboriginal and Treaty rights.	None at this time.	None at this time.	Ongoing: Working with First Nation
				In addition, a conservative assumption was made that Indigenous groups had access to the PDA to practice traditional use activities notwithstanding access to these private lands is limited. At the meetings held on September 21, 2018 and October 11, 2018, Alberta Transportation discussed future land use planning and asked Tsuut'ina Nation to think about how they would like to see the lands			
				Used. On November 23, 2018, Alberta Transportation provided its report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table. In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA for hunting, fishing, and traditional use, including: development of a land use plan; and mitigation measures for wildlife and fish. Alberta Transportation also met with Tsuut'ina Nation December 6, 2018 to discuss the response and mitigation table.			
				At the meeting held on December 6, 2018, Alberta Transportation presented on their proposed plan for a land use plan that would include: access for traditional use, hunting, and harvesting; management during/after a flood; and ongoing monitoring programs.			
85	September 21, 2018 Meeting between Alberta Transportation, Stantec, and Tsuut'ina Nation	Land use planning	Tsuut'ina Nation would like to see a land use plan and heritage resource plan.	At the meetings held on September 21, 2018 and October 11, 2018, Alberta Transportation discussed future land use planning and asked Tsuut'ina Nation to think about how they would like to see the lands used once the project is built.	None at this time.	None at this time.	Ongoing: Working with First Nation
				On November 23, 2018, Alberta Transportation provided its report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table. Alberta Transportation committed to the development of a land use plan. Alberta Transportation also met with Tsuut'ina Nation December 6, 2018 to discuss the response and mitigation table.			
				At the meeting held on December 6, 2018, Alberta Transportation presented on their proposed plan for a land use plan that would			

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				include: access for traditional use, hunting, and harvesting; management during/after a flood; and ongoing monitoring programs.			
				In a letter dated June 18, 2019, Alberta Transportation indicated they had created a draft post-construction land use document for the SR1 project that provides draft principles of future land use for the Project Development Area (PDA). The primary use of all lands within the PDA, including the LUA, is for flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses such as vegetation management and First Nations' traditional activities (including the exercise of treaty rights such as hunting) will be allowed within the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights and to engage in traditional uses.			
86	May 14-15, 2018 Meeting between Tsuut'ina Nation, Alberta Transportation, and Stantec to discuss Tsuut'ina Nation's specific concerns and Alberta Transportation's responses and proposed mitigation.	Riparian areas Access	Tsuut'ina Nation asked whether the riparian area adjacent to the proposed Project will be accessible and if the concrete infrastructure will block it.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
87	August 31, 2017 Meeting between Alberta Transportation and Tsuut'ina	Engagement	Tsuut'ina presented the option of having an SR1 Community Information Session to be organized and held on the Tsuut'ina Reserve.	At the meeting held on August 31, 2017, Alberta Transportation committed to working with Tsuut'ina Nation to facilitate a community engagement session on the SR1 Project. Community workshops to discuss the TLRU sections of the EIA (Volumes 3A and 3B) were held March 1, 5, 6, and 7, 2018 on the Tsuut'ina reserve.	None at this time.	None at this time.	Ongoing: Working with First Nation
88	August 23, 2017 Meeting between Alberta Transportation, Stantec, and Tsuut'ina Nation leadership.	Engagement	Tsuut'ina should have been part of the project selection process and should have been part of the technical EIA work completed by Stantec on behalf of Alberta Transportation. Tsuut'ina should be a decision maker and want the SR1 project to require Tsuut'ina's "Consent" as part of the current process.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: Immediately following the 2013 flood, the Government of Alberta through Alberta Transportation hired the engineering company, AMEC, to prepare a report on options to mitigate damage due to flooding on the Elbow River including the SR1 and the Maclean Creek option. The report was completed in early 2014 and recommended the SR1 flood mitigation option. In 2015, Alberta Transportation hired Deltares to review Amec's report. The Deltares review agreed with Amec's report recommendation. Based on these report recommendations, Alberta Transportation chose to proceed with the SR1. Alberta Transportation has provided the Amec and Deltares reports with the Tsuut'ina Nation as part of the current ongoing engagement process. A detailed assessment as to why SR1 was chosen is also provided in the EIA. Alberta Transportation has provided funding to Tsuut'ina for a	At the meetings held on May 14-15, 2018, Tsuut'ina Nation reiterated the importance of getting consent from First Nations. Tsuut'ina Nation stated that the current EIA does not capture upstream mitigation planning (including Bragg Creek and Redwood Meadows mitigation) and therefore the EIA does not take a comprehensive view of the Project in order to understand potential cumulative effects.	None at this time.	Ongoing: Working with First Nation
				traditional use study. To facilitate the traditional use studies, Alberta	CD4 CDECIFIC CONCERNO AND DECE		

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				Transportation arranged and facilitated 21 site visits by Tsuut'ina within the Project Development Area (PDA) over the period between the fall of 2016 to the late summer of 2017. A TUS study was not received in time to be incorporated in the EIA submitted in October 2017. A draft TUS has now been received however Tsuut'ina's permission to include the information from it in the revised EIA re-submission has not been received.			
				Alberta Transportation sent the link to the October 2017 EIS to Tsuut'ina on November 3, 2017. On December 5, 2017. Alberta Transportation requested feedback on the TLRU sections (Volumes 3A and 3B).			
				Relevant information, concerns and recommendations received after the EIA has been filed in March 2018 will be used for project planning and implementation purposes, where applicable.			
				At the meetings held on May 14-15, 2018, Alberta Transportation indicated that in 2013 when the province was exploring flood mitigation, they had tried two times to contact Tsuut'ina Nation to get feedback on the effects of the 2013 flood to Tsuut'ina. Alberta Transportation noted that funding has been provided to complete the Bragg Creek mitigation and Government of Alberta is prepared to engage with Tsuut'ina Nation regarding mitigation options for flood protection at Redwood Meadows.			
				On July 21, 2018, Alberta Transportation funded Tsuut'ina Nation to conduct an assessment of mitigation options for flood protection at Redwood Meadows. Tsuut'ina Nation and Alberta Transportation met on September 21, 2018 to discuss Aquatic Resource Management Ltd.'s report on flood mitigation for Redwood Meadows.			
89	May 18, 2017 Letter by Violet Meguinis, Acting Consultation Director Tsuut'ina to the Honorable Brian Mason, Minister of Infrastructure	Engagement	Concerned that Alberta Transportation have not engaged Tsuut'ina on the additional work set forth in the Appendix A of the May 30, 2016, letter and is now moving	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: Alberta Transportation has been engaged with Tsuut'ina Nation since 2014 to understand how the Project potentially impacts rights, interests and traditional uses.	At the meetings held on May 14-15, 2018, Tsuut'ina Nation stated that the process is moving quickly, and the Nation does not want to rush a decision. Tsuut'ina Nation added that safety and socioeconomic certainty are important factors in making a decision.	None at this time.	Ongoing: Working with First Nation
	and Transportation July 19, 2017 Letter from Chief Lee Crowchild to Alberta Environment and Parks		forward with the EIS submission. Requests engagement with Tsuut'ina on the collection of the information identified in Appendix A (of the May 30, 2016 letter) and other information needed to understand the SR1 impacts.	Alberta Transportation has provided funding to Tsuut'ina for a traditional use study. To facilitate the traditional use studies, Alberta Transportation arranged and facilitated 21 site visits by Tsuut'ina within the Project Development Area (PDA) over the period between the fall of 2016 to the late summer of 2017. A TUS study was not received in time to be incorporated in the EIA submitted in October 2017. A draft TUS has now been received however Tsuut'ina's permission to include the information from it in the revised EIA re-submission has not been received.	At the meetings held on May 14-15, 2018, Tsuut'ina Nation requested information regarding specific mitigation planning and recommended that Alberta Transportation participate in developing a Project-specific work plan.		
			Recommend engagement with Tsuut'ina to prepare a consultation work plan to guide the remainder of the review process for the Project.	Alberta Transportation sent the link to the October 2017 EIS to Tsuut'ina on November 3, 2017. On December 5, 2017, Alberta Transportation requested feedback on the TLRU sections (Volumes 3A and 3B).			
			process for the Froject.	Project timelines for resubmission of the EIA were extended by 60 days in order to undertake further indigenous engagement activities.			

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			Concerned by the lack of engagement on the project.	Alberta Transportation provided Tsuut'ina Nation with the revised draft TLRU sections for review and comment under correspondence dated February 6, 2018. Alberta Transportation also offered a workshop with the goal of better understanding potential impacts of the Project to Tsuut'ina Nations and to provide responses to the concerns raised to date. Alberta Transportation arranged 4-day workshop with Tsuut'ina on March 1, 5, 6 and 7, 2018. The workshop was facilitated by CEAA with the goal of better understanding potential impacts to Tsuut'ina from the Project and to provide responses to the concerns raised to date. Verification of the meeting minutes from the workshops was not received prior to March 16, 2018 and therefore the TLRU section has not been updated to include information discussed.			
				Relevant information, concerns and recommendations received after the EIA has been filed in March 2018 will be used for project planning and implementation purposes, where applicable. At the meetings held on May 14-15, 2018, Alberta Transportation			
90	May 14-15, 2018 Meeting between Tsuut'ina Nation, Alberta Transportation, and Stantec to discuss Tsuut'ina Nation's specific concerns and Alberta Transportation's responses and proposed mitigation. October 11, 2018 Meeting between Alberta Transportation, Stantec, and Tsuut'ina Nation	Regulatory process	Tsuut'ina Nation expressed concerns that late June is the beginning of the ceremony season, but the Project review and Information Request (IR) process will be occurring at the same time. Tsuut'ina Nation wants the opportunity to continue to participate meaningfully in the Project. Involvement of Tsuut'ina Nation in the regulatory/IR process.	stated they are willing to continue to meet and discuss mitigation for project impacts with Indigenous groups. At the meetings held on May 14-15, 2018, Alberta Transportation stated they wanted to continue to work with Tsuut'ina Nation. At the meeting held on October 11, 2018, Alberta Transportation indicated they were willing to discuss CEAA IRs of concern with Tsuut'ina Nation. Under cover dated January 28, 2019, Alberta Transportation requested that Tsuut'ina Nation provide its views and perspectives on its Aboriginal and Treaty rights, cultural and experiential values, and country foods. The letter listed four specific topics that Alberta Transportation was requesting input on to help answer Canadian Environmental Assessment Agency (CEAA) IR2-01, IR2-02, and IR2-08. The specific information requests were attached as Appendix A. A deadline of February 28, 2019 was given for written feedback to be included in the IR responses. Feedback received after the deadline will be incorporated into regulatory submissions and project planning, as appropriate.	In a letter dated February 28, 2019, Tsuut'ina Nation responded to Alberta Transportation's January 28, 2019. Alberta Transportation received the CEAA IRs over five months prior to the date of the January 28, 2019 letter, but only provided Tsuut'ina Nation with four weeks to respond. Please explain the timing behind Alberta Transportation's request. The timing of Alberta Transportation's request is problematic given that the environmental assessment for the Project is not yet complete. Tsuut'ina has identified a number of information gaps in the environmental assessment, including with respect to issues relating to groundwater, surface water, vegetation and wetlands, wildlife, archaeological sites, and cumulative effects. This information is needed to understand how the Project will impact Tsuut'ina's Aboriginal and treaty rights and what mitigation or accommodation measures will be required to mitigate potential impacts. In Tsuut'ina Nation's view, it is not a robust or respectful approach to the assessment of potential impacts to Tsuut'ina's Aboriginal and Treaty rights from the Project to expect that impacts can be identified and mitigated in the absence of the information that Tsuut'ina has identified as necessary and is still being collected.	None at this time.	Ongoing: Working with First Nation

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					Should Alberta Transportation intend to submit its responses to the IRs without waiting for the outstanding information to be collected and assessed, Tsuut'ina requests the opportunity to review the draft IR responses before they are submitted to CEAA so that they can provide their input.		
91	May 18, 2017 Letter by Violet Meguinis, Acting Consultation Director Tsuut'ina to the Honorable Brian Mason, Minister of Infrastructure and Transportation	Environmental Impact Statement	An opportunity for Tsuut'ina to review the draft EIS before it is submitted to the Agency. Concerns when Tsuut'ina will be able to review the Environmental assessments being completed for SR1.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: Alberta Transportation sent the link to the October 2017 EIS to Tsuut'ina on November 3, 2017. On December 5, 2017 Alberta Transportation requested feedback on the TLRU sections (Volumes 3A and 3B).	At the meetings held on May 14-15, 2018, Tsuut'ina Nation stated Alberta Transportation should have engaged with them earlier. Now they are under CEAA's tight timelines.	None at this time.	Ongoing: Working with First Nation
	July 19, 2017		Boiling completion for circle.	Project timelines for resubmission of the EIA were extended by 60 days in order to undertake further indigenous engagement activities.			
	Letter from Chief Lee Crowchild to Alberta Environment and Parks			Alberta Transportation provided Tsuut'ina Nation with the revised draft TLRU sections for review and comment under correspondence dated February 6, 2018. Alberta Transportation also offered a workshop with the goal of better understanding potential impacts of the Project to Tsuut'ina Nations and to provide responses to the concerns raised to date.			
				Alberta Transportation arranged 4-day workshop with Tsuut'ina on March 1, 5, 6 and 7, 2018. The workshop was facilitated by CEAA with the goal of better understanding potential impacts to Tsuut'ina from the Project and to provide responses to the concerns raised to date. Verification of the meeting minutes from the workshops was not received prior to March 16, 2018 and therefore the TLRU section has not been updated to include information discussed.			
				Relevant information, concerns and recommendations received after the EIA has been filed in March 2018 will be used for project planning and implementation purposes, where applicable.			
				At the meetings held on May 14-15, 2018, Alberta Transportation explained they did not share the full EIA with anyone prior to submission as per the regulation process. Alberta Transportation also indicated they had offered workshops in 2016 but the offer was not acted on by Tsuut'ina Nation.			

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92	May 18, 2017 Letter by Violet Meguinis, Acting Consultation Director Tsuut'ina to the Honorable Brian Mason, Minister of Infrastructure and Transportation July 19, 2017 Letter from Chief Lee Crowchild to Alberta Environment and Parks August 31, 2017 Meeting between Alberta Transportation and Tsuut'ina	Hydrology	An opportunity for Tsuut'ina to review the draft hydrology report before it is submitted to the agency. Concerned that while Alberta Environment are preparing a hydrology study on SR1, there has not been sufficient engagement with Tsuut'ina to know if this study covers the areas or issues of most concern. Tsuut'ina requested a copy of the Breach Analysis Report and Hydrology Study.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: The following reports were sent by registered mail to Chief Crowchild and Tsuut'ina's Consultation Office on February 9, 2018. Hydrology - Springbank Off-Stream Storage Project Hydrology Flood Frequency Analysis – Report on Methods and Results (March 22, 2017) Dam Breach Analysis – Breach Analysis and Inundation Mapping – Springbank Off-Stream Reservoir (SR1) (March 6, 2017) EIA - Volume 3B, Section 5.0 Assessment of Potential Effects on Hydrogeology (November 2017) EIA - Appendix I Hydrogeology – Hydrogeology Baseline Technical Data Report (November 2017) An email with a link to the draft Hydrology Report was also provided on February 9, 2018. At the meetings held on May 14-15, 2018, Alberta Transportation explained they did not share the full EIA with anyone prior to submission as per the regulation process.	At the meetings held on May 14-15, 2018, Tsuut'ina Nation questioned the boundary of the RAA. Tsuut'ina Nation requested that wetlands be considered within the hydrology assessment. Tsuut'ina Nation requested certainty that when the water backs up during a flood event it will not flood Redwood Meadows and turn it into a wetland, and that if springs are covered by back water this will not affect drinking water. Tsuut'ina Nation stated that because a request for funding to conduct a hydrology study was not funded early in the Project, Tsuut'ina Nation is now having to catch up (with the support of PGL Environmental Consultants) to understand the potential effects on hydrology from the Project. Tsuut'ina Nation stated that currently it is not understood what will happen between Bragg Creek and the proposed SR1 project in the event of a flood, including effects on Tsuut'ina Nation reserve lands and Redwood Meadows. Tsuut'ina Nation questioned why the 2013 flood was chosen as the design flood.	None at this time.	Ongoing: Working with First Nation
93	August 31, 2017 Meeting between Alberta Transportation and Tsuut'ina April 2, 2019 Letter from Roy Crowther, attached to a letter from Chief Lee Crowchild to Catherine McKenna, Minister of Environment and Climate Change.	Funding	It is a concern that the Tsuut'ina budget for a hydrology study had not been approved.	At the meeting held on August 31, 2017, Alberta Transportation responded that the hydrology information gathered during the SR1 technical studies could be shared with Tsuut'ina Nation and if needed a meeting to discuss the hydrology could be arranged. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: A Hydrology report has been prepared for the EIA submission that has gathered all baseline information and assesses the potential impacts and effects of the Project. On July 21, 2018, Alberta Transportation funded Tsuut'ina Nation to conduct an assessment of flood mitigation options for Redwood Meadows. Tsuut'ina Nation and Alberta Transportation met on September 21, 2018 to discuss Aquatic Resource Management Ltd.'s report on flood mitigation for Redwood Meadows. Under cover dated March 14, 2019, Alberta Transportation offered a grant to fund Tsuut'ina Nation to complete further studies on flood protection for Redwood Meadows.	At the meetings held on May 14-15, 2018, Tsuut'ina Nation stated that because a request for funding to conduct a hydrology study was not funded early in the Project, Tsuut'ina Nation is now having to catch up (with the support of PGL Environmental Consultants) to understand the potential effects on hydrology from the Project. In a letter attached to the letter dated April 2,	None at this time.	Ongoing: Working with First Nation
94	July 19, 2017 Letter from Chief Lee Crowchild to Alberta Environment and Parks	Funding	Concerns that Tsuut'ina's ability to review the environment assessment is extremely limited without capacity funding.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: Funding is available to Indigenous groups through	At the meetings held on May 14-15, 2018, Tsuut'ina Nation questioned the adequacy of CEAA funding, noting that there is ongoing logistics, planning, coordinating, technical meetings, and reporting that is not always	None at this time.	Ongoing: Working with First Nation

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				CEAA to review the EIA and participate in the regulatory review process. At the meetings held on May 14-15, 2018, Alberta Transportation responded that if Tsuut'ina Nation felt the review of the EIA was not adequate, to let Alberta Transportation know what further activities they would like to undertake so they can take it to management.	funded. Tsuut'ina Nation added that nobody funds the EIA completeness review.		
95	April 2, 2019 Letter from Chief Lee Crowchild to Catherine McKenna, Minister of Environment and Climate Change.	Funding	Tsuut'ina Nation is concerned that funding for the project has been approved from the Federal Government when there are still outstanding concerns from Tsuut'ina Nation and others.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
96	May 14-15, 2018 Meeting between Tsuut'ina Nation, Alberta Transportation, and Stantec to discuss Tsuut'ina Nation's specific concerns and Alberta Transportation's responses and proposed mitigation. August 8, 2018 Meeting between Tsuut'ina Nation, Alberta Transportation, and Stantec September 21, 2018 Meeting between Alberta Transportation, Stantec, and Tsuut'ina Nation October 11, 2018 Meeting between Alberta Transportation, Stantec, and Tsuut'ina Nation	Safety Emergency response Disaster planning	Tsuut'ina Nation expressed concerns about safety and requested a communication plan to ensure that Nations and reserves receive warning about potential floods. Concerns that the emergency response plan would be developed after Project approvals, and Tsuut'ina Nation would not be able to assess the plan. Tsuut'ina Nation would like to see disaster planning. Emergency response process. Tsuut'ina Nation would like there to be an emergency response planning exercise. When a flood hits, both Alberta Transportation and Tsuut'ina Nation need to understand the process so people are prepared.	At the meetings held on May 14-15, 2018, Alberta Transportation explained that Rocky View County would have an emergency notification plan that would notify everyone; they would have a list of people to contact. At the meeting held on August 8, 2018, Alberta Transportation committed to trying to expediate the process of developing emergency response plans and bringing the information back to Tsuut'ina Nation. On November 23, 2018, Alberta Transportation provided its report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table. In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA for accidents and malfunctions, including dam failure, such as, in the event of failure or breach of dam, Alberta Emergency Management Agency and Calgary Emergency Management Agency will enact emergency response procedures and disaster recovery programs. Should a failure or breach of the auxiliary spillway occur, emergency response procedures will be implemented to address public safety. Alberta Transportation also committed to including dam safety and emergency response planning to the agenda for a future meeting with Tsuut'ina Nation. Alberta Transportation also met with Tsuut'ina Nation December 6, 2018 to discuss the response and mitigation table.	None at this time.	None at this time.	Ongoing: Working with First Nation
97	April 3, 2018 Draft Tsuut'ina Traditional Land Use Report for the Proposed Springbank Off- Stream Reservoir Project prepared by Trailmark Systems Inc. May 14-15, 2018	Cumulative effects Impact to reserve Flooding Hydrology	Concerned that the Project will compound cumulative effects from ongoing development, including impacts to water flow through the reserve, plant and animal loss, barriers to access, etc. Tsuut'ina Nation expressed concern that the current EIA	At the meetings held on May 14-15, 2018, Alberta Transportation provided Tsuut'ina Nation with copies of the June 6, 2017 letter from Minister Brian Mason to Chief Lee Crowchild that suggested a working group be formed to discuss mitigation at Redwood Meadows. Alberta Transportation explained the province is looking at flood mitigation at Bragg Creek, and projects will not be designed to wipe each other out. On July 21, 2018, Alberta Transportation provided funding for Tsuut'ina Nation to conduct an assessment of flood mitigation options for Redwood Meadows.	None at this time.	None at this time.	Ongoing: Working with First Nation

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	Meeting between Tsuut'ina Nation, Alberta Transportation, and Stantec to discuss Tsuut'ina Nation's specific concerns and Alberta Transportation's responses and proposed mitigation. May 14, 2018 Springbank Off-Stream Reservoir Project EIS – Selected Section: Second Sufficiency Review by PGL Environmental Group, dated April 16, 2018. Provided via email on May 14, 2018 Letter dated July 12, 2018 from Chief Lee Crowchild and Councillor Vincent Crowchild to Minister Brian Mason December 6, 2018 Meeting between Tsuut'ina Nation, Alberta Transportation, and Stantec. February 21, 2019 Meeting between Tsuut'ina Nation and Alberta Transportation February 28, 2019 Letter from Tanis Onespot to Alberta Transportation August 15, 2019 Meeting between Minister of Transportation and Tsuut'ina Nation		dismisses any interaction with the upstream mitigation planning, i.e., Redwood Meadows and Bragg Creek. The project is not being looked at holistically or considering cumulative effects. Integrated effects assessment that included Bragg Creek and Redwood Meadows mitigation was not included. Concerns expressed regarding flood mitigation in and around the Tsuut'ina Reserve, including the Springbank Off-Stream Reservoir program, and how none will protect their reserve from flooding and could increase their vulnerability. Tsuut'ina Nation expressed concerns with how SR1 will interact with other flood mitigation projects in the area. Scope of EIA must be expanded to include potential effects from all works recommended in the Deltares report. Safety and security of Tsuut'ina Nation in terms of flood protection. Tsuut'ina Nation voiced concerns regarding the cumulative effects of multiple flood mitigation projects around their lands. The project, when combined with the project proposed for the Bragg Creek area, may increase the risk of flooding on their reserve. Concerns about cumulative impacts and the impacts to Tsuut'ina Nation's Reserve.	In an email on August 22, 2018, Alberta Transportation proposed a meeting to discuss SR1 as well as Tsuut'ina Nation's additional work that was funded July 21, 2018. This was followed up again in email on August 27, 2018 and phone conversations on August 29, 2018. The meetings proposed would include SR1, as well as discussing the results of Tsuut'ina Nation's assessment of flood mitigation options for Redwood Meadows. Tsuut'ina Nation and Alberta Transportation met on September 21, 2018 to discuss Aquatic Resource Management Ltd.'s report on flood protection for Redwood Meadows. Alberta Transportation has committed to continue discussions on flood protection for Tsuut'ina Nation. On November 23, 2018, Alberta Transportation provided its report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table. In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA for cumulative effects. Alberta Transportation also met with Tsuut'ina Nation December 6, 2018 to discuss the response and mitigation table. At the morning meeting held on February 21, 2019, Alberta Transportation detailed the additional work that has been done with the hydrogeological model. Results of the updated modelling will be provided to Tsuut'ina Nation. At the afternoon meeting held on February 21, 2019, Wim Veldman presented on to present his review of Aquatic Resource Management Ltd.'s proposal for flood protection at Redwood Meadows.			
98	November 13, 2014	Impacts to Reserve Dam operation	Tsuut'ina Nation were concerned that the failure of any dam, particularly MC1, and	Possible impacts and mitigation measures related to concerns raised by the Tsuut'ina Nation will be addressed as part of the EIA.	None at this time.	None at this time.	Ongoing: Working with First Nation

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Ts Tr DB Ma Le Ac Di Hc Mi an Ju Le Cr Er Ap Pr St pr St pr St pr St	itial SR1 Meeting with suut'ina Nation, Alberta ransportation, and EMA Land Services ay 18, 2017 Letter by Violet Meguinis, cting Consultation frector Tsuut'ina to the conorable Brian Mason, inister of Infrastructure and Transportation ally 19, 2017 Letter from Chief Lee rowchild to Alberta anvironment and Parks coril 3, 2018 Letter Tsuut'ina Traditional and Use Report for the roposed Springbank Offteram Reservoir Project repared by Trailmark systems Inc. Line 6, 2019 Letter from Chief Lee rowchild to Jason cenney, Premier		also SR1, would impact Tsuut'ina first. Concerned any failure of the SR1 dam or spillway during a flood could have catastrophic consequences for Tsuut'ina. Concerns that dam and diversion will not act as intended - what if intake is blocked and floods? What if the dam fails? What assurances are there the Project will function as intended? RECOMMENDATION: Require a special consultation session related to possibility of dam failure. Many risks have not been sufficiently addressed, including risk of structural failures to gates and berms.	At meetings held on April 21, 2016 and August 23, 2017, Alberta Transportation indicated that the SR1 project was the main focus of the Government of Alberta and that the MC1 option would not be moving forward. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: SR1 dam and structures will comply fully with the Canadian Dam Association guidelines and statistically a dam breach is unlikely. However, an emergency preparedness plan will be prepared, and advanced warning would be given in the event of a failure. Instrumentation will be installed and will provide advanced warning if failure issues are detected. The emergency spillway will prevent flood waters from overtopping the dam. On May 14-15, 2018, August 8, 2018, September 21, 2018, and October 11, 2018, Alberta Transportation met with Tsuut'ina Nation to review their specific concerns and the responses and proposed mitigation measures in <i>Table 7-3 SR1 Project Specific Concerns and Responses – Tsuut'ina Nation</i> . At the meeting held on October 11, 2018, Alberta Transportation discussed potential accidents and malfunctions, including dam breaches. On November 23, 2018, Alberta Transportation provided its report, <i>Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table</i> . In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA for accidents and malfunctions, including dam failure, such as, in the event of failure or breach of dam, Alberta Emergency Management Agency and Calgary Emergency Management Agency will enact emergency response procedures and disaster recovery programs. Alberta Transportation also committed to including dam safety and emergency response planning to the agenda for a future meeting with Tsuut'ina Nation December 6, 2018 to discuss the response and mitigation table.			
Le Ad Di Ho Mi an Ju Le Cr Er	ay 18, 2017 Letter by Violet Meguinis, cting Consultation irector Tsuut'ina to the conorable Brian Mason, inister of Infrastructure and Transportation ly 19, 2017 Letter from Chief Lee rowchild to Alberta invironment and Parks ovember 1, 2017	Impact to Reserve	Concerned that SR1 could increase the risk of Tsuut'ina lands being flooded. Concerned that the SR1 Project would not prevent flooding on Tsuut'ina Reserve lands or traditional territory. Concerned about potential flooding of Tsuut'ina land caused by the floodplain berm.	At the meeting held on November 1, 2017, Stantec explained that the groundwater sampling and modeling show that the Elbow River is a hydrologic divide and the effects of operating the Springbank Offstream Reservoir are contained to the Project Development Area (PDA) and do not extend south of the Elbow River. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: The Tsuut'ina reserve lands have been included in the EIA. The potential effects of the Project have been assessed using three geographic areas. The Project Development Area (PDA), the Local Assessment Area (LAA) and the Regional Assessment Area (RAA).	None at this time.	None at this time.	Ongoing: Working with First Nation

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	Technical overview for the EIA with Tsuut'ina Nation, Alberta Transportation, and Stantec.			The PDA represents the project footprint i.e., immediate area of physical disturbance and construction activities (approximately 1440 ha). The PDA located on private land, north of the Elbow River, and this area is the same for all the valued components (VCs). The LAA is an area larger than the PDA and is considered to be the area where Project effects would be reasonably expected to occur and where effects can be predicted or measured with a reasonable degree of accuracy. The RAA is an area larger than the LAA and is an area within which Project effects may interact or accumulate with the effects of other projects or activities. The size of the LAA and RAA varies depending on the VC being assessed. In many cases the assessment areas include the Tsuut'ina Reserve.			
				In addition to the assessment of VCs the EIA document also contains an assessment of the potential Project effects on Federal Lands, including the Tsuut'ina Reserve (Volume 3A and 3B, Chapter 18).			
				No back up of water onto Tsuut'ina Reserve is expected, including debris and contamination.			
				The Project will provide flood protection for communities and lands downstream of the diversion structure, including the northeastern part of the Tsuut'ina Reserve that is located downstream of the diversion structure. During a flood event, it is expected that some water will "back-up" upstream of the diversion structure. However, modeling studies have shown that the "back-up" of water would not reach the Tsuut'ina Reserve upstream even in a 2013 design flood event. At its closest point the back-up water would be approximately 1,130 m from the Reserve Volume 3A, Section 18, Figure 18-3.			
				In the event the diversion structure does not operate properly, and water continually backs up behind the structure, the auxiliary spillway and floodplain berm have been designed with a low point that will allow flood water to pass over the berm and continue downstream, thereby preventing back up flooding.			
				On November 23, 2018, Alberta Transportation provided its report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table. In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA for accidents and malfunctions, including dam failure. Alberta Transportation also committed to including dam safety and emergency response planning to the agenda for a future meeting with Tsuut'ina Nation. Alberta Transportation also met with Tsuut'ina Nation December 6, 2018 to discuss the response and mitigation table.			
100	August 23, 2017 Meeting between Alberta Transportation, Stantec, and Tsuut'ina Nation leadership.	Flooding	Asked what would happen if the gates were left up during a flood and water was allowed to continue to enter the reservoir.	At the meeting on August 23, 2017, Stantec explained the purpose of the emergency spillway on the design, that if such an event occurred, which was unlikely, the spillway would return water to the Elbow River and Stantec stated the SR1 was designed so that the water level behind the dam, in a flood event, would pass out the same spillway and would never exceed 3 metres from the top of the SR1 dam.	None at this time.	None at this time.	Ongoing: Working with First Nation

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101	July 12, 2018 Springbank Off-Stream Reservoir Project Environmental Impact Assessment Dam Safety Information Deficiency Analysis by Robert J. Huzjak, dated June 14, 2018	Dam safety	Adequate information is not available for a regulatory authority or an independent engineer to evaluate the feasibility of the concepts and the safety of the dam and other project components. Adequate information was not provided to evaluate the technical, safety, and performance differences and risks between the MC1 and SR1 alternatives. Potential failure modes for the dam and other facilities do not appear to have been identified and therefore, have not been addressed in development of the design concept. The design includes a gated outlet that enables, or could result in, the dam storing waste water for prolonged periods of time. It does not appear that the design has adequately considered this condition, which could impact the safety of the dam.	On November 23, 2018, Alberta Transportation provided its report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table. In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA for accidents and malfunctions, including dam failure. Alberta Transportation also committed to including dam safety and emergency response planning to the agenda for a future meeting with Tsuut'ina Nation. Alberta Transportation provided the mitigation measures proposed in the EIA. Alberta Transportation committed to providing its response to CEAA IR3-45 (regarding additional information for alternative projects) to Tsuut'ina Nation once completed and, if requested, discussing the response. Alberta Transportation also met with Tsuut'ina Nation December 6, 2018 to discuss the response and mitigation table.	None at this time.	None at this time.	Ongoing: Working with First Nation
102	May 14-15, 2018 Meeting between Tsuut'ina Nation, Alberta Transportation, and Stantec to discuss Tsuut'ina Nation's specific concerns and Alberta Transportation's responses and proposed mitigation.	Security	Tsuut'ina Nation noted that with a proposed Bragg Creek emergency exit access road, even though it's being managed through Rocky View Country, road changes need to be considered cumulatively and cohesively. It will open a corridor and have a regional impact and causes security concerns.		None at this time.	None at this time.	Ongoing: Working with First Nation
103	November 13, 2014 Initial SR1 Meeting with Tsuut'ina Nation, Alberta Transportation, and DEMA Land Services April 21, 2016 Meeting with Tsuut'ina Nation, Alberta	Road closures	Tsuut'ina Nation concerned that the SR1 Project (in a flood situation) could cause road closures that would impact tourists. Concerns expressed on the impact that SR1 would have on access routes in the SR1 Project.	At the meeting held on November 13, 2014, Alberta Transportation responded that roads were being looked at to keep open, with no permanent road closures planned. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: During construction, there will be no road closures with the exception of Range Road 41 which currently dead-ends south of Springbank Road, it will be permanently closed. To accommodate	At the meetings held on May 14-15, 2018, Tsuut'ina Nation indicated that the response in Table 7-3 responds to the concern.	Proponent response satisfactory to First Nation.	No further action required.

	ocument or Meeting rence	2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. First Nation/Metis Settlement response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
	sportation, and IA Land Services			construction of bridges over the diversion channel on TWP Road 242 and Hwy 22, traffic will be detoured to bypass construction activities.			
				Springbank road will be closed temporarily during a flood event that inundates the road. Local traffic will be detoured to access Hwy 1 to the north to bypass the temporary closure.			
Whiti Envir	30, 2016 er from Chief Roy ney to Canadian ronmental essment Agency	Impacts to Reserve	Potential impacts to the Reserve from the realignment of Highway 22 which abuts the Reserve.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: The Tsuut'ina Reserve will not be impacted by the proposed realignment of Highway 22. The location of the outlet works, and realignment of Highway 22 are described in the Project Description (Volume 1 of the EIA).	At the meetings held on May 14-15, 2018, Tsuut'ina Nation noted that with a proposed Bragg Creek emergency exit access road, even though it will be managed through Rocky View County, road changes need to be considered cumulatively and cohesively.	None at this time.	Ongoing: Working with First Nation
Initia Tsuu Trans DEM May Lette White Envir Asse Augu Meet Trans and leade June Lette Crow	ember 13, 2014 I SR1 Meeting with at ina Nation, Alberta sportation, and IA Land Services 30, 2016 er from Chief Roy ney to Canadian ronmental essment Agency ast 23, 2017 ting between Alberta sportation, Stantec, Tsuut'ina Nation ership. 6, 2019 er from Chief Lee ychild to Jason ney, Premier	Pipelines	Tsuut'ina Nation are concerned what would happen to the oil pipelines that traverse the SR1 project. Accidents or malfunctions resulting from construction activities. The Project would intersect with several operating or inactive buried pipelines in the Project area, some of which also cross our reserve. These pipelines carry a variety of substances including high pressure and low-pressure product, natural gas and sour gas. Inquired about pipelines that cross the SR1 and what would happen to them. Many risks have not been sufficiently addressed, including risk of structural failures from pipelines.	At the meeting held on November 13, 2014, Alberta Transportation responded that any pipelines impacted by the SR1 project would probably be relocated, but specific information was not available at this time. At the August 23, 2017 meeting, Stantec responded that impacted pipelines would be relocated. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: The procedures for dealing with overhead and buried utilities located within constructions zones is highly regulated. All regulatory requirements will be strictly adhered to. Oil and gas pipelines operated by four companies (TransCanada Pipelines Ltd., Pengrowth Energy Corp., Veresen Inc., and Plains Midstream Canada) are located within the diversion channel, dam, and reservoir areas. Alberta Transportation are currently in contact with these utility owners and crossing agreements will be developed. Buried pipeline and overhead utilities will be relocated, moved or lowered as required. Prior to any soil disturbance, utility locate sweeps will be done and buried lines and pipelines will be flagged and marked. Pipeline crossings will be designed and maintained as required by the utility owners and in strict compliance with regulations. Daily hazard assessments will be conducted before work is undertaken in the vicinity of utilities. In the event of damage to existing pipelines, project personnel would contact the pipeline company's emergency contacts to address pipeline emergency response. The implementation preventative measures and of daily hazard assessments will greatly reduce the risk of accidental contact with utilities. In the unlikely event of damage to existing pipelines, project personnel would contact the emergency response. The implementation of preventative measures and of daily hazard assessments will greatly reduce the risk of accidental contact with utilities.	At the meeting held on October 11, 2018 Tsuut'ina Nation voiced concerns about pipelines that run through their lands and if work had to be done on those.	None at this time.	Ongoing: Working with First Nation

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				On May 14-15, 2018, August 8, 2018, September 21, 2018, and October 11, 2018, Alberta Transportation met with Tsuut'ina Nation to review their specific concerns and the responses and proposed mitigation measures in <i>Table 7-3 SR1 Project Specific Concerns and Responses – Tsuut'ina Nation.</i>			
				At the meeting held on October 11, 2018, Alberta Transportation described that the pipelines within the Project area would be retrofitted or relocated as required. It will be the responsibility of the pipeline operators to clean up any spills. Alberta Transportation confirmed only pipelines within the Project area would be moved, not pipelines on Tsuut'ina lands. Alberta Transportation also discussed accidents and malfunctions, and described that the pipelines within the Project area would be retrofitted or relocated as required. It will be the responsibility of the pipeline operators to clean up any spills. Alberta Transportation confirmed only pipelines within the Project area would be moved, not pipelines on Tsuut'ina lands.			
106	September 21, 2018 Letter from Chief Lee Crowchild, Councillor Vincent Crowchild, and Councillor Lyle Dodginghorse	Project interactions Cumulative effects	Tsuut'ina Nation expressed concerns that the Bragg Creek Project was not designated for environmental assessment under CEAA 2012, and expressed concerns that the potential interaction between the Bragg Creek Project and SR1 would not be studied. Tsuut'ina Nation proposed multiple studies that they would like to be done.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
	May 30, 2016 Letter from Chief Roy Whitney to Canadian Environmental Assessment Agency	Visual impacts	Visual impacts to reserve lands as the Diversion Structure and the Storage Dam are likely to be visible from the reserve.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: The diversion structure is located about 2000 metres from the northwestern boundary of the Tsuut'ina Reserve and it is not likely to be visible from the Tsuut'ina reserve lands. The easterly portion of the off-stream reservoir dam is located north of the Elbow River. The earth fill dam is approximately 27 metres tall at its highest point and it will be seeded to grass. It will blend into the existing contours and landscape. The dam at its highest point will be lower than the level of the surrounding high ridge immediately south of the Springbank road that currently dominates the local landscape. The dam may possibly be visible from Highway 8 south of the Elbow River, but it will most likely be hidden from view by the tall heavy tree growth along the river valley and its grass seeded side slopes.	At the meetings held on May-15, 2018, Tsuut'ina Nation noted that linear access changes, sensory disturbance, and increased predators are all potential effects of the Project. Tsuut'ina Nation stated that there should be a plan to prepare wildlife for these landscape changes.		Ongoing: Working with First Nation
108	September 21, 2018 Meeting between Alberta Transportation, Stantec, and Tsuut'ina Nation	Construction	Concerned about the use of concrete for the diversion structure.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation

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109	August 8, 2018 Meeting between Tsuut'ina Nation, Alberta Transportation, and Stantec	Meeting attendance	Alberta Environment and Parks (AEP) needs to be at the table.	At the meeting held on September 21, 2018, AEP was present for the morning discussion on flood mitigation for Redwood Meadows.	None at this time.	None at this time.	Ongoing: Working with First Nation
110	October 17, 2018 Letter from Norine Saddleback to Kate McEwen, Aboriginal Consultation Office, sent via email to Alberta Transportation.	Meeting attendance	Tsuut'ina Nation was concerned that the ACO was not present at the October 11, 2018 meeting.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
111	April 3, 2018 Draft Tsuut'ina Traditional Land Use Report for the Proposed Springbank Off- Stream Reservoir Project prepared by Trailmark Systems Inc.	Future development	Concern that once infrastructure is in place it will be easier to expand into new uses, and concerns that it will not remain a "dry" dam.	On November 23, 2018, Alberta Transportation provided its report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table. In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA for project design, including that the main objective of the project is to divert and retain a portion of Elbow River during a flood and release the water in a controlled manner after the threat of flood has subsided. The reservoir will not hold a permanent pool of water. Alberta Transportation also met with Tsuut'ina Nation December 6, 2018 to discuss the response and mitigation table.	None at this time.	None at this time.	Ongoing: Working with First Nation
112	August 8, 2018 Meeting between Tsuut'ina Nation, Alberta Transportation, and Stantec	Project purpose	If it becomes a manmade lake, what will happen.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
113	May 14, 2018 Springbank Off-Stream Reservoir Project EIS – Selected Section: Second Sufficiency Review by PGL Environmental Group, dated April 16, 2018. Provided via email on May 14, 2018.	Methodology Traditional Use	Scoping and valued component (VC) selection made without reference to traditional use information.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
114	May 14, 2018 Springbank Off-Stream Reservoir Project EIS – Selected Section: Second Sufficiency Review by PGL Environmental Group, dated April 16, 2018. Provided via email on May 14, 2018.	Methodology	Proponent has not provided clear statement as to why the design flood was selected, and how frequently this design flood is likely to be exceeded. Provide a flood frequency analysis incorporating effects of climate change, and determine if the 2013 flood is suitable as the design flood.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation

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	July 12, 2018 Springbank Offstream Reservoir Project EIS Technical Review and Information Requests by PGL Environmental Consultants, dated June 15, 2018.						
115	July 12, 2018 Springbank Offstream Reservoir Project EIS Technical Review and Information Requests by PGL Environmental Consultants, dated June 15, 2018.	Hydrology	Provide a rationale for the LAA selected for the hydrology assessment.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
116	July 12, 2018 Springbank Offstream Reservoir Project EIS Technical Review and Information Requests by PGL Environmental Consultants, dated June 15, 2018.	Hydrology	Cumulative effects for hydrology under construction and dry conditions should be assessed, including the proposed mitigation at Bragg Creek.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
117	May 14, 2018 Springbank Off-Stream Reservoir Project EIS – Selected Section: Second Sufficiency Review by PGL Environmental Group, dated April 16, 2018. Provided via email on May 14, 2018.	Flood frequency	Application does not provide 1:1000 year flood value.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
118	July 12, 2018 Springbank Offstream Reservoir Project EIS Technical Review and Information Requests by PGL Environmental Consultants, dated June 15, 2018.	TLRU	Clarify how TLRU information was incorporated into the analysis of effects.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
119	June 6, 2019 Letter from Chief Lee Crowchild to Jason Kenney, Premier	Consultation	Request a meaningful dialogue between government and the communities and stakeholders.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation

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120	November 13, 2014 Initial SR1 Meeting with	Environmental impacts	Tsuut'ina Nation are concerned about the environmental impacts to both McLean Creek and the Elbow River.	Possible impacts and mitigation measures related to concerns raised by the Tsuut'ina Nation will be addressed as part of the EIA.	None at this time.	None at this time	Ongoing: Working with First Nation
	Tsuut'ina Nation, Alberta Transportation, and			Alberta Transportation provided links to the EIA November 3, 2017, and to the March 2018 EIA on March 29, 2018.			
	DEMA Land Services			At meetings held on April 21, 2016 and August 23, 2017, Alberta Transportation indicated that he SR1 project was the main focus of the Government of Alberta and that the MC1 option would not be moving forward.			
				On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: The Diversion Structure will have minimal effect on the flow of the Elbow River or its course downstream when constructed. The three additional streams refer to small ephemeral streams that flow only part of the time. During construction of the diversion channel, the unnamed tributary (ID 1350) would be diverted into the diversion channel. Approximately 1,200 m of the tributary would be destroyed, with the lowest 300 m being fish habitat that would be lost. The loss of the 300 m of habitat in the tributary could be offset by the enhancement or construction of side channel habitat on the Elbow River that could provide rearing habitat for salmonids and cover for small-bodied fish.			
				The Project is designed to reduce the changes to the course of the river during extreme floods. The channel of the Elbow River experiences seasonal changes in flows. Such changes are greater during flood events. As discussed in Volume 3B, Section 6.4.4, the presence of the Project would decrease the amount of deposition and erosion of the channel bed during extreme flood events, compared to changes without the Project. Channel form and bedload (river bed particles) movement during extreme floods would remain the same with or without the Project. The Project is assessed as not resulting in significant changes to the Elbow River or local ecosystem. The diversion structure is designed to allow fish passage under all conditions.			
				On May 14-15, 2018, August 8, 2018, September 21, 2018, and October 11, 2018, Alberta Transportation met with Tsuut'ina Nation to review their specific concerns and the responses and proposed mitigation measures in <i>Table 7-3 SR1 Project Specific Concerns and Responses – Tsuut'ina Nation.</i>			
				On November 23, 2018, Alberta Transportation provided its report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table. In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA. Alberta Transportation committed to providing its response to CEAA IR3-45 (regarding additional information for alternative projects) to Tsuut'ina Nation once completed and, if requested, discussing the response. Alberta Transportation also met with Tsuut'ina Nation December 6, 2018 to discuss the response and mitigation table.			

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121	June 6, 2019 Letter from Chief Lee Crowchild to Jason Kenney, Premier	Review of project	Request an impartial review of the project by water management experts.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
122	June 6, 2019 Letter from Chief Lee Crowchild to Jason Kenney, Premier	Health	Request an acknowledgement that SR1 causes permanent negative outcomes in Rocky View County and for Tsuut'ina Nation, including health concerns.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
123	August 29, 2019 Meeting between Tsuut'ina Nation and Albertan Transportation	Project selection	Tsuut'ina Nation voiced their continued opposition to the project as it is currently planned.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
124	April 3, 2018 Draft Tsuut'ina Traditional Land Use Report for the Proposed Springbank Off- Stream Reservoir Project prepared by Trailmark Systems Inc.	Project selection	Believe that the selection of the Springbank Project shows a patterned, inherent bias against Tsuut'ina's community's interests in favour of more prosperous, non-Indigenous Calgarians and their subdivisions.	None at this time.	None at this time.	None at this time.	Ongoing: Working with First Nation
125	November 13, 2014 Initial SR1 Meeting with Tsuut'ina Nation, Alberta Transportation, and DEMA Land Services	McLean Creek option (MC1)	Tsuut'ina Nation inquired about the McLean Creek option (MC1) and why no one from Alberta had contacted Tsuut'ina on that option.	At the meeting held on November 13, 2014, Alberta Transportation responded that the SR1 technical work would also include a review of MC1, but the SR1 project was the preferred flood mitigation project. At meetings held on April 21, 2016 and August 23, 2017, Alberta Transportation indicated that he SR1 project was the main focus of the Government of Alberta and that the MC1 option would not be moving forward. The March 2018 EIA reviewed alternatives, including MC1. At the meetings held on March 1 and 7, 2018, and May 14-15, 2018, it was reiterated that SR1 was the project moving forward, not MC1. On November 23, 2018, Alberta Transportation provided its report, Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table. In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA. Alberta Transportation committed to providing its response to CEAA IR3-45 (regarding additional information for alternative projects) to Tsuut'ina Nation once completed and, if requested, discussing the response. Alberta Transportation met with Tsuut'ina Nation December 6, 2018 to discuss the response and mitigation table.	None at this time.	None at this time.	Ongoing: Working with First Nation
126	August 23, 2017 Meeting between Alberta Transportation, Stantec,	McLean Creek option	Critical that the MC1 location was not identified on the Stantec maps of the SR1 project area.	At the meeting held on August 23, 2017, the location of McLean Creek was pointed out, and it was stated that Alberta Transportation had hired other engineering firms to undertake work at McLean Creek in order to provide details on alternatives. Stantec emphasized that the	At the meeting held on May 14, 2018, Tsuut'ina Nation requested copies of large-scale maps showing MC1, Bragg Creek, SR1, Bow River,	Alberta Transportation updated the maps and provided copies to Tsuut'ina Nation	No further action required.

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	and Tsuut'ina Nation leadership.			Government of Alberta had made their decision that the SR-1 project was the one to move forward. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: The MC1 location has been mapped and these maps are included in the EIA submission. At the meetings held on May 14-15, 2018, Alberta Transportation provided large copies of the maps requested by Tsuut'ina Nation.	Tsuut'ina Nation and other components relevant to the Project.		
127	August 23, 2017 Meeting between Alberta Transportation, Stantec, and Tsuut'ina Nation leadership. April 3, 2018 Draft Tsuut'ina Traditional Land Use Report for the Proposed Springbank Off-Stream Reservoir Project prepared by Trailmark Systems Inc. June 6, 2019 Letter from Chief Lee Crowchild to Jason Kenney, Premier	McLean Creek option	Tsuut'ina indicated that they live in an arid climate and water is very important, they saw MC1 as an opportunity to benefit from water that could be stored behind the MC1 dam. Believe that Maclean Creek is a better location for a diversion project, and believe third-party expert opinion supports this. RECOMMENDATION: Reconsider Maclean Creek and other alternatives and consult. The cost and speed at which the SR1 project could be built over the McLean Creek option. Request a complete and updated costing of SR1 and the McLean Creek option, including benefits of water storage in the McLean Creek option.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-3 SR1 Project Specific Concerns and Responses - Tsuut'ina Nation</i> from the March 2018 EIA: The conceptual design for the MC1 option is a dry reservoir but maintains a small permanent pond of 3.5 million m³ of water to control sediment migration to the outlet structure. The MC1 option does not provide water storage. At meetings held on April 21, 2016 and August 23, 2017, Alberta Transportation indicated that the SR1 project was the main focus of the Government of Alberta and that the MC1 option would not be moving forward. The March 2018 EIA reviewed alternatives, including MC1. At the meetings held on March 1 and 7, 2018, and May 14-15, 2018, it was reiterated that SR1 was the project moving forward, not MC1. On May 14-15, 2018, August 8, 2018, September 21, 2018, and October 11, 2018, Alberta Transportation met with Tsuut'ina Nation to review their specific concerns and the responses and proposed mitigation measures in <i>Table 7-3 SR1 Project Specific Concerns and Responses – Tsuut'ina Nation.</i> On November 23, 2018, Alberta Transportation provided its report, <i>Response to Tsuut'ina Nation Traditional Land and Resource Use Information including Mitigation Table.</i> In the mitigation table, Alberta Transportation provided the mitigation measures proposed in the EIA for project design. Alberta Transportation provided the mitigation measures proposed in the EIA for project design. Alberta Transportation provided the mitigation measures proposed in the EIA for project design. Alberta Transportation committed to providing its response to CEAA IR3-45 (regarding additional information for alternative projects) to Tsuut'ina Nation once completed and, if requested, discussing the response. Alberta Transportation also met with Tsuut'ina Nation December 6, 2018 to discuss the response and mitigation table.	None at this time.	None at this time.	Ongoing: Working with First Nation
128	October 28, 2016 Meeting with the Tsuut'ina Nation Consultation Office, Alberta Transportation, Stantec, and DEMA Land Services	Environmental Assessment Information Sharing	Tsuut'ina Consultation Director requested information on what was occurring on the Environmental Assessments being undertaken for the Springbank Off-stream Reservoir.	At the meeting held on October 28, 2016, Stantec agreed to provide the Tsuut'ina Nation an outline of the work being undertaken for the EIA required by the CEAA when that work was completed. At the meeting held on October 28, 2016, Alberta Transportation made an offer that Stantec could come into the Tsuut'ina community and undertake a workshop related to the EIA underway at the Springbank SR1. No response was received from Tsuut'ina Nation.	None at this time.	None at this time.	Ongoing: Working with First Nation

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				Workshops to discuss the TLRU sections of the EIA (Volumes 3A and 3B) were held March 1, 2, 6, and 7, 2018 on the Tsuut'ina reserve.			
129	April 21, 2016 Meeting with Tsuut'ina Nation, Alberta Transportation, and DEMA Land Services	Information sharing	Tsuut'ina requested a copy of a Letter of Objection from a Treaty 7 Nation mentioned in the CEAA submission.	At the meeting held on April 21, 2016, Alberta Transportation indicated they could not share the letter as it was private communication, and recommended that Tsuut'ina inquire directly with that Treaty 7 Nation.	None at this time.	Alberta Transportation advised that it could not provide the requested document because it was a private communication.	No further action required.
130	July 15, 2017 Phone calls between Chief Lee Crowchild and Dallas Maynard.	Confirmation of SR1 Site Visit protocols	Chief Crowchild did not want DEMA or Alberta Transportation accompanying his Consultation teams when they were in the field on their Site Visits	Alberta Transportation agreed that no one from DEMA/Alberta Transportation would accompany Tsuut'ina into the field. Confirmed that Alberta Transportation would arrange the access to each of the SR1 properties and would maintain as safe a work environment as was possible and would provide daily COR Hazard Assessment reviews prior to commencing the Site Visits.	The Tsuut'ina Consultation technicians proceeded to inspect the various SR1 properties with DEMA/Alberta Transportation remaining at the property perimeter.	Alberta Transportation agreed not to accompany Tsuut'ina consultants into the field.	The site visits proceeded as requested by Chief Crowchild. No further action required.

ALBERTA TRANSPORTATION SPRINGBANK OFF-STREAM RESERVOIR PROJECT RESPONSE TO AGENCY CONFORMITY REVIEW OF ROUND 1 PART 2, DATED AUGUST 6, 2019

Attachment 1-2.2 CEAA Indigenous Groups December 2019

ATTACHMENT 1-2.2 CEAA INDIGENOUS GROUPS



ALBERTA TRANSPORTATION SPRINGBANK OFF-STREAM RESERVOIR PROJECT RESPONSE TO AGENCY CONFORMITY REVIEW OF ROUND 1 PART 2, DATED AUGUST 6, 2019

Attachment 1-2.2 CEAA Indigenous Groups December 2019



Indigenous Stakeholder: **ERMINESKIN CREE NATION**

	Document or Meeting Reference	2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. Indigenous Group Response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
1	June 27, 2017 Meeting between Ermineskin Cree Nation and Alberta Transportation.	Traditional use study	Ermineskin Cree Nation indicated they would like to tour the SR1 lands and potentially undertake a Traditional Land Use Study.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-8 SR1 Project Specific Concerns and Responses – Ermineskin Cree Nation</i> (Table 7-8) from the March 2018 Environmental Impact Assessment (EIA): Alberta Transportation has requested a budget from Ermineskin Cree Nation to undertake a site visit and a traditional land use/traditional ecological study. Ermineskin Cree Nation provided a budget for a Traditional Knowledge and Use Study (TUS) in April 2018 and it was approved by Alberta Transportation on April 9, 2018. On June 26, 2018 Alberta Transportation met with Ermineskin Cree Nation to review their specific concerns and the responses and proposed mitigation measures in Table 7-8.	On June 25, 2018, Ermineskin Cree Nation provided their report Ermineskin Cree Nation Traditional Knowledge and Use Study: Springbank Off-Stream Reservoir Project by Willow Springs Strategic Solutions, dated June 2018.	Alberta Transportation approved Ermineskin Cree Nation's TUS budget on April 9, 2018.	No further action required.
2	January 5, 2018 Letter provided by JFK Law Corporation on behalf of Ermineskin Cree Nation June 25, 2018 Letter addressed to Dallas Maynard from Jeff Langlois, JFK Law Corporation on behalf of Ermineskin Cree Nation. June 25, 2018 Springbank EIS Technical comments – Ermineskin Cree Nation and Blood Tribe. June 26, 2018 Meeting between Ermineskin Cree Nation, Alberta Transportation, and Stantec.	Impacts to water Impacts to health Impacts to traditional territory Treaty rights	Alberta Transportation has not made adequate efforts to obtain information about: an assessment of country foods relied upon by the Ermineskin Cree Nation; traditional territory of Ermineskin Cree Nation; impacts to drinking water and recreational waters by Ermineskin Cree Nation; and potential health and socioeconomic effects of the project on Ermineskin Cree Nation. The proponent has failed to adequately assess the impacts to the current use of lands for traditional purposes and potential impacts to Ermineskin Cree Nation's rights. The proponent has failed to understand the scope of Treaty rights held by the Ermineskin Cree Nation. No meaningful efforts have been made to gather information from the Ermineskin Cree Nation. Proponent has failed to gather baseline information regarding the location of lands which	In a letter dated January 26, 2018, Alberta Transportation described the timelines for the EIA submission, indicating that the timelines had been extended by 60 days to undertake further Indigenous engagement activities. Alberta Transportation also proposed a workshop to discuss Traditional Land and Resource Use (TLRU) and obtain feedback from Ermineskin Cree Nation. Alberta Transportation also welcomed written feedback on the updated EIA TLRU sections (Volumes 3A and 3B), which were provided February 5, 2018. In a letter dated January 29, 2018, Alberta Justice responded to the January 5, 2018 letter, referencing the January 26, 2018 letter and Alberta Transportation's offer to hold a workshop. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of Table 7-8 from the March 2018 EIA: Following the Canadian Environmental Assessment Agency's (CEAA) non conformancy review revisions to the EIA were underway to address regulator comments. In December 2017 Alberta Transportation was looking for feedback from the Ermineskin Cree Nation on the TLRU sections. As the TLRU was updated in early February, a revised TLRU section was sent to Ermineskin Cree Nation on February 5th and Alberta Transportation requested feedback on that document. Alberta Transportation offered a workshop with Ermineskin Cree Nation to better understand how the project potentially impacts Ermineskin Cree Nation. No response was received. The potential effects to country foods, drinking water and health have been assessed within the EIA, and were included in the revised TLRU section sent on February 5th. Effects to socioeconomic conditions have been included in this EIA. Any information provided by the Ermineskin Cree Nation has been included within the assessment.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group

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			Ermineskin Cree Nation access to exercise Treaty rights. Ermineskin Cree Nation feels that the EIA was done incorrectly as it did not involve Ermineskin Cree Nation. Ermineskin Cree Nation stated that the EIA did not consider impacts to Treaty rights and this was very concerning to Ermineskin Cree Nation. Ermineskin Cree Nation. Ermineskin Cree Nation stated that if the environment is affected, then rights are also affected. Ermineskin Cree Nation noted that it is not understood how much land is needed to meaningfully exercise Treaty rights and identified this as a limitation of the EIA. Identifying what baseline information is needed to understand impacts to Treaty rights was also identified as an unknown when conducting an assessment of rights.	On June 26, 2018 Alberta Transportation met with Ermineskin Cree Nation to review their specific concerns and the responses and proposed mitigation measures in Table 7-8. In a letter dated January 28, 2019, Alberta Transportation requested input from Ermineskin Cree Nation on its views and perspectives on its Aboriginal and Treaty rights, cultural and experiential values, and country foods. A deadline of February 28, 2019 was given for written feedback to be included in the CEAA information request responses. Feedback received after the deadline will be incorporated into regulatory submissions and project planning, as appropriate. To date, Ermineskin Cree Nation has not responded to this letter.			
3	June 25, 2018 Springbank Offstream Reservoir Project EIS Technical Review and Information Requests by PGL Environmental Consultants, dated June 15, 2018. June 25, 2018 Springbank EIS Technical comments – Ermineskin Cree Nation and Blood Tribe. June 26, 2018 Meeting between Ermineskin Cree Nation, Alberta Transportation, and Stantec.	TLRU	Clarify how TLRU information was incorporated into the analysis of effects. Incorporate information from recent Traditional Land Use report submitted by the Ermineskin Cree Nation. Ermineskin Cree Nation inquired how their TUS report would be used in the assessment and in decision making processes. Ermineskin Cree Nation recommends collaboration on what the results of the review of the TUS report versus the EIA are, prior to submission of the review to CEAA.	At the meeting held on June 26, 2018, Stantec explained that the TKU study would be reviewed to understand how or if the information informs or potentially changes the EIA. Alberta Transportation noted that once the new material had been reviewed a document would be developed and submitted to Ermineskin Cree Nation and a meeting would be scheduled to discuss the document. Alberta Transportation responded to Ermineskin Cree Nation's TUS report on August 8, 2019 with mitigation measures and responses. This document included a mitigation table that listed mitigation measures and responded to concerns from Ermineskin Cree Nation's TUS report. Alberta Transportation met with Ermineskin Cree Nation on September 16, 2019 with the intent of discussing this document and obtaining feedback on the proposed mitigation measures.	Ermineskin Cree Nation did not want to specifically discuss the TUS response on September 16, 2019 and will respond in writing on a later date.	None at this time.	Ongoing: Working with Indigenous Group
4	June 25, 2018 Ermineskin Cree Nation Traditional Knowledge and Use Study: Springbank Off- Stream Reservoir Project by Willow Springs Strategic	Historical resources	Potential tipi rings, campground, and burial sites located within the project area. Ermineskin Cree Nation would like to work with the Ministry of Culture, Multiculturalism and Status of Women (Alberta Culture) to	Alberta Transportation responded to Ermineskin Cree Nation's TUS report on August 8, 2019 with mitigation measures and responses: • Alberta Transportation will participate in discussions with Alberta Culture and Indigenous groups regarding further investigation of identified sites located within the designated construction site boundary.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group

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	Solutions, dated June 2018. (TUS report)		determine if these sites are in fact tipi rings/burials.	Alberta Transportation will commit to adhering to any conditions Alberta Culture applies to these sites.			
		Presence of spiritually, ceremonial, and other important sites that were historically and	Alberta Transportation will notify Indigenous groups regarding project activities and schedules, including provision of project maps and design components.				
			are currently used. Potential impact on sites of potential historical and spiritual significance to Ermineskin Cree Nation.	Alberta Transportation will minimize disturbance to cultural and spiritual sites and subsurface impacts, and develop a protocol for recovery, collection, reporting on, and possible repatriation of artifacts found in consultation with Indigenous groups, which could include flagging, fencing, or providing signage of sites to prevent disturbance during construction.			
				Alberta Transportation will follow heritage resource protection methods as mandated by Alberta Culture and verify archaeological results with Indigenous groups.			
				The historical site mapped by Ermineskin Cree Nation has the potential to be affected by construction of the gravel road, diversion channel, diversion structure and floodplain berm. Alberta Transportation is committed to ongoing engagement Ermineskin Cree Nation to better understand the potential effects and discuss mitigation measures, where warranted. Sites located outside the project development area (PDA) are not anticipated to be affected by the Project.			
				The construction and management of the off-stream reservoir presents a unique opportunity with the conversion of private land to Crown land for future use by First Nations and stakeholders. Through the engagement process that included feedback from Indigenous groups, a draft principles of future land use for the Project has been developed. The primary use of all lands within the PDA is for flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses including traditional activities will be allowed to occur within the designated land use area (LUA). Alberta Transportation invites Ermineskin Cree Nation to participate in the engagement process for the LUA.			
5	June 25, 2018	Historic resources	Risks and impacts to cultural heritage sites is not clear, and	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group
	Springbank EIS Technical comments – Ermineskin Cree Nation and Blood Tribe.		mitigation measures do not provide substantive information.				maigenous Group
6	June 27, 2017 Meeting between Ermineskin Cree Nation and Alberta Transportation. June 25, 2018	Wildlife	nesting in the area, other wildlife such as elk, moose, deer and bears. Potential impacts of the Project on sensitive species of cultural importance, such as bald eagles.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of Table 7-8 from the March 2018 EIA: Several raptor stick and platform nests were observed in the Local Assessment Area (LAA), including an active bald eagle stick nest along the Elbow River. This nest occurs in the construction area near the off stream dam and low level outlet. If an active nest or den is found	None at this time.	None at this time.	Ongoing: Working with Indigenous Group
	Ermineskin Cree Nation Traditional Knowledge and Use Study: Springbank Off- Stream Reservoir Project by Willow Springs Strategic			during construction, it will be subject to a provincial or federal disturbance setback buffer and site-specific mitigation. Details of setback distances for species of management concern with potential to occur in the project development area are provided in the EIA Volume 3A, section 11.			

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Solutions, dated June 2018. (TUS report)			On June 26, 2018 Alberta Transportation met with Ermineskin Cree Nation to review their specific concerns and the responses and proposed mitigation measures in Table 7-8.			
			Alberta Transportation responded to Ermineskin Cree Nation's TUS report on August 8, 2019 with mitigation measures and responses:			
			Pre-construction surveys will be conducted to identify wildlife features (e.g., nests, dens) and appropriate site-specific mitigation developed.			
			Where possible, construction activities during the RAP for the key wildlife and biodiversity zone (KWBZ) identified along Elbow River (December 15 to April 30) will be avoided or reduced. This will limit potential sensory disturbance to wintering ungulates (ESRD 2015, Government of Alberta 2017). If construction activities must occur during this time period, a wildlife mitigation and monitoring plan will be developed in consultation with regulators, which will include monitoring ungulate habitat use and response to human disturbance.			
			Restrict all construction activities to the approved construction footprint.			
			Where fencing is proposed to restrict livestock access to project structures (e.g., diversion channel), wildlife-friendly fencing will be installed to allow ungulate passage.			
			Vegetation removal will be avoided during the RAP for nesting migratory birds and raptors. The recommended RAP to avoid destruction and disturbance to raptor nests is from February 15 to August 15. If vegetation removal is scheduled to occur within the RAP for migratory birds and raptors, a qualified wildlife biologist will inspect the site for active nests within seven days of the start of the proposed construction activity (e.g., vegetation removal, blasting).			
			If an active nest or den is found, it will be subject to a provincial or federal disturbance setback buffer and site-specific mitigation.			
			The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the Regional Assessment Area (RAA) is unlikely (see Volume 3A, Section 11.4.2).			
			Construction activities associated with the diversion channel, floodplain berm and off-stream dam have the potential to create physical or sensory barriers to ungulate movement, including elk. Mitigation measures listed in column 5 [of the TUS response] will be implemented to reduce the potential adverse effects of the Project on wildlife movement. A measurable change in the abundance and distribution of ungulates in the LAA during construction is possible, but a measurable change in the abundance of ungulates in the RAA is unlikely post-construction (see Volume 3A, Section 11.4.3).			
			During construction, vegetation removal has potential to result in direct habitat loss for migratory birds and fragmentation of migratory bird habitat, which can cause displacement of birds into other, less suitable habitat.			

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		Construction activities also have potential to result in indirect effects caused by increased disturbance (e.g., noise and artificial light, presence of workers), which can reduce habitat effectiveness in the LAA. For non-migratory birds, such as bald eagle, changes to terrestrial habitat (e.g., upland cover types) during construction would be similar as described for migratory birds for each habitat association. A measurable change in the abundance and distribution of migratory and non-migratory birds in the LAA during construction is possible, but a measurable change in the abundance of migratory and non-migratory birds in the RAA is unlikely post-construction (see Volume 3A, Section 11.4.7.2).			
Meeting between Ermineskin Cree Nation and Alberta Transportation. June 25, 2018 Ermineskin Cree Nation Traditional Knowledge and Use Study: Springbank Off- Stream Reservoir Project by Willow Springs Strategic Solutions, dated June 2018. (TUS report) Wildlife Wildlife Wildlife Wildlife	Concerns expressed to maintain the migratory patterns and game trails for wildlife. Potential impacts of the Project on wildlife migration routes and wildlife abundance and availability in the area.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of Table 7-8 from the March 2018 EIA: Although the Project would result in additional anthropogenic features on the landscape that might hinder wildlife movement in the local assessment area, Alberta Transportation has made adjustments to accommodate wildlife movement such as revegetating the floodplain berm with materials conducive for ungulate movement. The EIA concluded that the project residual effects on wildlife movement are unlikely to pose a long-term threat to the persistence or viability of a wildlife species, including species at risk (EIA, Volume 3A and 3B section 11). On June 26, 2018 Alberta Transportation met with Ermineskin Cree Nation to review their specific concerns and the responses and proposed mitigation measures in Table 7-8. Alberta Transportation responded to Ermineskin Cree Nation's TUS report on August 8, 2019 with mitigation measures and responses: Where fencing is proposed to restrict livestock access to project structures (e.g., diversion channel), wildlife-friendly fencing will be installed to allow ungulate passage. The diversion channel will be built with 3H:1V side slopes, which is within the range that most large mammals (e.g., elk,) are known to traverse. The side slopes and bottom of the diversion channel will be vegetated, except under the proposed bridges and at Pirmez Creek. Vegetated areas will provide a more conducive wildlife passage across the channel. To maintain ungulate movement within the KWBZ, the floodplain berm will be revegetated with materials conducive for ungulate movement. The section of reinforced concrete (~250 m) closest to Elbow River will be covered with topsoil and seeded with native grasses. The central portion of the floodplain berm includes approximately 550 m of exposed riprap, where sections will be filled with substrate finer than riprap, such as sand, gravel and vegetation to allow for more walkable sections (Austin a	None at this time.	None at this time.	Ongoing: Working with Indigenous Group

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				the effectiveness of mitigation implemented throughout the diversion channel.			
				Construction activities associated with the diversion channel, floodplain berm and off-stream dam have the potential to create physical or sensory barriers to ungulate movement, including elk. Mitigation measures listed in column 5 [of the TUS response] will be implemented to reduce the potential adverse effects of the Project on wildlife movement. A measurable change in the abundance and distribution of ungulates in the LAA during construction is possible, but a measurable change in the abundance of ungulates in the RAA is unlikely post-construction (see Volume 3A, Section 11.4.3).			
8	June 25, 2018	Wildlife	Provide regional data and	None at this time.	None at this time.	None at this time.	Ongoing: Working with
	Springbank Offstream Reservoir Project EIS Technical Review and Information Requests by PGL	Traditional use	traditional use data as a context for the baseline study results for elk. Potential for project to influence				Indigenous Group
	Environmental Consultants, dated June 15, 2018.		elk movement patterns.				
	June 25, 2018		Justify the 250 metre and 500 metre road buffers for elk.				
	Springbank EIS Technical comments – Ermineskin Cree Nation and Blood Tribe.		More detail needed regarding population trends and threats to elk.				
			Concerns regarding assessment of wildlife, especially elk, upon which the Ermineskin Cree Nation depend for hunting.				
9	June 25, 2018	Wildlife	Location of remote cameras not	Alberta Transportation responded to Ermineskin Cree Nation's TUS report	None at this time.	None at this time.	Ongoing: Working with
	Springbank Offstream Reservoir Project EIS Technical Review and Information Requests by PGL Environmental Consultants, dated June 15, 2018.		provided. Provide details on monitoring program to monitor project effects on wildlife.	on August 8, 2019 with mitigation measures and responses: A remote camera program will be designed with Alberta Environment and Parks, to identify whether the diversion channel acts as a barrier to wildlife movement during dry operations, especially for ungulates, and determine the effectiveness of mitigation implemented throughout the diversion channel. This will include monitoring along Elbow River to determine if wildlife use of the KWBZ has been affected by the construction and operation of the Project. Alberta Transportation will respond to monitoring data as needed. Although the specific details and design of the remote camera program will be determined with AEP prior to construction, the following describes the basis of a preliminary approach.			Indigenous Group
				 During the Project dry operation phase, a total of 14 remote cameras will be deployed in the wildlife LAA and monitor wildlife movement for at least one-year post-construction. The six remote cameras along the Elbow River will remain at the same locations as during the construction phase. Four remote cameras will be deployed soon after completion of project construction and placed at the same locations as pre-construction baseline surveys near Highway 22 (i.e., near the raised portion of the highway at the north end of the wildlife LAA). An additional four remote cameras will be installed along wildlife friendly fencing at the edge of the 			

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				diversion channel at crossable sections where there is vegetation. Remote cameras at the diversion channel will be spaced approximately 1 km apart.			
				 A wildlife biologist will visit the cameras every four months during construction and operation to change out memory cards and batteries and check on the overall status of equipment (e.g., positioning, weather related malfunctions, animal or human tampering of equipment). 			
10	June 25, 2018 Springbank Offstream Reservoir Project EIS Technical Review and Information Requests by PGL Environmental Consultants, dated June 15, 2018.	Wildlife	Justify why a 15 kilometre buffer of the project area was chosen for the RAA for wildlife.	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group
11	June 25, 2018 Springbank Offstream Reservoir Project EIS Technical Review and Information Requests by PGL Environmental Consultants, dated June 15, 2018.	Wildlife	Explain why elevation and aspect was not included in the grizzly bear habitat suitability model. Explain why a 500 metre buffer of industrial developments was used in the grizzly bear habitat suitability model. Clarify why average home range for female grizzly bear was chosen as the RAA for vegetation and wetlands.	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group
12	June 25, 2018 Springbank Offstream Reservoir Project EIS Technical Review and Information Requests by PGL Environmental Consultants, dated June 15, 2018.	Wildlife habitat	Recommend a habitat compensation plan be developed.	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group
13	June 25, 2018 Springbank Offstream Reservoir Project EIS Technical Review and Information Requests by PGL Environmental Consultants, dated June 15, 2018.	Wildlife Wildlife habitat	Definition of significance should include wildlife habitat and biodiversity. Concern that the conclusion of significance is discussed at a high level for wildlife and is not done for each species. Summary of the wildlife and biodiversity cumulative effects needed.	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group
14	June 25, 2018 Springbank Offstream Reservoir Project EIS	Birds	Explain using a seven day window for conducting a nest survey.	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group

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Technical Review and Information Requests by PGL Environmental Consultants, dated June 15, 2018.						
Meeting between Ermineskin Cree Nation, Alberta Transportation, and Stantec. September 16, 2019 Meeting between Ermineskin Cree Nation, Alberta Transportation, and Stantec.	Wildlife Sediment	Ermineskin Cree Nation expressed concerns about sediment affecting lands, elk, grizzly bear, plants, and water and noted that members need healthy plants and animals in order to also be healthy. Ermineskin Cree Nation are the stewards of the land, air and water, and would prefer that the lands within the Project area not be disturbed. Ermineskin Cree Nation is concerned about the amount of sediment buildup after a flood and how long it will take for vegetation and wildlife to return to the area.	At the meeting held on September 16, 2019, Alberta Transportation explained that in a 2013 level flood event, some areas would have substantial amounts of sediment deposited, however the majority of the reservoir area would have little sediment deposited, even in a 2013 event. Alberta Transportation committed to providing references to the EIA and additional information regarding sediment deposition and revegetation.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group
Meeting between Ermineskin Cree Nation and Alberta Transportation. June 25, 2018 Ermineskin Cree Nation Traditional Knowledge and Use Study: Springbank Off-Stream Reservoir Project by Willow Springs Strategic Solutions, dated June 2018. (TUS report) June 26, 2018 Meeting between Ermineskin Cree Nation, Alberta Transportation, and Stantec.	Medicinal plants	Concerns were expressed about the loss of medicinal plants. Potential destruction of plant species of medicinal and cultural significance to Ermineskin Cree Nation. Ermineskin Cree Nation expressed concerns regarding medicinal and ceremonial plants in the SR1 area. These plants may not be available elsewhere.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of Table 7-8 from the March 2018 EIA: Vegetation will be cleared from the project development area during construction. However, effects of the Project are not anticipated to result in the loss of traditionally used species in the local assessment area. The effects on plants and traditional use are assessed in the EIA in Volume 3A and 3B, sections 10 and 14. Alberta Transportation would provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction On June 26, 2018 Alberta Transportation met with Ermineskin Cree Nation to review their specific concerns and the responses and proposed mitigation measures in Table 7-8. Alberta Transportation responded to Ermineskin Cree Nation's TUS report on August 8, 2019 with mitigation measures and responses: • Alberta Transportation will notify Indigenous groups regarding project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods. • Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction. • Restrict construction activities to the approved construction footprint. • Reduce the removal of vegetation in wetlands to the extent possible. • Where possible, conduct ground level cutting/mowing/mulching of wetland vegetation instead of grubbing.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group

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		Where applicable, in areas not impacted by the permanent Project footprint, if ground conditions are encountered that create potential for rutting, admixing or compaction, minimize ground disturbance by using a protective layer such as matting or biodegradable geotextile and clay ramps or other approved materials between wetland root/seed bed and construction equipment.			
		Native areas disturbed by the Project would be reseeded using an Alberta Transportation native custom seed mix.			
		Traditionally used plant species will be directly affected due to vegetation removal and grading associated with construction, affecting 168 ha associated with permanent project infrastructure and approximately 566 ha of temporary workspace. Although individual plants will be removed from the PDA, none of the traditionally used species identified will be lost in the LAA, nor will vegetation communities supporting traditionally used plants be lost from the PDA (see Volume 3A, Section 10.4). Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction.			
		The Project is expected to operate in perpetuity and is not expected to be decommissioned. However, following construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded to meet Alberta Environment and Parks reclamation requirements. Native trees and shrubs should re-establish over time.			
		Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important.			
		Many of the potentially affected grassland and wetland plant communities have intrinsic adaptations to periodic flooding, while other species such as poplar and spruce would be less tolerant to flooding due to having a low anaerobic tolerance. Mortality of traditional use species found in upland plant communities is expected. However, these species are widespread and are expected to re-establish by natural recruitment; permanent loss of traditional use species is not predicted. Overall, residual effects on vegetation and wetlands post-flood would not result in the loss of native upland or wetland plant communities, nor would it result in the loss of wetland function from the LAA (see Volume 3B, Section 10.2).			
		Alberta Transportation will work with Ermineskin Cree Nation to develop a process to share monitoring results.			
17 June 25, 2018 Vegetation Springbank Offstream Reservoir Project EIS Technical Review and Information Requests by PGL Environmental Consultants, dated June 15, 2018.	Clarify the claim that native communities may be altered but areas would not be lost as a result of filling and draining the reservoir. Long term loss of traditional use plants in flooded areas not considered.	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group

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			Justify assessment of potential loss of rare plants.				
	June 25, 2018 Springbank Offstream Reservoir Project EIS Technical Review and Information Requests by Pe Environmental Consultants dated June 15, 2018.		Planting native shrub and tree species should be considered to mitigate the change in species diversity and loss of native vegetation communities. Mitigation should include developing management plan to prevent spread of regulated weeds. Provide an invasive species management plan.	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group
F	19 June 25, 2018	Wetlands	Potential reduction of wetland habitat for breeding and nesting	Alberta Transportation responded to Ermineskin Cree Nation's TUS report on August 8, 2019 with mitigation measures and responses:	None at this time.	None at this time.	Ongoing: Working with Indigenous Group
	Ermineskin Cree Nation Traditional Knowledge and Use Study: Springbank Off Stream Reservoir Project b Willow Springs Strategic Solutions, dated June 2018 (TUS report)	. y	and its effect on wildlife species that rely upon wetlands.	 Restrict construction activities to the approved construction footprint. Reduce the removal of vegetation in wetlands to the extent possible. Where possible, conduct ground level cutting/mowing/mulching of wetland vegetation instead of grubbing. Many of the potentially affected grassland and wetland plant communities have intrinsic adaptations to periodic flooding, while other species such as poplar and spruce would be less tolerant to flooding due to having a low anaerobic tolerance. Mortality of traditional use species found in upland plant communities is expected. However, these species are widespread and are expected to re-establish by natural recruitment; permanent loss of traditional use species is not predicted. Overall, residual effects on vegetation and wetlands post-flood would not result in the loss of native upland or wetland plant communities, nor would it result in the loss of wetland function from the LAA (see Volume 3B, Section 10.2). 			
	20 June 25, 2018 Springbank Offstream Reservoir Project EIS Technical Review and Information Requests by Penerone Environmental Consultants dated June 15, 2018.		How is direct/indirect loss or alteration of surface or groundwater flow patterns being measured with respect to wetland function?	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group
	21 June 25, 2018 Springbank Offstream Reservoir Project EIS Technical Review and Information Requests by Pe Environmental Consultants dated June 15, 2018.		Run numerical groundwater model simulations that predicts potential effects from construction dewatering. Uncertainty analyses should be completed in the revised numerical groundwater model report.	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group

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			Remodel flood simulations and conduct sensitivity analysis on the model results by introducing high permeability windows into the reservoir base.				
			Conduct and report particle tacking simulations and conduct sensitivity analyses on the particle tracking using high permeability windows.				
			Add bedrock heterogeneities and fractured bedrock to the conceptual hydrostratigraphic framework.				
22	June 25, 2018 Springbank Offstream Reservoir Project EIS Technical Review and Information Requests by PGL Environmental Consultants, dated June 15, 2018.	Hydrology	Provide a rationale for the LAA selected for the hydrology assessment.	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group
23	June 25, 2018 Springbank Offstream Reservoir Project EIS Technical Review and Information Requests by PGL Environmental Consultants, dated June 15, 2018.	Hydrology	Cumulative effects for hydrology under construction and dry conditions should be assessed, including the proposed mitigation at Bragg Creek.	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group
24	June 25, 2018 Springbank Offstream Reservoir Project EIS Technical Review and Information Requests by PGL Environmental Consultants, dated June 15, 2018.	Hydrology	Provide a flood frequency analysis incorporating effects of climate change, and determine if the 2013 flood is suitable as the design flood.	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group
25	June 25, 2018 Springbank Offstream Reservoir Project EIS Technical Review and Information Requests by PGL Environmental Consultants, dated June 15, 2018.	Cumulative effects	Scope of EIA must be expanded to include potential effects from all works recommended in the Deltares report.	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group
26	June 25, 2018 Ermineskin Cree Nation Traditional Knowledge and	Cumulative effects	Ermineskin Cree Nation finds the cumulative effects assessment	Alberta Transportation responded to Ermineskin Cree Nation's TUS report on August 8, 2019 with mitigation measures and responses:	None at this time.	None at this time.	Ongoing: Working with Indigenous Group

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	Use Study: Springbank Off- Stream Reservoir Project by Willow Springs Strategic Solutions, dated June 2018. (TUS report)		carried out by Alberta Transportation to be inadequate.	• The cumulative effects assessment conducted for the Project follows the AEP Terms of Reference and the CEA Agency's Operational Policy Statement entitled Addressing Cumulative Environmental Effects under the Canadian Environmental Assessment Act 2012 and the guide entitled Cumulative Effects Assessment Practitioners' Guide.			
				• The assessment of cumulative effects is presented consistent with the residual effects assessment: the assessment of effects is considered for the Project in two scenarios: construction and dry operations; and flood and post-flood operations. The cumulative effects assessment evaluates flood and post-flood operations that include consideration of overlapping infrastructure (pipelines, transmission lines, roads), other flood mitigation works, and considers the effects from reasonably foreseeable projects in regional and community development plans.			
				• Proposed mitigation for residual effects from the Project for all assessed values components is described in Appendix C of Volume 4.			
				The cumulative effects assessment considered the project effects that have the potential to act cumulatively with effects of other past, present and reasonably foreseeable future projects and activities in the RAAs for two scenarios: construction and dry operations and flood and post-flood operations. The assessment of potential cumulative effects of the Project was accomplished by recognizing the interactions table where such interactions may occur, and in consideration of the regional context. Proposed mitigation for residual effects from the Project for all assessed VCs described in Appendix C of Volume 4 was deemed adequate to mitigate potential Project contribution to cumulative effects.			
27	June 25, 2018 Springbank Offstream Reservoir Project EIS Technical Review and Information Requests by PGL Environmental Consultants, dated June 15, 2018.	Monitoring Vegetation Wetlands	Confirm if a monitoring plan for post-construction and post-flood conditions will be developed to monitor reclaimed areas (vegetation and wetlands).	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group
28	June 25, 2018 Ermineskin Cree Nation Traditional Knowledge and Use Study: Springbank Off- Stream Reservoir Project by Willow Springs Strategic Solutions, dated June 2018. (TUS report)	Monitoring	Recommendation: Alberta Transportation should work with Ermineskin Cree Nation in the design and implementation of environmental monitoring. As part of environmental monitoring, Alberta Transportation should engage with Ermineskin Cree Nation to discuss the possibility of training, employment, and contracting opportunities for Ermineskin Cree Nation. Recommendation: As part of its environmental monitoring plan, Alberta Transportation and	In a letter dated June 18, 2019, Alberta Transportation stated they are committed to Indigenous participation in the Project including training, employment, and contracting opportunities. Alberta Transportation responded to Ermineskin Cree Nation's TUS report on August 8, 2019 with mitigation measures and responses. Alberta Transportation will work with Ermineskin Cree Nation to develop a process to share monitoring results. At the meeting held on September 16, 2019, Indigenous participation was discussed. Alberta Transportation has committed to Indigenous participation in employment and monitoring and other aspects of the project, with more details needed to be worked out. Alberta Transportation expressed their willingness to have monthly meetings with Ermineskin Cree Nation to continue discussions on Indigenous participation.	At the meeting held on September 16, 2019, Ermineskin Cree Nation expressed interest in being involved in employment and monitoring.	None at this time.	Ongoing: Working with Indigenous Group

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			Ermineskin Cree Nation should develop a joint communications plan for the presentation of environmental monitoring results to the community and the incorporation of community feedback.				
29	June 26, 2018 Meeting between Ermineskin Cree Nation, Alberta Transportation, and Stantec.	Reclamation	Ermineskin Cree Nation would like to be involved in reclamation should the Project proceed and a flood take place.	At the meeting held on September 16, 2019, Indigenous participation was discussed. Alberta Transportation has committed to Indigenous participation in employment and monitoring and other aspects of the project, with more details needed to be worked out. Alberta Transportation expressed their willingness to have monthly meetings with Ermineskin Cree Nation to continue discussions on Indigenous participation.	At the meeting held on September 16, 2019, Ermineskin Cree Nation expressed interest in being involved in employment and monitoring, and expressed interest in being involved specifically in revegetation.	None at this time.	Ongoing: Working with Indigenous Group
30	June 25, 2018 Ermineskin Cree Nation Traditional Knowledge and Use Study: Springbank Off- Stream Reservoir Project by Willow Springs Strategic Solutions, dated June 2018. (TUS report)	Socio-economic Employment	That without clear targets for Ermineskin Cree Nation employment and contracting and a clear work plan to meet potential targets, Ermineskin Cree Nation and its members will be largely excluded from the potential socio-economic benefits of the Project. That the significant obstacles to employment for Ermineskin Cree Nation members, particularly with respect to education, experience, and culture, with impede the ability of Ermineskin Cree Nation members to benefit from the Project. That Ermineskin Cree Nation members employed on the Project could be subjected to discriminatory treatment and insensitive attitudes from supervisors and/or contractors, which could result in psychological harm and lower retention rates, among other potential effects. Recommendation: Alberta Transportation should engage with Ermineskin Cree Nation regarding the establishment of employment targets for Ermineskin Cree Nation community members and the	In a letter dated June 18, 2019, Alberta Transportation stated they are committed to Indigenous participation in the Project including training, employment, and contracting opportunities. Alberta Transportation responded to Ermineskin Cree Nation's TUS report on August 8, 2019 with mitigation measures and responses: • Alberta Transportation will participate in discussions with Indigenous groups regarding possible monitoring opportunities. • Alberta Transportation will adhere to government procurement policies and procedure with respect to labor, and goods and services. Alberta Transportation is preparing an Indigenous Participation Plan for the Project. Alberta Transportation is committed to Indigenous participation in the Project including potential training and contracting opportunities. Alberta Transportation intends to obtain feedback on the draft Plan from Ermineskin Cree Nation and other Indigenous groups. At the meeting held on September 16, 2019, Indigenous participation was discussed. Alberta Transportation has committed to Indigenous participation in employment and monitoring and other aspects of the project, with more details needed to be worked out. Alberta Transportation expressed their willingness to have monthly meetings with Ermineskin Cree Nation to continue discussions on Indigenous participation.	At the meeting held on September 16, 2019, Ermineskin Cree Nation expressed interest in being involved in employment and monitoring.	None at this time.	Ongoing: Working with Indigenous Group

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			development of a plan to meet those targets. As part its employment plan, Alberta Transportation should engage with Ermineskin Cree Nation regarding potential support for educational, training, and apprenticeship programs that could facilitate the employment of Ermineskin Cree Nation community members, and especially young people. Alberta Transportation should engage with Ermineskin Cree Nation regarding businesses in the community and potential business and contracting opportunities in relation to the Project. Where possible the Proponent and Ermineskin Cree Nation should attempt to identify opportunities for Direct Negotiated Contracts with Ermineskin Cree Nation businesses.				
31	June 25, 2018 Ermineskin Cree Nation Traditional Knowledge and Use Study: Springbank Off- Stream Reservoir Project by Willow Springs Strategic Solutions, dated June 2018. (TUS report)	Communication	Recommendation: Alberta Transportation should work with Ermineskin Cree Nation in the development of a communications plan for flood and post-flood operations.	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group
32	June 25, 2018 Springbank EIS Technical comments – Ermineskin Cree Nation and Blood Tribe. June 25, 2018 Ermineskin Cree Nation Traditional Knowledge and Use Study: Springbank Off-Stream Reservoir Project by Willow Springs Strategic Solutions, dated June 2018. (TUS report)	Land access	Justify how the removal of access to Areas B, C, and D does not constitute a long-term loss of available resources or access to lands. Recommend identifying mitigation measures to allow access during construction and dry operations to Area B, C, and D, subject to safety considerations. Potential impacts of the loss for an indefinite time of access to much of the Project Development	At the meeting held on June 26, 2018, Alberta Transportation discussed future land use. This will have to be discussed with the eventual project operator, Alberta Environment and Parks, but there is a possibility to have discussion regarding access to some of the areas. In a letter dated June 18, 2019, Alberta Transportation indicated they had created a draft post-construction land use document for the SR1 project that provides draft principles of future land use for the Project Development Area (PDA). The primary use of all lands within the PDA, including the LUA, is for flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses such as vegetation management and First Nations' traditional activities (including the exercise of treaty rights such as hunting) will be allowed within the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in	At the meeting held on September 16, 2019, Ermineskin Cree Nation noted they are open to discussions on future land use but are concerned about having open access to the public and open access for treaty users.	None at this time.	Ongoing: Working with Indigenous Group

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		Area (PDA) over the life of the Project on Ermineskin Cree Nation traditional use, consumption of wild meat, and ability to transmit their traditional way of life, culture, and knowledge to future generations. Recommendation: Alberta Transportation should attempt to ensure that Areas B and C of the PDA are accessible to Ermineskin Cree Nation for traditional use purposes, subject to safety considerations related to flooding. If Area C will contain grazing options that are privately managed, Alberta Transportation should work with private managers to ensure maximum access for Ermineskin Cree Nation hunters. Recommendation: Alberta Transportation should work with Ermineskin Cree Nation to design an access management plan for Areas B and C. Such a plan could support Ermineskin Cree Nation access to the area for hunting and other traditional purposes. Ermineskin Cree Nation expressed concern about loss of access to and disturbance of the Project area. The Project area is part of Ermineskin Cree Nation expressed concern about loss of access to and disturbance of the Project area. The Project area is part of Ermineskin Cree Nation expressed the area. Ermineskin Cree Nation stressed the importance for Ermineskin Cree Nation stressed the importance for Ermineskin Cree Nation expressed concern about losing access to Area B. Ermineskin Cree Nation expressed concern about losing access to Area B for traditional land and resource use become part of mitigation.	a positive change to the ability to exercise Section 35 rights and to engage in traditional uses. Alberta Transportation responded to Ermineskin Cree Nation's TUS report on August 8, 2019 with mitigation measures and responses. The construction and management of the off-stream reservoir presents a unique opportunity with the conversion of private land to Crown land for future use by First Nations and stakeholders. Through the engagement process that included feedback from Indigenous groups, a draft principles of future land use for the Project has been developed. The primary use of all lands within the PDA is for flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses include traditional activities, including the exercise of treaty rights such as hunting will be allowed to occur within the designated land use area (LUA). Alberta Transportation invites Ermineskin Cree Nation to participate in the engagement process for the LUA. At the meeting held on September 16, 2019, future land use was discussed. Alberta Transportation expressed their willingness to have monthly meetings with Ermineskin Cree Nation to continue discussion on future land use.			

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33	Ermineskin Cree Nation Traditional Knowledge and Use Study: Springbank Off- Stream Reservoir Project by Willow Springs Strategic Solutions, dated June 2018. (TUS report)	Hunting	Recommendation: Prior to construction, Alberta Transportation should invite Ermineskin Cree Nation to hunt in the PDA.	Alberta Transportation responded to Ermineskin Cree Nation's TUS report on August 8, 2019 with mitigation measures and responses. Alberta Transportation will notify Indigenous groups regarding project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods. Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction land access management. The construction and management of the off-stream reservoir presents a unique opportunity with the conversion of private land to Crown land for future use by First Nations and stakeholders. Through the engagement process that included feedback from Indigenous groups, a draft principles of future land use for the Project has been developed. The primary use of all lands within the PDA is for flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses include traditional activities, including the exercise of treaty rights such as hunting will be allowed to occur within the designated land use area (LUA). Alberta Transportation invites Ermineskin Cree Nation to participate in the engagement process for the LUA.	At the meeting held on September 16, 2019, Ermineskin Cree Nation noted they are open to discussions on future land use but are concerned about having open access to the public and open access for Treaty uses.	None at this time.	Ongoing: Working with Indigenous Group
34	June 25, 2018 Ermineskin Cree Nation Traditional Knowledge and Use Study: Springbank Off- Stream Reservoir Project by Willow Springs Strategic Solutions, dated June 2018. (TUS report)	Ermineskin Cree Nation Traditional Knowledge and Use Study: Springbank Off- Stream Reservoir Project by Willow Springs Strategic Solutions, dated June 2018.	construction, Alberta Transportation should invite Ermineskin Cree Nation to harvest medicinal plants in the PDA.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of Table 7-8 from the March 2018 EIA: Vegetation will be cleared from the project development area during construction. However, effects of the Project are not anticipated to result in the loss of traditionally used species in the local assessment area. The effects on plants and traditional use are assessed in the EIA in Volume 3A and 3B, sections 10 and 14. Alberta Transportation would provide opportunities for harvesting or	At the meeting held on September 16, 2019, Ermineskin Cree Nation noted they are open to discussions on future land use but are concerned about having open access to the public and open access for Treaty uses.	None at this time.	Ongoing: Working with Indigenous Group
				relocating medicinal and ceremonial plants prior to construction. Alberta Transportation responded to Ermineskin Cree Nation's TUS report on August 8, 2019 with mitigation measures and responses. Alberta Transportation will notify Indigenous groups regarding project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods. Alberta Transportation will maintain access to identified current use sites (located outside of the designated construction and project site limits) during construction and operations, and Alberta Transportation will advise Indigenous groups on post-construction land access management. The construction and management of the off-stream reservoir presents a unique opportunity with the conversion of private land to Crown land for future use by First Nations and stakeholders. Through the engagement process that included feedback from Indigenous groups, a draft principles of future land use for the Project has been developed. The primary use of all lands within the PDA is for flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses include traditional activities, including the exercise of treaty rights such as hunting will be allowed to occur within the designated land use area (LUA). Alberta Transportation invites Ermineskin Cree Nation to participate in the engagement process for the LUA.			

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3	5 June 25, 2018 Ermineskin Cree Nation Traditional Knowledge and Use Study: Springbank Off- Stream Reservoir Project by Willow Springs Strategic Solutions, dated June 2018. (TUS report)	Traditional use Community programming	Recommendation: Given the potential negative effects of the Project on Ermineskin Cree Nation traditional use and traditional knowledge, and the traditional way of life and culture of its people, Alberta Transportation should discuss ways to support programming within the community to strengthen the transmission of Ermineskin Cree Nation way of life and culture to future generations.	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group
3	6 June 25, 2018 Ermineskin Cree Nation Traditional Knowledge and Use Study: Springbank Off- Stream Reservoir Project by Willow Springs Strategic Solutions, dated June 2018. (TUS report)	Cultural-sensitivity training	Alberta Transportation should engage with Ermineskin Cree Nation regarding the design and implementation of a Cree cultural-sensitivity training program that is mandatory for all Project employees and contractors.	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group
3	June 25, 2018 Ermineskin Cree Nation Traditional Knowledge and Use Study: Springbank Off- Stream Reservoir Project by Willow Springs Strategic Solutions, dated June 2018. (TUS report)	Decommissioning	Recommendation: In the event that the Project is to be decommissioned, Alberta Transportation should engage with Ermineskin Cree Nation regarding the design, implementation, and monitoring of its Reclamation Plan to maximize the use of Ermineskin Cree Nation TEK and support Ermineskin Cree Nation employment in the reclamation process.	Alberta Transportation responded to Ermineskin Cree Nation's TUS report on August 8, 2019 with mitigation measures and responses. The Project is expected to operate in perpetuity and is not expected to be decommissioned.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group
3	January 5, 2018 Letter provided by JFK Law Corporation on behalf of Ermineskin Cree Nation	EIA timeline	Request clarification as to why Ermineskin Cree Nation is being asked for comments on the EIA, given that the EIA does not conform to the EIA guidelines. Information cannot be provided in the time frame given. Request Alberta Transportation's timeline for amending the EIA.	In a letter dated January 26, 2018, Alberta Transportation described the timelines for the EIA submission, indicating that the timelines had been extended by 60 days to undertake further Indigenous engagement activities. Alberta Transportation also proposed a workshop to discuss TLRU and obtain feedback from Ermineskin Cree Nation. Alberta Transportation also welcomed written feedback on the updated EIA TLRU sections (Volumes 3A and 3B), which were provided February 5, 2018. In a letter dated January 29, 2018, Alberta Justice responded to the January 5, 2018 letter, referencing the January 26, 2018 letter and Alberta Transportation's offer to hold a workshop. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of Table 7-8 from the March 2018 EIA: Following CEAA'S non conformancy review revisions to	Ermineskin Cree Nation submitted documents to CEAA on June 25, 2018, including a TUS report and technical reviews of the EIA.	Project timelines for resubmission of the EIA were extended by 60 days in order to undertake further indigenous engagement activities. Alberta Transportation has committed to responding to Ermineskin Cree Nation's submissions to CEAA.	No further action required.

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				the EIA were underway to address regulator comments. In December 2017 Alberta Transportation was looking for feedback from the Ermineskin Cree Nation on the TLRU sections. As the TLRU was updated in early February, a revised TLRU section was sent to Ermineskin Cree Nation on February 5th and Alberta Transportation requested feedback on that document. Alberta Transportation offered a workshop with Ermineskin Cree Nation to better understand how the project potentially impacts Ermineskin Cree Nation and is awaiting a response.			
				Project timelines for resubmission of the EIA were extended by 60 days in order to undertake further indigenous engagement activities. Feedback was requested by March 1, 2018 in order to meet a resubmission date of end March 2018. Relevant information, concerns and recommendations received after the EIA has been filed in March 2018 will be used for project planning and implementation purposes, where applicable.			
				On June 26, 2018 Alberta Transportation met with Ermineskin Cree Nation to review their specific concerns and the responses and proposed mitigation measures in Table 7-8.			
39	January 5, 2018 Letter provided by JFK Law Corporation on behalf of Ermineskin Cree Nation	Resources and time provided to First Nation.	Request time to provide a TUS report outlining Ermineskin Cree Nation's use of the project area. Request sufficient time and resources to provide additional information regarding other areas of non-conformity.	In a letter dated January 26, 2018, Alberta Transportation described the timelines for the EIA submission, indicating that the timelines had been extended by 60 days to undertake further Indigenous engagement activities. Alberta Transportation also proposed a workshop to discuss TLRU and obtain feedback from Ermineskin Cree Nation. Alberta Transportation also welcomed written feedback on the updated EIA TLRU sections (Volumes 3A and 3B), which were provided February 5, 2018.	Ermineskin Cree Nation submitted documents to CEAA on June 25, 2018, including a TUS report and technical reviews of the EIA.	Project timelines for resubmission of the EIA were extended by 60 days in order to undertake further indigenous engagement activities. Alberta Transportation has committed to responding to Ermineskin Cree	No further action required.
			or non-someoning.	In a letter dated January 29, 2018, Alberta Justice responded to the January 5, 2018 letter, referencing the January 26, 2018 letter and Alberta Transportation's offer to hold a workshop.		Nation's submissions to CEAA.	
			On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of Table 7-8 from the March 2018 EIA: Project timelines for resubmission of the EIA were extended by 60 days in order to undertake further indigenous engagement activities.				
				Alberta Transportation provided Ermineskin Cree Nation with the revised draft TLRU sections for review and comment under correspondence dated February 6, 2018. Alberta Transportation also offered a workshop with the goal of better understanding potential impacts of the Project to Ermineskin Cree Nation and to provide responses to the concerns raised to date, and is awaiting a response.			
				Relevant information, concerns and recommendations received after the EIA has been filed in March 2018 will be used for project planning and implementation purposes, where applicable.			
				On June 26, 2018 Alberta Transportation met with Ermineskin Cree Nation to review their specific concerns and the responses and proposed mitigation measures in Table 7-8.			

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40	June 25, 2018 Ermineskin Cree Nation Traditional Knowledge and Use Study: Springbank Off- Stream Reservoir Project by Willow Springs Strategic Solutions, dated June 2018. (TUS report) June 26, 2018 Meeting between Ermineskin Cree Nation, Alberta Transportation, and Stantec.	Engagement	Ermineskin Cree Nation is concerned that engagement began too late in the regulatory process and lacked the depth required for adequacy. Ermineskin Cree Nation has concerns about the adequacy of the assessment of potential Project impacts to Ermineskin Cree Nation. Recommendation: Alberta Transportation should negotiate with Ermineskin Cree Nation to provide resources and reasonable timelines to gather an adequate baseline of Ermineskin Cree Nation traditional use in the Project areas and produce a comprehensive assessment of potential impacts and a determination of significance. Recommendation: Upon completion of the community-based assessment of potential impacts to Ermineskin Cree Nation, Alberta Transportation should meet with Ermineskin Cree Nation to discuss concerns and address potential mitigation and compensation. Ermineskin Cree Nation would like to discuss with Alberta Transportation steps that can be taken to improve engagement outside of the statutory assessment process.	On June 26, 2018 Alberta Transportation met with Ermineskin Cree Nation to review their specific concerns and the responses and proposed mitigation measures in Table 7-8. In a letter dated January 28, 2019, Alberta Transportation requested input from Ermineskin Cree Nation on its views and perspectives on its Aboriginal and Treaty rights, cultural and experiential values, and country foods. A deadline of February 28, 2019 was given for written feedback to be included in the CEAA information request responses. Feedback received after the deadline will be incorporated into regulatory submissions and project planning, as appropriate. As of March 31, 2019, Ermineskin Cree Nation has not responded to this letter. Alberta Transportation responded to Ermineskin Cree Nation's TUS report on August 8, 2019 with mitigation measures and responses. Alberta Transportation has met directly with Ermineskin Cree Nation regarding the Project, facilitated a site visit to the Project site with Elders and knowledge holders, and has funded a Project-specific TUS report. Alberta Transportation commits to working with Ermineskin Cree Nation to discuss the concerns raised in the TUS report, including discussing mitigation measures if applicable. Alberta Transportation anticipates building upon engagement efforts to date to continue to strengthen relationships with potentially affected Indigenous groups. Information provided throughout the regulatory phase will be used to inform Project plans and mitigation, as appropriate.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group
41	June 26, 2018 Meeting between Ermineskin Cree Nation, Alberta Transportation, and Stantec.	Methodology	Ermineskin Cree Nation expressed an interest in discussing with Stantec and Alberta Transportation how the Methodology for Assessing Potential Impacts on the exercise of Aboriginal and Treaty Rights of the Proposed Frontier Oils Sands Mine Project, or portions of that methodology could be used on the SR1 project.	At the meeting held on June 26, 2018, Stantec indicated they would review this document.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group

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June 19, 2017 Letter provided by JFK Law Corporation on behalf of Ermineskin Cree Nation.	First Nations Involvement in the CEAA tour	Ermineskin Cree Nation objected to a tour of the Project area arranged by Alberta Transportation for the Natural Resources Conservation Board (NRCB) and the Canadian Environmental Assessment Agency (CEAA). Ermineskin Cree Nation objected to the lack of representation of First Nations whose Treaty rights and traditional uses may be impacted by the proposed Project. Ermineskin Cree Nation also concerned that they were not notified of the tour. Ermineskin Cree Nation requested that the tour be postponed until it can be conducted with proper notification to and involvement of First Nations.	Alberta Transportation responded in a letter on June 22, 2017 to let the Ermineskin Cree Nation know that the tour had been cancelled.	N/A	Alberta Transportation responded in a letter on June 22, 2017 to let the Ermineskin Cree Nation know that the tour had been cancelled.	No further action required.

Indigenous Stakeholder: FOOTHILLS OJIBWAY SOCIETY

	Document or Meeting Reference	3. Project Specific Aspect of the Concern Expressed	2. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. Indigenous Group response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
1	May 7, 2018 Meeting between Foothills Ojibway Society and Alberta Transportation	Traditional use	Concern regarding a location near Camp Kiwanis where members of the Foothills Ojibway historically visited to perform sweats and other activities.	At the meeting held on May 7, 2018, Alberta Transportation indicated that the area referred to was flooded in 2013. Alberta Transportation also indicated they were open to the Foothills Ojibway Society doing a site visit, subject to landowner access, if they would like to submit a budget. In an email on September 30, 2019, Alberta Transportation followed up to ask if Foothills Ojibway Society would like to do a site visit or tour of the SR1 Project. Alberta Transportation requested a budget for a site visit if they were interested, and also offered a meeting to provide an update on the project.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group Foothills Ojibway may submit a budget to complete a site visit. To date, no budget has been received.
2		Wildlife	Concern for animals in the area.	None at this time.	None at this time.	None at this time.	Ongoing: Working with indigenous Group

Indigenous Stakeholder: KTUNAXA NATION COUNCIL

	2. Project Specific Aspect of the Concern Expressed		4. Proponent Response on Effort to Avoid or Mitigate Concern	5. Indigenous Group response to Proponent's Effort to Avoid or	6. Details on How Concerns Were Addressed, Including	
				Mitigate Concern	Avoidance or Mitigation	
					Measures	
No concerns communicated by	the Ktunaxa Nation Council duri	ng this period.				

Indigenous Stakeholder: Louis Bull Tribe

November 22, 2018				Proponent's Effort to Avoid or Mitigate Concern	Were Addressed, Including Avoidance or Mitigation Measures	Outcomes/Comments
Louis Bull Tribe Traditional Land Use Assessment for the proposed Springbank Off- Stream Reservoir Project. (TUS report) March 4, 2019 Letter from Louis Bull Tribe in response to Alberta Transportation's January 28, 2019 request for input on CEAA information requests.	Treaty rights	Louis Bull Tribe expressed concerns relating to development in the Project area and potential impacts to Aboriginal and Treaty rights. The greatest concern of the Louis Bull Tribe is related to cumulative effects and increased impacts to Aboriginal and Treaty rights. Cumulative effects and incremental impacts to the health and abundance of resources provided under Louis Bull Tribe's Aboriginal and Treaty rights.	At the meeting held on November 6, 2018, Alberta Transportation discussed their desire to work with Indigenous groups to develop a future land use that includes access for traditional uses. In a letter dated June 18, 2019, Alberta Transportation indicated they had created a draft post-construction land use document for the SR1 project that provides draft principles of future land use for the Project Development Area (PDA). The primary use of all lands within the PDA, including the land use area (LUA), is for flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses such as vegetation management and First Nations' traditional activities (including the exercise of treaty rights such as hunting) will be allowed within the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights and to engage in traditional uses.	In an email sent on September 10, 2019, Louis Bull Tribe requested that the land be designated for Indigenous use only.	None at this time	Ongoing: Working with Indigenous Group.
			Alberta Transportation responded to Louis Bull Tribe's TUS report on August 8, 2019 with mitigation measures and responses. The cumulative effects assessment considered the Project effects that have the potential to act cumulatively with effects of other past, present and reasonably foreseeable future projects and activities in the Regional Assessment Areas (RAAs) for two scenarios: construction and dry operations and flood and post-flood operations. The assessment of potential cumulative effects of the Project was accomplished by recognizing the interactions table where such interactions may occur, and in consideration of the regional context. Proposed mitigation for residual effects from the Project for all assessed valued components (VC) described in Appendix C of Volume 4 was deemed adequate to mitigate potential Project contribution to cumulative effects.			
			The construction and management of the off-stream reservoir presents a unique opportunity with the conversion of private land to Crown land for future use by First Nations and stakeholders. Through the engagement process that included feedback from Indigenous groups, a draft principles of future land use for the Project has been developed. The primary use of all lands within the PDA is for flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses include traditional activities, including the exercise of treaty rights such as hunting will be allowed to occur within the designated land use area (LUA). Alberta Transportation invites LBT to participate in the engagement process for the LUA.			
	Funding for traditional use study	Request for a Traditional Use Study (TUS) (including a cultural impact assessment).	In an email on October 16, 2017, Alberta Transportation approved Louis Bull Tribe's budget for their TUS. On March 23, 2018, Alberta Transportation sent detailed responses to	Louis Bull Tribe provided their TUS report November 22, 2018.	In an email on October 16, 2017, Alberta Transportation approved Louis Bull Tribe's budget for their	No further action required.

Document or Meeting Reference	2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. Indigenous Group Response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
Maynard, DEMA Land Services			Project Specific Concerns and Responses – Louis Bull Tribe from the March 2018 Environmental Impact Assessment (EIA): Alberta Transportation approved Louis Bull Tribe's budget for a TUS. As of March 16, 2018, the TUS report has not yet been received by Alberta Transportation.			
November 22, 2018 Louis Bull Tribe Traditional Land Use Assessment for the broposed Springbank Off- Stream Reservoir Project.	Wildlife	Louis Bull Tribe noted concerns regarding local wildlife populations (including moose, deer, cougars, coyotes, wolves, beaver, and muskrat) and habitat loss, and suggested mitigation measures including adhering to the Restricted Activity Periods (RAP), reduction of the project footprint, and limitations on the uses of chemicals.	At the meeting held on November 6, 2018, Alberta Transportation stated that they would be following restricted activity periods during construction to help protect the fish and wildlife. Alberta Transportation responded to Louis Bull Tribe's TUS report on August 8, 2019 with mitigation measures and responses: • Pre-construction surveys will be conducted to identify wildlife features (e.g., nests, dens) and appropriate site-specific mitigation developed. • Where possible, construction activities during the RAP for the KWBZ identified along Elbow River (December 15 to April 30) will be avoided or reduced. This will limit potential sensory disturbance to wintering ungulates (ESRD 2015, Government of Alberta 2017). If construction activities must occur during this time period, a wildlife mitigation and monitoring plan will be developed in consultation with regulators, which will include monitoring ungulate habitat use and response to human disturbance. • Restrict all construction activities to the approved construction footprint. • Where possible, temporary workspaces and access roads will be in areas that avoid wildlife features and native vegetation (e.g., shrubland, treed areas, wetlands). Existing access roads and previously disturbed areas will be used, where feasible. • Where fencing is proposed to restrict livestock access to project structures (e.g., diversion channel), wildlife-friendly fencing will be installed to allow ungulate passage. • If an active nest or den is found, it will be subject to a provincial or federal disturbance setback buffer and site-specific mitigation. • The diversion channel will be built with 3H:1V side slopes, which is within the range that most large mammals (e.g., elk.) are known to traverse (McCorquodale 2003; Frair et al. 2005; Mao et al. 2005; The Bow Corridor Ecosystem Advisory Group 2012). • The side slopes and bottom of the diversion channel will be vegetated, except under the proposed bridges and at Pirmez Creek. Vegetated areas will provide a more conducive wil	None at this time.	None at this time	Ongoing, working with Indigenous Group

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				furthest from Elbow River, will be a 450 m earthen embankment vegetated with native grasses.			
				• A remote camera program will be designed with AEP to identify whether the diversion channel acts as a barrier to wildlife movement during dry operations, especially for ungulates, and determine the effectiveness of mitigation implemented throughout the diversion channel.			
				The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see Volume 3A, Section 11.4.2).			
				The mitigation measures outlined in Column 5 [of the TUS response], including revegetating the floodplain berm and installing wildlife friendly fencing, will be implemented to maintain wildlife movement through the Project area. The diversion channel has potential to fragment habitat in the local assessment area (LAA) and reduce landscape connectivity if wildlife do not cross; however, wildlife species richness and abundance are not expected to be influenced by habitat fragmentation from the Project in the RAA (see Volume 3A, Section 11.4.5).			
				There were no beaver dams or lodges identified within the construction footprint for the Project during the baseline wildlife surveys completed within the LAA and as a result, Alberta Transportation is not expecting to remove any dams or lodges. If an active beaver dam is identified within the construction footprint at a later date, mitigation for dam removal will be developed with the appropriate agencies (e.g., AEP) and the relevant permit(s) obtained, as required.			
4	November 6, 2018 Meeting between Louis Bull	Wildlife Fish	Louis Bull Tribe expressed concerns regarding fish and	At the meeting held on November 6, 2018, Alberta Transportation stated that they would be following restricted activity periods during construction	None at this time.	None at this time	Ongoing: Working with Indigenous Group.
	Tribe, Alberta Transportation, and Stantec	Construction	wildlife during construction.	to help protect the fish and wildlife. Alberta Transportation responded to Louis Bull Tribe's TUS report on August 8, 2019 with mitigation measures and responses: The Project is anticipated to result in a change in the availability of traditional resources for current use through loss or alteration of habitat during construction. Although there would be temporary displacement and disturbance to wildlife during construction, a measurable change in the abundance of wildlife in the RAA is unlikely (see Volume 3A, Section 11.4.2).			
				The mitigation measures outlined in Column 5 [of the TUS response], including revegetating the floodplain berm and installing wildlife friendly fencing, will be implemented to maintain wildlife movement through the Project area. The diversion channel has potential to fragment habitat in the LAA and reduce landscape connectivity if wildlife do not cross; however, wildlife species richness and abundance are not expected to be influenced by habitat fragmentation from the Project in the RAA (see Volume 3A, Section 11.4.5).			
				There were no beaver dams or lodges identified within the construction footprint for the Project during the baseline wildlife surveys completed			

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				within the LAA and as a result, Alberta Transportation is not expecting to remove any dams or lodges. If an active beaver dam is identified within the construction footprint at a later date, mitigation for dam removal will be developed with the appropriate agencies (e.g., AEP) and the relevant permit(s) obtained, as required.			
				Construction of the diversion channel will result in the loss of 1,854 m2 of fish habitat on the bed and banks of Elbow River and 300 m2 of fish habitat at the interception of tributary ID 1350. With the implementation of mitigation, the Project is unlikely to reduce the productivity or sustainability of a commercial, recreational or Aboriginal fishery as defined by the Fisheries Act.			
				During dry operations, there will be no changes to flow in Elbow River, and therefore no alterations to the quality of fish habitat. Overall, the Project is not expected to limit the availability of traditional resources for current use in the RAA (see Volume 3A, Section 8.4.4 and Section 14.8.1).			
5	November 22, 2018 Louis Bull Tribe Traditional Land Use Assessment for the	Fish Habitat	Impacts to fish and loss of fish habitat.	At the meeting held on November 6, 2018, Alberta Transportation stated that they would be following restricted activity periods during construction to help protect the fish and wildlife.	None at this time.	None at this time	Ongoing, working with Indigenous Group.
	proposed Springbank Off- Stream Reservoir Project.			Alberta Transportation responded to Louis Bull Tribe's TUS report on August 8, 2019 with mitigation measures and responses:			
				• Structures will be designed so that storm water runoff and wash water from the access roads, decks, side slopes, and approaches are directed into a retention pond or vegetated area to remove suspended solids, dissipate velocity, and prevent sediment and other deleterious substances from entering watercourses.			
				• Works in water will be timed with respect to the restricted activity periods (RAPs) wherever possible. For Elbow River, the RAP is May 01 – July 15 and September 16 – April 15. Condition and use of restricted activity periods will be provided within further project permitting and authorization under the Fisheries Act. For planning purposes, the Elbow River RAP will be applied as an avoidance and mitigation measure.			
				• To allow for fish passage and construction of the structures within the Elbow River, the Elbow River will be diverted, and flows will be maintained downstream by the construction of a temporary bypass channel.			
				• Drainage areas within the reservoir will be graded to reduce stranding of fish during release of stored flood water from the reservoir.			
				A monitoring program will be undertaken to identify if fish passage is impeded for migratory salmonids or other fish species.			
				Maintenance, debris removal on the structure, and on the fish passage structures will occur to accommodate fish passage.			
				• Debris will be cleaned from the structure gates after a flood recedes to allow unimpeded fish passage upstream over the structure.			
				 Isolated pools will be identified, marked, and a determination by a Qualified Aquatic Environmental Specialist will be made as to whether 			

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			there are stranded fish in the pool that require rescue and relocation to secure habitats in Elbow River. When the water has been fully drained, the low-level outlet canal will also be surveyed to identify isolated pools where fish might be stranded.				
				• Where debris removal from the structures is required, debris removal will be timed to avoid disruption to sensitive fish life stages (i.e., outside the RAP), unless the debris and its accumulation is immediately threatening to the integrity of the structure or relates to an emergency (i.e., risk of structure failure).			
				• During post-flood reservoir maintenance, areas that had isolated pools may be graded to prevent the isolation of fish in successive flood events.			
				Construction of the diversion channel will result in the loss of 1,854 m2 of fish habitat on the bed and banks of Elbow River and 300 m2 of fish habitat at the interception of tributary ID 1350. With the implementation of mitigation, the Project is unlikely to reduce the productivity or sustainability of a commercial, recreational or Aboriginal fishery as defined by the Fisheries Act.			
				During dry operations, there will be no changes to flow in Elbow River, and therefore no alterations to the quality of fish habitat. Overall, the Project is not expected to limit the availability of traditional resources for current use in the RAA (see Volume 3A, Section 8.4.4 and Section 14.8.1).			
6	November 22, 2018 Louis Bull Tribe Traditional	Ceremonial Plants Traditional Rights	Louis Bull Tribe noted ceremonial plants in the	Alberta Transportation responded to Louis Bull Tribe's TUS report on August 8, 2019 with mitigation measures and responses:	None at this time.	None at this time.	Ongoing: working with Indigenous Group.
	Land Use Assessment for the proposed Springbank Off-Stream Reservoir Project.	Traditional ritgino	construction area and suggested mitigation measures, including root retention, limitation of chemical herbicides, retention of	Alberta Transportation will notify Indigenous groups regarding project activities and schedules, including provision of Project maps and design components, and discuss key traditional harvesting periods.			
			riparian species, and harvest prior to construction.	Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction.			
				Restrict construction activities to the approved construction footprint.			
				Reduce the removal of vegetation in wetlands to the extent possible.			
				 Where possible, conduct ground level cutting/mowing/mulching of wetland vegetation instead of grubbing. 			
				Where applicable, in areas not impacted by the permanent Project footprint, if ground conditions are encountered that create potential for rutting, admixing or compaction, minimize ground disturbance by using a protective layer such as matting or biodegradable geotextile and clay ramps or other approved materials between wetland root/seed bed and construction equipment.			
				Native areas disturbed by the Project would be reseeded using an Alberta Transportation native custom seed mix.			
				Alberta Transportation will not apply herbicide within 30 m of plant species or ecological communities of management concern, wetland or			

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				waterbody. Spot spraying, wicking, mowing, or hand picking are acceptable measures for control of regulated weeds in this area.			
				• A licensed industrial pesticide applicator would be contracted to select and apply all herbicide in compliance with the procedures as outlined in the Code of Practice for Pesticides (Government of Alberta 2010b).			
				Traditionally used plant species will be directly affected due to vegetation removal and grading associated with construction, affecting 168 ha associated with permanent project infrastructure and approximately 566 ha of temporary workspace. Although individual plants will be removed from the PDA, none of the traditionally used species identified will be lost in the LAA, nor will vegetation communities supporting traditionally used plants be lost from the PDA (see Volume 3A, Section 10.4). Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction.			
				Following construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded with a native custom seed mix to meet AEP reclamation requirements. Native trees and shrubs should re-establish over time.			
				Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important.			
				Many of the potentially affected grassland and wetland plant communities have intrinsic adaptations to periodic flooding, while other species such as poplar and spruce would be less tolerant to flooding due to having a low anaerobic tolerance. Mortality of traditional use species found in upland plant communities is expected. However, these species are widespread and are expected to re-establish by natural recruitment; permanent loss of traditional use species is not predicted. Overall, residual effects on vegetation and wetlands post-flood would not result in the loss of native upland or wetland plant communities, nor would it result in the loss of wetland function from the LAA (see Volume 3B, Section 10.2).			
7	November 22, 2018 Louis Bull Tribe Traditional Land Use Assessment for the proposed Springbank Off- Stream Reservoir Project.	Impacts to riverbed	Impacts to the Elbow River bed.	At the meeting held on November 6, 2018 Alberta Transportation explained that the fish habitat lost would be offset under the rules set out by Fisheries and Oceans Canada (DFO). Alberta Transportation also stated that they would be adding water calming measures and erosion protection downstream of the gates as the gates may speed up the flow of the river in this location.	None at this time.	None at this time.	Ongoing, working with first Indigenous Groups.
8	March 4, 2019 Letter from Louis Bull Tribe in response to Alberta Transportation's January 28, 2019 request for input on CEAA information requests.	Monitoring	Louis Bull Tribe recommends engaging community members in long term monitoring efforts.	None at this time	None at this time	None at this time.	Ongoing, working with First Nations.
9	November 22, 2018	Monitoring	Louis Bull Tribe requests the opportunity to conduct site visits during and after construction to	Alberta Transportation responded to Louis Bull Tribe's TUS report on August 8, 2019 with mitigation measures and responses: Alberta Transportation will provide Louis Bull Tribe the opportunity for two site	None at this time	None at this time.	Ongoing, working with Indigenous Group.

	1. Document or Meeting Reference	2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. Indigenous Group Response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
	Louis Bull Tribe Traditional Land Use Assessment for the proposed Springbank Off- Stream Reservoir Project.		monitor any culturally significant sites.	visits, one during construction and one post-construction to observe application of prescribed mitigation measures and provide feedback.			
10	November 6, 2018 Meeting between Louis Bull Tribe. Alberta Transportation, and Stantec November 19, 2018 Louis Bull Tribe hosted an open house for their members. Alberta Transportation and DEMA attended. November 22, 2018 Louis Bull Tribe Traditional Land Use Assessment for the proposed Springbank Off-Stream Reservoir Project. March 4, 2019 Letter from Louis Bull Tribe in response to Alberta Transportation's January 28, 2019 request for input on CEAA information requests.	Future land use	Louis Bull Tribe stated that they would like to be consulted on future land use for SR1 area. Louis Bull Tribe noted that they would like to see this area reserved for Indigenous use. Members of Louis Bull Tribe expressed concerns over the loss of access to Crown lands. Louis Bull Tribe requests that the land taken up for this project be designated for Indigenous use only so they have the space to carry out traditional uses on the land. Louis Bull Tribe recommends providing access to the reservoir lands for Indigenous use.	At the meeting held on November 6, 2018, Alberta Transportation discussed their desire to work with Indigenous groups to develop future land use that includes access for traditional uses. At the open house held on November 19, 2018, Alberta Transportation explained that the majority of the project was on private land and future land use was being discussed with First Nations. In a letter dated June 18, 2019, Alberta Transportation indicated they had created a draft post-construction land use document for the SR1 project that provides draft principles of future land use for the Project Development Area (PDA). The primary use of all lands within the PDA, including the LUA, is for flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses such as vegetation management and First Nations' traditional activities (including the exercise of treaty rights such as hunting) will be allowed within the LUA. As such, the potential for increased access in the PDA relative to existing conditions (i.e., private land) would result in a positive change to the ability to exercise Section 35 rights and to engage in traditional uses. Alberta Transportation responded to Louis Bull Tribe's TUS report on August 8, 2019 with mitigation measures and responses: The construction and management of the off-stream reservoir presents a unique opportunity with the conversion of private land to Crown land for future use by First Nations and stakeholders. Through the engagement process that included feedback from Indigenous groups, a draft principles of future land use for the Project has been developed. The primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses include traditional activities, including the exercise of treaty rights such as hunting will be allowed to occur within the designated land use area (LUA). Alberta Transportation invites Louis Bull Tribe to participate in the engagement process for the LUA.	In an email sent on September 10, 2019, Louis Bull Tribe requested that the land be designated for Indigenous use only.	None at this time	Ongoing: Working with Indigenous Group.
11	November 6, 2018 Meeting between Louis Bull Tribe. Alberta Transportation, and Stantec November 22, 2018 Louis Bull Tribe Traditional Land Use Assessment for the proposed Springbank Off-Stream Reservoir Project. March 4, 2019	Vegetation	Louis Bull Tribe would like to be involved in a discussion regarding the revegetation of the SR1 area post construction. Louis Bull Tribe requests to be consulted on the reclamation activities along the banks of the Elbow River to ensure a healthy plant ecosystem. Louis Bull Tribe recommends involving community members in	At the meeting held on November 6, 2018, Alberta Transportation committed to continuing discussions on this topic. Alberta Transportation responded to Louis Bull Tribe's TUS report on August 8, 2019 with mitigation measures and responses: Following construction, areas disturbed by construction that are not required for operation and maintenance will be topsoiled and seeded with a native custom seed mix to meet AEP reclamation requirements. Native trees and shrubs should re-establish over time. Alterations will be made to the Alberta Transportation custom native seed mix in consideration of site-specific conditions of vegetation communities and input from Indigenous groups as to species that are culturally important.	None at this time.	None at this time	Ongoing: Working with Indigenous Group.

	1. Document or Meeting Reference Letter from Louis Bull Tribe in response to Alberta Transportation's January 28, 2019 request for input on CEAA information requests.	2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed the reclamation of disturbed areas.	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. Indigenous Group Response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
	November 6, 2018 Meeting between Louis Bull Tribe. Alberta Transportation, and Stantec November 22, 2018 Louis Bull Tribe Traditional Land Use Assessment for the proposed Springbank Off- Stream Reservoir Project.	Flood Mitigation Fish	Louis Bull Tribe would like to be involved in the post flood mitigation projects, including the fish rescue program. Louis Bull Tribe requests to be included in post flood mitigation activities to ensure practice of Aboriginal and Treaty rights can be continued following a flood event	At the meeting held on November 6, 2018, Alberta Transportation committed to continuing discussions on this topic. Alberta Transportation responded to Louis Bull Tribe's TUS report on August 8, 2019 with mitigation measures and responses: Alberta Transportation will provide Louis Bull Tribe the opportunity for two site visits, one during construction and one post-construction to observe application of prescribed mitigation measures and provide feedback. The construction and management of the off-stream reservoir presents a unique opportunity with the conversion of private land to Crown land for future use by First Nations and stakeholders. Through the engagement process that included feedback from Indigenous groups, a draft principles of future land use for the Project has been developed. The primary use of all lands within the PDA is for flood mitigation. In light of the primary use, the safety of anyone with access or land users will be an overriding factor. Secondary uses include traditional activities, including the exercise of treaty rights such as hunting will be allowed to occur within the designated land use area (LUA). Alberta Transportation invites Louis Bull Tribe to participate in the engagement process for the LUA.	None at this time.	None at this time	Ongoing: Working with Indigenous Group.
13	November 6, 2018 Meeting between Louis Bull Tribe. Alberta Transportation, and Stantec	Tradition Uses Treaty Rights Grazing	Louis Bull Tribe expressed concerns over using the areas for traditional use and grazing. They noted that grazing cattle made it hard to practice traditional uses.	At the meeting held on November 6, 2018, Alberta Transportation noted that grazing would likely be considered as a measure for fire control in the area but were willing to keep the discussions open with regards to future land use.	None at this time.	None at this time	Ongoing: Working with Indigenous Group.
14	November 6, 2018 Meeting between Louis Bull Tribe. Alberta Transportation, and Stantec November 19, 2018 Louis Bull Tribe hosted an open house for their members. Alberta Transportation and DEMA attended. November 22, 2018 Louis Bull Tribe Traditional Land Use Assessment for the proposed Springbank Off-Stream Reservoir Project.	Economic Opportunities	Louis Bull Tribe would like to be involved in a discussion of economic opportunities regarding the SR1 Project. Members of the Louis Bull Tribe asked about economic and employment opportunities with the SR1 Project. Louis Bull Tribe would like to participate in training, employment, and economic opportunities that may stem from the SR1 Project	At the meeting held on November 6, 2018 and the open house on November 19, 2018, Alberta Transportation committed to continuing discussions on this topic. In a letter dated June 18, 2019, Alberta Transportation stated they are committed to Indigenous participation in the Project including training, employment, and contracting opportunities. Alberta Transportation responded to Louis Bull Tribe's TUS report on August 8, 2019 with mitigation measures and responses: Alberta Transportation will discuss training, employment and contracting opportunities with Louis Bull Tribe. Alberta Transportation is preparing an Indigenous Participation Plan for the Project. Alberta Transportation is committed to Indigenous participation in the Project including potential training and contracting opportunities. Alberta Transportation intends to obtain feedback on the draft Plan from Louis Bull Tribe and other Indigenous groups.	None at this time.	None at this time	Ongoing: Working with Indigenous Group.

	1. Document or Meeting Reference	2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. Indigenous Group Response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
15	Meeting (conference call) between Louis Bull Tribe, Alberta Transportation, and Stantec	Use of traditional knowledge	Louis Bull Tribe would like to discuss the responses to the Information Requests (IR) relating to traditional knowledge.	At the meeting held on October 9, 2018, Alberta Transportation discussed the status of the regulatory process and also set a date of November 6, 2018 for a meeting with the Louis Bull Tribe community to further discuss the project and the IRs and the use of traditional knowledge in responding to the IRs. At the meeting held on November 6, 2018, Alberta Transportation committed to continued discussions with Louis Bull Tribe on the responses to the CEAA IRs, which were still being completed by Alberta Transportation. In a letter dated January 28, 2019, Alberta Transportation requested input from Louis Bull Tribe on its views and perspectives on its Aboriginal and Treaty rights, cultural and experiential values, and country foods. A deadline of February 28, 2019 was given for written feedback to be included in the CEAA information request responses. Feedback received after the deadline will be incorporated into regulatory submissions and project planning, as appropriate. Louis Bull Tribe submitted a response March 4, 2019.	In a letter dated February 28, 2019, Louis Bull Tribe provided their response to Alberta Transportation's January 28, 2019 letter. Louis Bull Tribe described how the project may affect their Aboriginal and Treaty rights and suggested mitigation measures from their TUS report.	None at this time.	Ongoing: Working with Indigenous Group.
16	Meeting (conference call) between Louis Bull Tribe, Alberta Transportation, and Stantec	Engagement	Louis Bull Tribe expressed displeasure that the Aboriginal Consultation Office (ACO) only identified Treaty 7 for consultation, and is not revising their list with the additional groups identified by CEAA (including Louis Bull Tribe). Louis Bull Tribe indicated they would be speaking directly to ACO about this issue.	At the meeting held on October 9, 2018, Alberta Transportation responded that they did not think the ACO was going to revisit their list, and this was an issue that would have to be discussed with the ACO.	N/A	N/A	No further action required.
17	7 October 9, 2018 Meeting (conference call) between Louis Bull Tribe, Alberta Transportation, and Stantec	Project alternatives	At the next meeting, Louis Bull Tribe stated they would like to understand the alternatives to the project and how Tsuut'ina Nation's concerns are being responded to.	At the meeting held on November 6, 2018, Alberta Transportation described the MC1 option and why SR1 was the chosen project.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group. At the meeting held on October 9, 2018, Alberta Transportation indicated they would be prepared to discuss these issues at the next meeting.
18	November 19, 2018 Louis Bull Tribe hosted an open house for their members. Alberta Transportation and DEMA attended.	Private Landowner's loss of lands	Members of the Louis Bull Tribe expressed concerns about people losing their lands to this project.	At the open house held on November 19, 2018, Alberta Transportation stated that the current landowners would be compensated at fair market value for their property.	N/A	N/A	No further action required.

Springbank SR1 – Stakeholder Specific Concerns and Response Table

Indigenous Stakeholder: MÉTIS NATION OF ALBERTA REGION 3

Date: OCTOBER 2016 - SEPTEMBER 2019

1. Document or Meeting Reference	2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. Indigenous Group Response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
Letter from Marlene Lanz, President of Métis Nation of Alberta Region 3, to Mark Svenson, Alberta Transportation	Historical use	Concerns expressed that more research and information was needed to discover and document the past use of the area by the Métis.	Alberta Transportation approved the Métis Nation's budget request to complete a Historical Research and Resources Impact Assessment Study on October 16, 2017. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of <i>Table 7-12 SR1 Project Specific Concerns and Responses – Métis Nation of Alberta Region 3</i> (Table 7-12) from the March 2018 Environmental Impact Assessment (EIA): Alberta Transportation has been engaged with the Metis Nation since 2016 to understand how the Project potentially impacts rights, interests and traditional uses including offering and funding site visits and Traditional Use (TUS) studies. Project timelines for resubmission of the EIA were extended by 60 days in order to undertake further indigenous engagement activities. Feedback was requested by March 1, 2018 in order to meet a resubmission date of early April. Information received after submission of the EIA will be considered in project planning and execution. Alberta Transportation approved the Métis Nation of Alberta Region 3's August 3, 2017 budget for a historical research and resources impact assessment study on October 16, 2017. As of October 31, 2018 the report had not been received by Alberta Transportation. Relevant information, concerns and recommendations received after the EIA has been filed in March 2018 will be used for project planning and implementation purposes, where applicable. On May 23, 2018, Alberta Transportation met with Métis Nation of Alberta Region 3 to review their specific concerns and the responses and proposed mitigation measures in Table 7-12. In a letter dated January 28, 2019, Alberta Transportation requested input from Métis Nation of Alberta Region 3 on its views and perspectives on its Aboriginal rights, cultural and experiential values, and country foods. A deadline of February 28, 2019 was given for written feedback to be included in the CEAA information request responses. Feedback to be included in the CEAA information req	In a letter dated March 13, 2019, Métis Nation of Alberta Region 3 provided their response to Alberta Transportation's January 28, 2019 letter. Métis Nation of Alberta Region 3 indicated there is current and past use of the project area, and more information would be forthcoming in their Historical Research and Resources Impact Assessment Study. The Métis Nation of Alberta Region 3 provided their TUS on August 30, 2019.	None at this time.	Ongoing: Working with Indigenous Group
2 March 21, 2019 Letter in response to Alberta Transportation's request for input on CEAA information requests.	Landscape Current use	The project will alter the landscape, potentially disrupting the connections of members who use the area to the lands and waters of the area.	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group
3 August 3, 2017	Historical Resources	Concerns expressed that the SR1 project would disrupt	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of Table 7-12 from	At the meeting held on May 23, 2018, Métis Nation of Alberta Region 3 stated	None at this time.	Ongoing: Working with Indigenous Group

1. Document or Meeting Reference 2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. Indigenous Group Response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
Letter from Marlene Lanz, President of Métis Nation of Alberta Region 3, to Mark Svenson, Alberta Transportation February 22, 2018 Workshop with Métis Nation of Alberta Region 3, Alberta Transportation, CEAA, and Stantec. August 30, 2019 Métis Nation of Alberta, Region 3 Métis Cultural Heritage Resources and Traditional Knowledge Report, Springbank Off- Stream Reservoir Project	potential homesteads, cart trails, historic use areas, and/or buried Métis sites. Concerns about artifacts, cart trails, and other cultural sites being identified and then reburied and not identified as Métis. The construction, maintenance, and associated access to the SRI will have ramifications on potential Métis archaeological heritage resources (camp sites, wintering villages, trails/rivers, Our Lady of Peace Mission sites). Any future planning for site disturbance should be done with clear consideration of these potential impacts and consult with the Métis Nation of Alberta Region 3, to best mitigate damages. RECOMMENDATION: Additional research must be done to identify areas of high potential for Métis archaeological heritage throughout the SR1 project area. This should include field research, archival research, in person interviews, and review of previous archaeological reports relating to Métis research in Alberta. RECOMMENDATION: Before a heritage permit is issued by the Archaeological Survey of Alberta for archaeological monitoring of the construction of the SR1 project, the Métis Nation of Alberta Region 3 should be given the opportunity to review and comment on the permit application. RECOMMENDATION: Explicit protocol requiring regular reporting to Métis Nation of Alberta Region 3 when sites with potential Métis archaeological	the March 2018 EIA: Project activities within the project development area would disturb 11 precontact period and 11 historic period archaeological sites. No traditional land use sites of very high heritage value, such as spiritual sites or human burials have been identified within the project development area. Identified sites include isolated finds, artifact scatters, campsites and historic remains such as homesteads and a school. Effects to historical resources are detailed in the EIA, Volume 3A and 3B, section 13. Alberta Culture and Tourism (ACT) independently assesses the heritage value of historic resources, determines the need for, and scope of, any avoidance or mitigation measures, and issues Project approval under the Historical Resources Act. If the Project is approved Alberta Transportation will follow all the requirements for the protection of historic resources as determined by ACT. On May 23, 2018, Alberta Transportation met with Métis Nation of Alberta Region 3 to review their specific concerns and the responses and proposed mitigation measures in Table 7-12. At the meeting held on May 23, 2018, Alberta Transportation stated the commitment in the EIA that Alberta Transportation will participate in monitoring discussions with Indigenous groups.	that there is potential for historical Métis use of the cabins or homesteads identified in the EIA and noted that there will be a lot of earth disturbed during Project construction. Métis Nation of Alberta Region 3 recommended that during construction, Métis Nation of Alberta Region 3 would like to monitor or be contacted in the event that historic period artifacts are encountered. Métis Nation of Alberta Region 3 requested to be involved in developing mitigation for the sites that may be encountered or disturbed. Métis Nation of Alberta Region 3 recommended that during drawdown following a flood event, the reservoir be monitored for any potential newly exposed heritage resources.		

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			heritage are found during the construction phase of SR1 project.				
4 June 28,	2017	Historical Resources	Stated that there was a short-	On March 23, 2018, Alberta Transportation sent detailed responses to	At the meeting held on May 23, 2018,	Alberta Transportation confirmed	No further action
Nation of and DEM	between Métis f Alberta Region 3 //A Land Services for Transportation		lived fort (Old Bow Fort) in the area of SR1.	specific concerns raised to date by providing a copy of Table 7-12 from the March 2018 EIA: The Old Bow Fort is included in the historical resources assessment (EIA, Volume 3A, Section 13). ACT independently assesses the heritage value of historic resources, determines the need for, and scope of, any avoidance or mitigation measures, and issues Project approval under the Historical Resources Act. If the Project is approved Alberta Transportation will follow all the requirements for the protection of historic resources as determined by ACT. On May 23, 2018, Alberta Transportation met with Métis Nation of Alberta Region 3 to review their specific concerns and the responses and proposed mitigation measures in Table 7-12, including historical resources.	the Métis Nation of Alberta Region 3 requested information on where the Old Bow Fort is located. On behalf of Alberta Transportation, Stantec confirmed that the fort is located outside of the Project Development Area (PDA), approximately 40 km west on the Stoney Nakoda Nations reserve. Métis Nation of Alberta Region 3 inquired about the Bow Fort archaeological excavation and will be requesting further information from ACT. Métis Nation of Alberta Region 3 also	that the Old Bow Fort and Old Lady of Peace cairn is located outside of the PDA.	required.
					requested information on the location of the Our Lady of Peace cairn.		
Transpor input on requests August 3 Métis Na Region 3 Heritage Tradition Report, S Stream F	response to Alberta rtation's request for CEAA information 30, 2019 ation of Alberta, B Métis Cultural Resources and real Knowledge Springbank Off-Reservoir Project	Country foods	Members of Métis Nation of Alberta Region 3 have harvested plants, caught fish, and hunted/trapped in the project area. The impacts to country foods by the construction of the reservoir has the potential to limit the access or have adverse effects on the ability of members of The Métis Nation of Alberta Region 3 to access country foods that form an important part of expressing, maintaining, and passing on cultural values. The Métis Nation of Alberta Region 3 has Aboriginal/Indigenous rights in the project area including; hunting, fishing, trapping, and gathering. The nature of the project means the landscape will be altered, potentially disrupting the connections of these members to the lands and waters of the area.	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group
6 May 8, 2	017	Wildlife Water	Concerned about wildlife in the project area.	At the meeting held on May 8, 2017, Alberta Transportation responded that wildlife corridors should not be affected by the project.	At the meeting held on May 23, 2018, Métis Nation of Alberta Region 3 requested information on whether there	At the meeting held on May 23, 2018, Alberta Transportation explained that "pinch points" are	Ongoing: Working with Indigenous Group

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	Meeting between Alberta Transportation and Métis Nation of Alberta Region 3 June 28, 2017 Meeting between Métis Nation of Alberta Region and DEMA Land Services for Alberta Transportation August 30, 2019 Métis Nation of Alberta, Region 3 Métis Cultural Heritage Resources and Traditional Knowledge Report, Springbank Off- Stream Reservoir Project		Expressed concern over the potential impacts to wildlife caused by the diversion of water from Elbow River and the construction of SR1. There are very few details on how water resources entering the diversion channel will be monitored or mitigated to minimize the risk on all species, especially those linked to human subsistence and livelihood.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of Table 7-12 from the March 2018 EIA: Potential impacts to wildlife, as a result of the Project, are described in the EIA and include a loss/change of habitat, disruption to movement, mortality risk and changes in biodiversity. With the application of mitigation and environmental protection measures, residual environmental effects on wildlife, including migratory birds, species at risk, biodiversity, and provisions to maintain ungulate movement which was recommended by Indigenous groups are predicted to be not significant. Project effects on wildlife are discussed in the EIA Volumes 3A and 3B, section 11. On May 23, 2018, Alberta Transportation met with Métis Nation of Alberta Region 3 to review their specific concerns and the responses and proposed mitigation measures in Table 7-12. At the meeting held on May 23, 2018, Alberta Transportation explained that areas where wildlife is vulnerable to predation, or "pinch points," are not anticipated through the infrastructure design.	will be "pinch points" where humans or predators can catch wildlife.	not anticipated through the infrastructure design.	
7	August 30, 2019 Métis Nation of Alberta, Region 3 Métis Cultural Heritage Resources and Traditional Knowledge Report, Springbank Off- Stream Reservoir Project	Ground disturbance	Environmental effects of taking down the original existing ground to the proposed concave grade.	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group
8	November 16, 2017 Email from Kirk Poitras to Mai-Linh Huynh, Canadian Environmental Assessment Agency (CEAA)	Reclamation	Concerns about reclamation and remediation.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of Table 7-12 from the March 2018 EIA: Reclamation will occur after construction for those areas temporarily affected during construction, EIA Volume 4, Appendix D. There are no plans to decommission the Project, as it will provide long term flood protection mitigation for all lands and communities down river of the Project. On May 23, 2018, Alberta Transportation met with Métis Nation of Alberta Region 3 to review their specific concerns and the responses and proposed mitigation measures in Table 7-12. At the meeting held on May 23, 2018, Alberta Transportation explained	At the meeting held on May 23, 2018, Métis Nation of Alberta Region 3 requested information on how maintenance will be managed following a flood event. Métis Nation of Alberta Region 3 requested that Alberta Transportation ensure commitments made to Métis Nation of Alberta Region 3 are met.	None at this time.	Ongoing: Working with Indigenous Group
			that a manual, including commitments, will be prepared by Alberta Transportation and transferred to Alberta Environment and Parks (AEP) during operation. The log of commitments will be comprised of those made during the engagement process, in the EIA, and conditions from the regulators.				
9	November 16, 2017 Email from Kirk Poitras to Mai-Linh Huynh, Canadian Environmental Assessment Agency (CEAA)	Waste recovery	Waste recovery within the basin after a flood should be considered.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of Table 7-12 from the March 2018 EIA: Suspended sediment concentrations will be monitored upstream and downstream of instream construction activities to identify potential sediment-related effects from construction. Construction will follow the mitigation measures detailed in Alberta Transportation's Erosion and Sediment Control Manual. Modeling has indicated that	None at this time.	None at this time.	Ongoing: Working with Indigenous Group

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				sediment will be deposited in the reservoir after a flood event. The amount of sediment will depend on the flood conditions. Sediment will be removed from the reservoir and infrastructure if it affects the future operational efficiency of the Project.			
				A debris management program would also be implemented during all phases of Project operation. This program would include measures such as debris removal in the Elbow River at the diversion structure, upstream of the diversion structure, and within the off-stream reservoir.			
				On May 23, 2018, Alberta Transportation met with Métis Nation of Alberta Region 3 to review their specific concerns and the responses and proposed mitigation measures in Table 7-12.			
				At the meeting held on May 23, 2018, Stantec provided additional information on the debris management system, which is designed to keep debris flowing downstream. If debris builds up on the management system when the reservoir is being filled it will be redirected downstream post-flood. There is also a commitment to go in after a flood and look at plant regrowth and confirm if seeding or sediment removal is required within the reservoir.			
				In a letter dated June 18, 2019, Alberta Transportation provided an update on the debris deflector. Alberta Transportation received concerns regarding debris management during the Indigenous consultation and stakeholder engagement programs for the Project including concerns related to debris build up in the off-stream reservoir. The proposed debris deflector mitigates these concerns by reducing the potential for large debris entering the off-stream reservoir.			
10	November 16, 2017 Email from Kirk Poitras to Mai-Linh Huynh, Canadian Environmental Assessment Agency (CEAA)	Sediment	Concern about sediment build up.	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of Table 7-12 from the March 2018 EIA: Suspended sediment concentrations will be monitored upstream and downstream of instream construction activities to identify potential sediment-related effects from construction. Construction will follow the mitigation measures detailed in Alberta Transportation's Erosion and Sediment Control Manual. Modeling has indicated that sediment will be deposited in the reservoir after a flood event. The amount of sediment will depend on the flood conditions. Sediment will be removed from the reservoir and infrastructure if it affects the future operational efficiency of the Project.	At the meeting held on May 23, 2018, Métis Nation of Alberta Region 3 requested information about dust hazards once sediment has settled. Métis Nation of Alberta Region 3 requested communication following a flood regarding mitigation or other information in order to monitor for cumulative effects.	At the meeting held on May 23, 2018, Stantec explained that there is potential for exceedances in air quality guidelines from dust in the event of a lot of wind and that this will be monitored. Alberta Transportation added that an adaptive management strategy will be applied to monitor and adjust mitigation as necessary.	Ongoing: Working with Indigenous Group
				On May 23, 2018, Alberta Transportation met with Métis Nation of Alberta Region 3 to review their specific concerns and the responses and proposed mitigation measures in Table 7-12.		AEP will monitor regrowth following a flood event to determine if reseeding or sediment removal will be required. AEP will also monitor for weeds.	
				At the meeting held on May 23, 2018, Stantec explained that there is potential for exceedances in air quality guidelines in the event of a lot of wind and that this will be monitored. Alberta Transportation added that an adaptive management strategy will be applied to monitor and adjust mitigation as necessary. AEP will monitor regrowth following a flood event to determine if reseeding or sediment removal will be required. AEP will also monitor for weeds.			

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11 November 16, 2017 Email from Kirk Poitras to Mai-Linh Huynh, Canadia Environmental Assessme Agency (CEAA)	n	Will there be sediment testing after a flood?	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of Table 7-12 from the March 2018 EIA: Sediment testing will occur after a flood event. Following a flood that results in the diversion of water to the reservoir and prior to discharge from the reservoir, water samples will be collected at the low-level outlet channel and analyzed for a number of parameters including total suspended sediment. The results will be provided to The City of Calgary water services department. On May 23, 2018, Alberta Transportation met with Métis Nation of Alberta Region 3 to review their specific concerns and the responses and proposed mitigation measures in Table 7-12. At the May 23, 2018 meeting, Alberta Transportation indicated they would confirm the procedure of how water sampling results would be communicated after a flood. In the May 23, 2018 meeting notes emailed on July 20, 2018, Alberta Transportation explained that water quality testing results would be	At the meeting held on May 23, 2018, Métis Nation of Alberta Region 3 requested information on how water sampling results will be communicated.	In the May 23, 2018 meeting notes emailed on July 20, 2018, Alberta Transportation explained that water quality testing results would be provided to the City of Calgary and be made available through their website. The information may also be available through AEP. Any drinking water advisories or notices would come through the City of Calgary.	No further action required.
			provided to the City of Calgary and be made available through their website. The information may also be available through AEP. Any drinking water advisories or notices would come through the City of Calgary.			
12 May 23, 2018 Meeting with the Métis Na of Alberta Region 3, Albertansportation, and Stant	ta	Métis Nation of Alberta Region 3 requests communication post flood re: mitigation etc. to monitor for cumulative effects.	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group
Letter in response to Albertansportation's request finput on CEAA information requests. August 30, 2019 Métis Nation of Alberta, Region 3 Métis Cultural Heritage Resources and Traditional Knowledge Report, Springbank Offstream Reservoir Project	or	Métis Nation of Alberta Region 3 recommends continuing consultation the Métis Nation of Alberta Region 3, including monitoring and similar programs. Metis Nation of Alberta Region 3 also recommends that Indigenous monitors are present thought out all phases of the Project, especially during construction. RECOMMENDATION: Given the reality that the SR1 project will be built on the Métis homeland, the proponent should financially support a full-time Métis Nation of Alberta Region 3 Heritage/Cultural Sites Coordinator throughout the duration of the project's construction. RECOMMENDATION: During all segments of the Project's	In a letter dated June 18, 2019, Alberta Transportation stated they are committed to Indigenous participation in the Project including training, employment, and contracting opportunities.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group

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			construction, Métis Heritage Monitors should be identified by the Métis Nation of Alberta Region 3.				
			RECOMMENDATION: Continuing consultation the Métis Nation of Alberta Region 3, including monitoring and similar programs, would help to ensure that Métis voices are heard as the project moves forward.				
14	November 16, 2017 Email from Kirk Poitras to Mai-Linh Huynh, Canadian Environmental Assessment Agency (CEAA) February 22, 2018 Workshop with Métis Nation of Alberta Region 3, Alberta Transportation, CEAA, and Stantec. May 23, 2018 Meeting with the Métis Nation of Alberta Region 3, Alberta Transportation, and Stantec	Land access	With Parks assuming operations and control, why would this not be a suitable place for people to have access to? Questioned why there will be no access to Area B during nonflood periods. Concern that members will not be able to exercise Aboriginal rights once the Project is complete. The Métis Nation of Alberta Region 3 would like to discuss options for accessing Area B.	At the workshop held on February 22, 2018, Alberta Transportation responded that the restricted access is due to safety reasons because after a flood there could be pockets of water. It was indicated that access could be a discussion Métis Nation of Alberta Region 3 have with Alberta Environment and Parks. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of Table 7-12 from the March 2018 EIA: If the Project is approved access will vary across the project area. Area A is a conservation area with public access and opportunities for low impact recreation; limited improvements beyond restoration of areas affected by Project construction. Area B is the reservoir, which will be owned and operated by Alberta Environment and Parks (AEP). The area will also be used for research on flood restoration activities, and monitoring of mitigation and environmental effects. There is limited or no public access. There is no public access for public safety and security. Area C has options for grazing through public leases. The land would be publicly owned and privately stewarded, with limitations on improvement to support the primary use as a reservoir. Area D is the location of project infrastructure. There is no public access and is fenced for public safety and security. Once the Project is constructed, access will be available in Area A and indigenous groups will have the ability to access this area for traditional use purposes. There will be no public access in Areas B and D. Area C will be publicly accessible. On May 23, 2018, Alberta Transportation met with Métis Nation of Alberta Region 3 to review their specific concerns and the responses and proposed mitigation measures in Table 7-12. At the meeting held on May 23, 2018, Alberta Transportation explained that access will have to be discussed with AEP, as they are the eventual owner/operator.	At the meeting held on May 23, 2018, Métis Nation of Alberta Region 3 requested the opportunity to discuss options for accessing Area B since there will be enhanced habitat and potentially an abundance of berries. Métis Nation of Alberta Region 3 noted that currently some people have access to the area through landowner agreements and if access does become restricted then this will affect opportunities for practicing traditional activities.	None at this time.	Ongoing: Working with Indigenous Group

	1. Document or Meeting Reference	2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. Indigenous Group Response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
15	August 30, 2019 Métis Nation of Alberta, Region 3 Métis Cultural Heritage Resources and Traditional Knowledge Report, Springbank Off- Stream Reservoir Project	Roads Access	New service and maintenance roads will block the flow of resources.	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group
16	February 22, 2018 Workshop with Métis Nation of Alberta Region 3, Alberta Transportation, CEAA, and Stantec.	Operation	Expressed concern of the risks of the Project being operated remotely.	At the workshop held on February 22, 2018, Alberta Transportation responded that during operations, AEP staff will be on site to monitor and manage the swing gates and to maintain flow rates. Redundancies (power lines, emergency generators, capacity for mechanical means) will be put in place to ensure public safety. On May 23, 2018, Alberta Transportation met with Métis Nation of Alberta Region 3 to review their specific concerns and the responses and proposed mitigation measures in Table 7-12.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group
17	August 30, 2019 Métis Nation of Alberta, Region 3 Métis Cultural Heritage Resources and Traditional Knowledge Report, Springbank Off- Stream Reservoir Project	Construction	Métis niche construction theories on the perception of channel formation must be investigated from a Métis TKU perspective. There was not enough information given on the channel modifications (e.g. widening, dredging, etc.), besides the fact that at the end of the construction period, the waterway should be 4.5 km long, with differential width, from bottom to top, between 24-60 m³. This is a concern because it is not known how these channel modifications may impact the Métis lands/waters users' mobility.	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group
18	August 30, 2019 Métis Nation of Alberta, Region 3 Métis Cultural Heritage Resources and Traditional Knowledge Report, Springbank Off- Stream Reservoir Project	Construction	Field workers not being capable of recognizing Métis lands/waters artifacts.	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group
19	February 22, 2018 Workshop with Métis Nation of Alberta Region 3, Alberta Transportation, CEAA, and Stantec.	Visual	Questioned the visual impact of the structures.	At the workshop held on February 22, 2018, Alberta Transportation responded that the Project will not be easily seen from a distance as it will be no higher than a lot of the trees in the area and it will blend in to the landscape.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group

	1. Document or Meeting Reference	2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. Indigenous Group Response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
				On May 23, 2018, Alberta Transportation met with Métis Nation of Alberta Region 3 to review their specific concerns and the responses and proposed mitigation measures in Table 7-12.			
20	August 30, 2019 Métis Nation of Alberta, Region 3 Métis Cultural Heritage Resources and Traditional Knowledge Report, Springbank Off- Stream Reservoir Project	Mitigation	Concerned that all its members will be able to continue to have knowledge and use of the lands/waters not only in Rocky View County, but also all along the Elbow River from its headwaters in Kananaskis to the confluence of the Bow River. The Métis Nation of Alberta Region 3 understand that the damages are perceived as inevitable, but would like mitigation to reduce this impact.	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group
21	August 30, 2019 Métis Nation of Alberta, Region 3 Métis Cultural Heritage Resources and Traditional Knowledge Report, Springbank Off- Stream Reservoir Project	Economic benefits	If the Province of Alberta does invest in the purchase of almost 7,000 acres, very little of these socio-economic benefits fall into the hands of the Métis closely living, occupying and holding MTKU in the Foothills of southern Alberta. Métis businesses and companies are being left out of contracting.	In a letter dated June 18, 2019, Alberta Transportation stated they are committed to Indigenous participation in the Project including training, employment, and contracting opportunities.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group
22	May 23, 2018 Meeting with the Métis Nation of Alberta Region 3, Alberta Transportation, and Stantec	Mapping	Métis Nation of Alberta Region 3 request shapefiles if they ever are made available.	At the meeting held on May 23, 2018, Alberta Transportation explained that the shapefiles are not currently publicly available.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group
23	November 16, 2017 Email from Kirk Poitras to Mai-Linh Huynh, Canadian Environmental Assessment Agency (CEAA) February 22, 2018 Workshop with Métis Nation of Alberta Region 3, Alberta Transportation, CEAA, and Stantec.	EIA Timelines	Environmental Impact Assessment (EIA) should not be deemed complete as many Indigenous groups have not completed their studies. Concern that the EIA resubmission is deadline is in March and the Métis Nation of Alberta Region 3 TUS will not be completed; concern that information from TUS will not be included.	At the workshop held on February 22, 2018, Alberta Transportation explained that information shared after March will still be part of the project planning process. New information will be reviewed even after the submission of the EIA. CEAA added that some information can be addressed through the technical review and information requests, or through the engagement program. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of Table 7-12 from the March 2018 EIA: Alberta Transportation has been engaged with the Metis Nation since 2016 to understand how the Project potentially impacts rights, interests and traditional uses including offering and funding site visits and TUS studies. Project timelines for resubmission of the EIA were extended by 60 days in order to undertake further indigenous engagement activities. Feedback was requested by March 1, 2018 in order to meet a resubmission date of	At the meeting held on May 23, 2018, Métis Nation of Alberta Region 3 clarified that the TUS was funded in November 2017 and there was not sufficient opportunity to complete the TUS prior to March 2018. Following surveys of the region, which require snow-free conditions, Métis Nation of Alberta Region 3 anticipates the TUS to be complete at the end of 2018.	None at this time.	Ongoing: Working with Indigenous Group

	1. Document or Meeting Reference	2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. Indigenous Group Response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
				early April. Information received after submission of the EIA will be considered in project planning and execution.			
				Alberta Transportation approved the Métis Nation of Alberta Region 3's budget for a historical research and resources impact assessment study. As of March16 th 2018 the report had not been received by Alberta Transportation.			
				Relevant information, concerns and recommendations received after the EIA has been filed in March 2018 will be used for project planning and implementation purposes, where applicable.			
				On May 23, 2018, Alberta Transportation met with Métis Nation of Alberta Region 3 to review their specific concerns and the responses and proposed mitigation measures in Table 7-12.			
				At the meeting held on May 23, 2018, Alberta Transportation explained they will review TUS reports as they are made available by Indigenous groups. Traditional Land and Resource Use (TLRU) information, concerns, and recommendations received after the EIA has been filed in March 2018 will be used for project planning and implementation purposes, where applicable. Project-specific TLRU information will be reviewed against the results of the EIA and a formal response will be developed.			
				Alberta Transportation also noted that landowner access will need to be obtained prior to fieldwork commencing, and provided the landowner map in an email of May 24, 2018.			
24	August 30, 2019 Métis Nation of Alberta, Region 3 Métis Cultural Heritage Resources and Traditional Knowledge Report, Springbank Off- Stream Reservoir Project	EIA Timelines	In regard to the EIA, the 2016-2017 season was not long enough to do all the armchair historical and archival surveys needed on Métis data. Elders and other Métis community members in Region 3 still have not had a chance to voice their direct opinions orally. More face-to-face interviews/oral interviews are crucial for an	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group
			overview of Métis issues directly related to the SR1 project.				
25	June 28, 2017 Meeting between Métis Nation of Alberta Region and DEMA Land Services for Alberta Transportation	Roads	Expressed concern over whether local taxpayer money would be used to fix Springbank Road should a flood event occur and cause damage.	At the meeting held on November 2, 2017, Transportation explained that if Springbank Road is flooded then the taxpayers will not have to pay for it. On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of Table 7-12 from the March 2018 EIA: The Springbank Road is under the jurisdiction of the Rockyview County. In the event of a flood, once floodwaters have receded sufficiently, affected roadways and bridges would be inspected for damage. If repairs were necessary, Springbank Road would remain	At the meeting held on May 23, 2018, the Métis Nation of Alberta Region 3 responded "that's good."	At the meeting held on May 23, 2018, Alberta Transportation further explained that if Springbank Road is damaged as a result of use of the SR1 flood mitigation measure, costs associated with the repair will be paid for by public funds. General maintenance of Springbank Road will remain the	No further action required.

1. D	ocument or Meeting Reference	2. Project Specific Aspect of the Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. Indigenous Group Response to Proponent's Effort to Avoid or Mitigate Concern		7. Outcomes/Comments
			out of service until repairs were completed. Public funds will be utilized for repair.		responsibility of Rocky View County.	
			On May 23, 2018, Alberta Transportation met with Métis Nation of Alberta Region 3 to review their specific concerns and the responses and proposed mitigation measures in Table 7-12.			
			At the meeting held on May 23, 2018, Alberta Transportation further explained that if Springbank Road is damaged as a result of use of the SR1 flood mitigation measure, the Province would be responsible for repairs. General maintenance of Springbank Road will remain the responsibility of Rocky View County.			

Springbank SR1 – Stakeholder Specific Concerns and Response Table

Indigenous Stakeholder: MÉTIS NATION OF BRITISH COLUMBIA

Date: OCTOBER 2016 - AUGUST 2019

1. Document or Meeting Reference	2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. Indigenous Group response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
July 11, 2018 Letter from Christopher Gall to the Canadian Environmental Assessment Agency (CEAA).	Will ambient light persist throughout project operation? Will these conditions be below CIE guidelines? Was construction simply used because it will be the highest light source?	Light	In a letter dated June 28, 2019, Alberta Transportation responded to the July 11, 2018 letter. Potential effects of light in the Environmental Impact Assessment (EIA) were only discussed for the construction phase, as this phase will provide the largest amount of light. As discussed in the response to CEAA Package 3, IR39 and in Volume 1 Section 4.3 (March 2018), the nighttime lighting during operation is expected to consist of some security lighting at the control building (located at the diversion structure). Permanent lighting is not planned for the floodplain berm, auxiliary spillway, service spillway, or the diversion inlet. Light levels from the luminaires at the control building are expected to be well below Commission Internationale de L'Éclairage (also known as the International Commission on Illumination) (CIE) guidelines for light trespass and glare for the nearby receptors. These luminaires are also not predicted to measurably contribute to existing sky glow near the Project. Building light emissions are predicted to be very low and will use best practice design principles such as full horizontal cut-off fixtures to reduce potential light spill, glare and contributions to sky glow.	No response received.	Proponent response addresses concern.	Complete.
	Can you provide a reference that confirms not genetically pure cutthroat in the Regional Assessment Area (RAA)/Local Assessment Area (LAA)?	Fish	In a letter dated June 28, 2019, Alberta Transportation responded to the July 11, 2018 letter. There are no pure strains of westlope cutthroat trout known to occur within the LAA and effects on fish and fish habitat due to the Project will not occur in the upper reaches of the RAA where westlope cutthroat trout are present. Western cutthroat hybridization has been defined through the DFO recovery strategy (DFO 2014) and has been reported by the Alberta Westslope Cutthroat Trout Recovery Team (2013). Pure westslope cutthroat have only been observed in a few streams in southern Alberta and isolated to extreme headwaters; they are considered functionally extirpated within the LAA for aquatic ecology (AEP 2018; DFO 2014) and, therefore, are not expected to be present. The upper reaches of the Elbow River within the RAA for aquatic ecology where westslope cutthroat trout may be found, will not be affected by the Project. Fish species, such as rainbow trout, which may hybridize with westslope cutthroat trout (McKelvey et al. 2016; DFO 2014), are prevented from migrating past Elbow Falls in the upstream area, a natural barrier to upstream fish passage. Therefore, the Project will not facilitate further hybridization of these stocks in the upper reaches of the aquatic ecology RAA.	No response received.	Proponent response addresses concern.	Complete.

1. Document or Meeting Reference 2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. Indigenous Group response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
Can a table of the wildlife species potentially impacted, and the source of their particular impact, be provided?	Wildlife	In a letter dated June 28, 2019, Alberta Transportation responded to the July 11, 2018 letter. A list of wildlife species that have potential to occur in the wildlife regional assessment area (RAA) is provided in Table 3-1 (a reproduction of Table 3-12 from Volume 4, Appendix H of the EIA). The potential effects of the Project on species of cultural importance is provided in Table 3-2 and Table 3-3 (a reproduction of Alberta Transportation's response to information request CEAA Package 2, IR2-11, Table IR11-1 and Table IR11-2). In addition, the potential effects of the Project on species at risk that were also considered as species of cultural importance are provided in Table 3-4 and Table 3-5 (a reproduction Volumes 3A and 3B, Section 11, Attachment A, Table A-1).	No response received.	Proponent response addresses concern.	Complete.

SR1 Springbank – Stakeholder Specific Concerns and Response Table

Indigenous Stakeholder: Montana First Nation

Date: OCTOBER 2016 - SEPTEMBER 2019

	1. Document or Meeting Reference	2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. Indigenous Group Response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
1	February 28, 2018	Engagement	Montana First Nation does not	None at this time.	None at this time.	None at this time.	Ongoing: Working with
	Email from Montana First Nation to DEMA Land Services		think the engagement process is being conducted in a respectful manner.				Indigenous Group
	June 25, 2018		Concerns about the process and how Alberta Transportation has				
	Review of Alberta Transportation's Springbank Off-stream Reservoir Project Environmental Impact Assessment by Management Solutions in Environmental Science		done their Environmental Impact Assessment (EIA) without directly engaging with Montana First Nation. Concerned that meaningful engagement on this Project has been limited to date.				
	June 27, 2018		been limited to date.				
	Meeting between Montana First Nation and Alberta Transportation.						
2	January 9, 2018	Traditional knowledge	Montana First Nation has not	On March 23, 2018, Alberta Transportation sent detailed responses to	None at this time.	None at this time.	Ongoing: Working with
	Email from Montana First Nation		been formally engaged in any traditional knowledge study specific to the SR1 Project.	specific concerns raised to date by providing a copy of <i>Table 7-10 SR1 Project Specific Concerns and Responses – Montana First Nation</i> from the March 2018 EIA: A meeting was held in January 2017 with Montana First Nation. At that meeting the Montana First Nation requested if funding was available to which Alberta Transportation responded that funding was available and requested that Montana First Nation submit a budget. No budget has been received to date. Alberta Transportation continues to engage with the Montana First Nation. Alberta Transportation approved Montana First Nation's TUS budget, in principle, on September 11, 2018.			Indigenous Group Montana First Nation submitted a budget for a Traditional Use Study (TUS) on April 24, 2018. A revised budget was submitted on August 3, 2018. Alberta Transportation approved the budget, in principle, on September 11, 2018.
3	June 25, 2018	Traditional land and resource	Please provide a separate	None at this time.	None at this time.	None at this time.	Ongoing: Working with
	Review of Alberta Transportation's Springbank Off-stream Reservoir Project Environmental Impact Assessment by Management Solutions in Environmental Science	use (TLRU)	assessment for Montana First Nation using their traditional territory as the Regional Assessment Area (RAA) and including consideration of the relative importance of sites within the Local Assessment Area (LAA) when placed within the context of the RAA. Please remove Montana First				Indigenous Group
			Nation from these tables [Tables 14-3 to 14-5] until such time that				

	1. Document or Meeting Reference	2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. Indigenous Group Response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
			relevant TLRU information becomes available to the proponent.				
			Please provide further detailed rationale and justification as to how Alberta Transportation concluded impacts to TLRU as not significant given that change in "access to traditional resources" and in "current use sites or areas within the area of permanent structures" were given a high magnitude and considered irreversible.				
			Please provide further clarification as to how a conclusion of no significant impacts on TLRU from flood or post-flood operations was determined.				
4	March 21, 2018 Meeting between Montana First Nation and Alberta Transportation June 25, 2018 Review of Alberta Transportation's Springbank Off-stream Reservoir Project Environmental Impact Assessment by Management Solutions in Environmental Science	Traditional use study (TUS)	Montana First Nation indicated a desire to undertake a TUS and will submit a budget. Alberta Transportation should commit to providing funding support to Montana First Nation for a Project specific TUS. If Alberta Transportation commits to funding this study, Alberta Transportation should describe in detail how the information from a TUS will be incorporated into the assessment and follow up programs.	At the meeting held on March 21, 2018, Alberta Transportation indicated they are open to receiving a budget for Montana First Nation to undertake a TUS.	Montana First Nation submitted a budget April 24, 2018, and an updated budget on August 3, 2018.	Alberta Transportation conditionally approved Montana First Nation's TUS budget on September 11, 2018.	No further action required at this time.
5	June 27, 2018 Meeting between Montana First Nation and Alberta Transportation.	Traditional use study (TUS) Timing and capacity	Concern that to complete a good TUS they might have to wait until next year, as the time when the plants start to grow is the best time to do a TUS. Also brought up capacity issues.	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group
6	June 25, 2018 Review of Alberta Transportation's Springbank Off-stream Reservoir Project Environmental Impact Assessment by Management	Historical resources	Permanent loss of historical resources. Alberta Transportation should commit to providing a workshop to interested Montana First Nation members on the sites identified and seek their	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group

	1. Document or Meeting Reference	2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. Indigenous Group Response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
	Solutions in Environmental Science		perspective on site significance, site interpretation, and appropriate mitigation.				
7	June 27, 2018 Meeting between Montana First Nation and Alberta Transportation.	Wildlife	Concerns for wildlife in the area, such as grizzly bear and elk.	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group
8	June 25, 2018 Review of Alberta Transportation's Springbank Off-stream Reservoir Project Environmental Impact Assessment by Management Solutions in Environmental Science	Wildlife	Please provide details on the sources of Project-specific information on species of traditional importance to the Montana First Nation and how this information was considered in the selection of wildlife Key Indicators.	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group
9	June 25, 2018 Review of Alberta Transportation's Springbank Off-stream Reservoir Project Environmental Impact Assessment by Management Solutions in Environmental Science	Wildlife Restricted Activity Periods (RAP)	When will Alberta Transportation know whether or not the Key Wildlife and Biodiversity Zone (KWBZ) RAP can be avoided? If the RAP cannot be avoided, when would Alberta Transportation expect to develop a wildlife mitigation and monitoring plan for the KWBZ? Would this plan be available prior to Project approval so that Montana First Nation can fully understand the potential impacts and how mitigation will be implemented and monitored before construction begins? Will First Nations be notified if traditional species of concern that they have identified are found during pre-construction surveys? This would allow First Nations to understand the scope of potential impacts of the Project on wildlife and potentially assist with mitigation.	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group
10	June 25, 2018 Review of Alberta Transportation's Springbank Off-stream Reservoir Project Environmental Impact Assessment by Management	Wildlife	Impacts to elk habitat. Has Alberta Transportation considered the option of habitat offsets to further mitigate the >10% loss of high and moderate suitability habitat for elk? If so,	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group

1. Document or Meeting Reference	2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. Indigenous Group Response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
Solutions in Environmental Science		Alberta Transportation should work with Montana First Nation to identify suitable locations for offsets to maintain access for traditional purposes.				
		Did Alberta Transportation complete a population viability analysis to support their conclusion that the Project is unlikely to pose a long-term threat? If not, what information did Alberta Transportation use to support the concept of minimal threat to 'persistence' or 'viability'?				
		Please clarify whether or not proposed access roads overlap with the KWBZ. If so, has Alberta Transportation developed an access management plan for Project? Access for traditional use must also be considered as part of any access management plan.				
11 June 25, 2018 Review of Alberta Transportation's Springbank Off-stream Reservoir Project Environmental Impact Assessment by Management Solutions in Environmental Science	Wildlife	Impacts to grizzly bear habitat. Please explain how a high magnitude impact on spring grizzly bear feeding habitat supports the proposed recovery strategy of maintaining the grizzly bear population within the Support Zone.	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group
		Does Alberta Transportation have a strategy or plan in place to proactively reduce humangrizzly bear conflict particularly considering the Project will have a high magnitude impact on grizzly bear habitat (E.g. Bear Management Standard and Wildlife Practices or Wildlife Attractant Survey)? This plan should also outline appropriate responses in the event of a human-bear interaction.				
12 June 25, 2018	Wildlife	Request more details on the fencing that is to be used and	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group

	1. Document or Meeting Reference	2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. Indigenous Group Response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
	Review of Alberta Transportation's Springbank Off-stream Reservoir Project Environmental Impact Assessment by Management Solutions in Environmental Science		how it will prevent public access but permit wildlife access.				
13	June 25, 2018 Review of Alberta Transportation's Springbank Off-stream Reservoir Project Environmental Impact Assessment by Management Solutions in Environmental Science	Wildlife	Was any Indigenous Knowledge used in the site selection and study design for the remote camera program? If so, please describe. If not, will Alberta Transportation commit to including Indigenous Knowledge in future study designs? Please describe how that input will be incorporated and implemented. Does remote camera data provide quantitative information on wildlife movement that could be used to support impact predictions? If so, please describe.	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group
14	March 21, 2018 Meeting between Montana First Nation and Alberta Transportation	Fish	Concerned about fish and if they would suffer.	At the meeting held on March 21, 2018, Alberta Transportation explained there would be a fish rescue plan in place to rescue fish stranded after drawdown.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group
15	June 27, 2018 Meeting between Montana First Nation and Alberta Transportation.	Fish passage	Concerns for how the project will affect fish passage up and down the river, specifically during a flood when the gates are up.	At the meeting held on June 27, 2018, Alberta Transportation responded the gates would only be up a few days, and fish generally are not mobile during floods.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group
16	June 27, 2018 Meeting between Montana First Nation and Alberta Transportation.	Medicinal and ceremonial plants	Concerns regarding medicinal and ceremonial plants in the area.	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group
17	June 25, 2018 Review of Alberta Transportation's Springbank Off-stream Reservoir Project Environmental Impact Assessment by Management Solutions in Environmental Science	Hydrology	Removal of suspended sediments from the Elbow River during diversion and potential downstream effects. Please explicitly report the expected sediment mass that would be removed from the Elbow River under each flood scenario and compare to the	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group

	1. Document or Meeting Reference	2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. Indigenous Group Response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
			annual sediment yield of the River.				
			Indicate whether the corresponding loss of sediment supply was accounted for in modelling potential changes in channel degradation/aggradation downstream of the diversion channel as a result of flood operations.				
			Please consider and discuss how sediment yields in the Elbow River may or may not be reduced over several decades, taking into account the probability of each flood scenario and the corresponding loss of sediment yield.				
			Please explain why effects of a 30% decrease in sediment yield in the River would be expected to be restricted to the local assessment area.				
			Please consider and assess the reduction in sediment yield as a Project impact, and not as related to the intent of the Project (flow diversion).				
18	June 25, 2018 Review of Alberta Transportation's Springbank Off-stream Reservoir Project Environmental Impact Assessment by Management Solutions in Environmental Science	Surface water quality	Please explain how suspended sediment concentrations (measured as Total Suspended Sediments (TSS)) will be maintained below the Canadian Council of Ministers of the Environment (CCME) guidelines in the Elbow River during reservoir drawdown through the outlet.	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group
19	June 25, 2018 Review of Alberta Transportation's Springbank Off-stream Reservoir Project Environmental Impact Assessment by Management Solutions in Environmental Science	Surface water quality	Please discuss the potential impacts to aquatic organisms in the reservoir that will result from methylmercury concentrations reaching the 0.002 µg/L short-term guideline and exceeding the long-term (chronic) guideline established by Alberta.	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group

	Reference	2. Project Specific Aspect of the Concern Expressed	Please discuss the potential spatial extent of impacts in the Elbow River that would result from the release of reservoir water containing 0.002 µg/L methylmercury. Consider that diversion to the reservoir with this concentration may occur as frequently as every decade (1:10 year flood).	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. Indigenous Group Response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
Transpo Off-strea Environ Assessn	of Alberta ortation's Springbank am Reservoir Project mental Impact ment by Management is in Environmental	Surface water quality	Please clarify whether Project infrastructure that is treated with herbicides will be in contact with any diverted water when reservoir is active. Please present soils data from the proposed reservoir area and determine whether there is a risk of mobilizing pesticides from soils into diverted water.	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group
	between Montana tion and Alberta	Sediment	Concerns about sediment in the river and sediment build up within the reservoir. Concern about how sediment build up in reservoir will affect vegetation.	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group
	between Montana ition and Alberta	Mitigation Compensation	Questioned what the mechanism is for dealing with aspects that cannot be mitigated. Recommended compensation and economic opportunities.	At the meeting held on June 27, 2018, Alberta Transportation responded that they have committed to exploring economic opportunities with Indigenous groups, but cannot move forward on that until the project is approved. In a letter dated June 18, 2019, Alberta Transportation stated they are committed to Indigenous participation in the Project including training, employment, and contracting opportunities.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group
Phone control First Nation February Phone control First Nation Services Transpo June 25 Review of Transpo Off-street	ry 8, 2018 call between Montana tion and DEMA Land s for Alberta ortation.	Information use	Materials representing Montana First Nation were taken from sources that have no relevance to the specific SR1 project. Why reports from other projects Montana First Nation was involved in were used for this project. Concerned that the assessment of impacts on Montana First Nation traditional use has not been adequately considered because information in the EIA used information from publicly available reports rather than	On March 23, 2018, Alberta Transportation sent detailed responses to specific concerns raised to date by providing a copy of Table 7-10 SR1 Project Specific Concerns and Responses – Montana First Nation from the March 2018 EIA: The publicly available information used in the TLRU section summarizes traditional resources that are generally known to be used by Indigenous groups and can be found in the area of the Project. The information in the TLRU section is based on available sources. The list of resources is not intended to be an exhaustive list of resources used by Indigenous groups, nor does the absence of information imply that an Indigenous group is not exercising traditional use in the regional assessment area. The list of resources noted in the October 2017 TLRU was updated in this revised EIA.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group

	1. Document or Meeting Reference	2. Project Specific Aspect of the Concern Expressed	3. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. Indigenous Group Response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
	Assessment by Management Solutions in Environmental Science		discussing potential impacts directly with Montana First Nation for this Project.				
			Montana First Nation does not support the proponent's use of Montana First Nation traditional land and resource use information available in the public domain to inform their assessment, particularly when the information used is of no relevance to the study area and has not been verified by Montana First Nation.				
24	March 29, 2018 Email from Danny Bellerose, Montana First Nation to Seamas Skelly, Alberta Transportation	Request for information	Requested a letter detailing the choice of SR1 over the MC1 option.	In a letter dated April 27, 2018, Alberta Transportation detailed the choice of SR1 over MC1.	None at this time.	Alberta Transportation provided the requested information.	No further action required.

Springbank SR1 – Stakeholder Specific Concerns and Response Table

Indigenous Stakeholder: Samson Cree Nation

Date: OCTOBER 2016 - SEPTEMBER 2019

	1. Document or Meeting Reference	3. Project Specific Aspect of the Concern Expressed	2. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. Indigenous Groups Response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
1	November 29, 2016 Meeting between Alberta Transportation and Samson Cree Nation.	Traditional Knowledge	Inquired if the Environmental Impact Assessment (EIA) would include Traditional Ecological Knowledge (TEK).	At the meeting held on November 29, 2016, Alberta Transportation responded that TEK would be included in the EIA.	No further response received.	Available TEK was included in the EIA.	No further action required.
2	June 25, 2018 Springbank Off-Stream Reservoir Project Written Submission by Matrix Solutions Inc.	Treaty rights Wildlife Hunting	Samson members continue to hunt and trap in and around the Project area. Samson has and continues to exercise its hunting rights. As such, the potential destruction of wildlife habitat is of particular concern to Samson. In addition, it is likely that Samson's hunting rights will be impacted during the construction and operation of the Project. The following list summarizes information requests required to address the gaps in the EIA's assessment of Project impacts on SCN Section 35 Rights: • Establish the link between impacts on wildlife and wildlife habitat and the impact on Indigenous people's Section 35 Rights and describe the Project's impacts on hunting; • Describe the proponents plan to mitigate the Project's impacts on section 35 hunting rights during construction and operation of the Project; and • Describe how Indigenous communities, including Samson, will be involved in monitoring wildlife and wildlife habitat during construction and operation of the Project.	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous group.
3	June 25, 2018 Springbank Off-Stream Reservoir Project Written	Treaty rights Fishing	The following list summarizes information requests required to address the gaps in the EIA's	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous group.

	1. Document or Meeting Reference	3. Project Specific Aspect of the Concern Expressed	2. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. Indigenous Groups Response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
	Submission by Matrix Solutions Inc.	Monitoring	assessment of Project impacts on SCN Section 35 Rights:				
			Establish the link between impacts on fish and fish habitat and the impact on Indigenous group's Section 35 Rights;				
			 Provide an assessment of the Project's impacts specifically on Indigenous fisheries, including Samson's fisheries; 				
			 Provide a description of the proponent's plan to mitigate the impacts on Section 35 Rights relating to fisheries; 				
			Describe how Indigenous communities, including Samson, will be involved in monitoring fisheries and fish habitat during the construction and operation of the Project; and				
			Describe the potential effects of erosion and sedimentation on watercourses on Samson sites of importance, including fishing sites and spiritual sites.				
4	June 25, 2018 Springbank Off-Stream Reservoir Project Written Submission by Matrix Solutions Inc.	Environment	Potential environmental effects did not consider effects to Indigenous communities (such as changes in culture or spirituality) related to the project.	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous group.
5	June 25, 2018 Springbank Off-Stream Reservoir Project Written Submission by Matrix Solutions Inc.	Wildlife	Samson Cree Nation is concerned about potential Project effects on beavers, bald eagles, moose and deer and requests further assessment of these indicator species.	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous group.
6	June 25, 2018 Springbank Off-Stream Reservoir Project Written Submission by Matrix Solutions Inc.	Wildlife	Samson Cree Nation identified a potential concern related to how the Project could impact regional movement of wildlife species, which would require evaluation beyond the spatial scale that would be typical for the EIA. Samson Cree Nation requests that Alberta Transportation demonstrate how it plans to	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous group.

	1. Document or Meeting Reference	3. Project Specific Aspect of the Concern Expressed	engage with Samson Cree Nation to identify an appropriate regional-scale approach to further evaluate its concerns regarding regional wildlife movement and effects within the Samson Cree Nation traditional territory.	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. Indigenous Groups Response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
7	June 25, 2018 Springbank Off-Stream Reservoir Project Written Submission by Matrix Solutions Inc.	Wildlife	The methods used to complete the amphibian and yellow rail surveys for the Project do not follow the timing guidelines provided in the Sensitive Species Inventory Guidelines (SSIG; ESRD 2013) which could impact detection rates. In order to develop appropriate mitigation measures for species that may be impacted by the Project, Samson requests that the Agency direct Alberta to conduct additional surveys in the year of construction, and in accordance with SSIG. Samson Cree Nation requests Alberta Transportation demonstrate how it plans on engaging with Samson Cree Nation so that community members can support or participate in pre-construction wildlife surveys. Samson Cree Nation requests that Alberta commit to implementing appropriate mitigation measures based on the results of pre-construction surveys.	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous group.
8	June 25, 2018 Springbank Off-Stream Reservoir Project Written Submission by Matrix Solutions Inc.	Wildlife	The proposed mitigation measures to reduce mortality are considered inadequate for amphibians including western toads and northern leopard frogs as well as for nesting raptor species. Samson requests that Alberta propose additional mitigation measures to support the	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous group.

	1. Document or Meeting Reference	3. Project Specific Aspect of the Concern Expressed	2. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. Indigenous Groups Response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
			prediction of a low wildlife mortality risk, including amphibian salvage, implementation of Alberta BearSmart recommendations and adherence to applicable year-round setbacks (GoA 2017).				
9	June 25, 2018 Springbank Off-Stream Reservoir Project Written Submission by Matrix Solutions Inc.	Wildlife movement	The potential effects of the Project on wildlife movement and direct mortality were assessed qualitatively, based on peer-reviewed literature and technical literature, professional judgement and project experience. Limited site-specific data was used to support the assessment and additional analysis methods are available to improve understanding of the potential Project effects. Additional analysis is requested to understand if habitat corridors exist within the local assessment area (LAA) or regional assessment area (RAA) for elk and grizzly bears.	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous group.
10	June 25, 2018 Springbank Off-Stream Reservoir Project Written Submission by Matrix Solutions Inc.	Wildlife movement	The proposed mitigation measures to reduce potential impacts to spring feeding habitat and grizzly bear movement are considered inadequate. Samson requests that Alberta propose additional mitigation measures (e.g., suitable fencing for grizzly bears and avoiding construction during spring feeding) to reduce impacts to grizzly bear movements.	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous group.
11	June 25, 2018 Springbank Off-Stream Reservoir Project Written Submission by Matrix Solutions Inc.	Fish	Samson Cree Nation has and continues to exercise its fishing rights. As such, the potential destruction of fish habitat is of particular concern to Samson Cree Nation.	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous group.
12	June 25, 2018	Fish	The historical presence of westslope cutthroat trout in the	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous group.

	1. Document or Meeting Reference	3. Project Specific Aspect of the Concern Expressed	2. Specific Concern Expressed	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. Indigenous Groups Response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
	Springbank Off-Stream Reservoir Project Written		Project development area was not considered.				
	Submission by Matrix Solutions Inc.		Samson would like to collaborate with Alberta in developing any offsetting plan in respect of westslope cutthroat trout habitat and population. Therefore, Samson requests that the Agency direct Alberta, through an information request(s), to provide further details on developing an offsetting plan, including collaborating with Samson and developing appropriate information requirements that should be included in any plan.				
13	June 25, 2018 Springbank Off-Stream Reservoir Project Written Submission by Matrix Solutions Inc.	Fish	The sole proposed mitigation measure of slowly lowering the water level within the reservoir to support fish travelling from the reservoir back to the Elbow River is considered inadequate to reduce fish mortality.	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous group.
			To reduce fish mortality, Samson requests that Alberta commit to maintaining grading in the reservoir such that low-lying areas will be present where stranded fish can be salvaged and safely returned to the river. Samson also requests that Alberta engage with Samson so that community members can support or participate in fish salvage activities should they be required.				
14	June 25, 2018 Springbank Off-Stream Reservoir Project Written Submission by Matrix Solutions Inc.	Aquatic ecology	Potential changes to channel morphology and substrate conditions caused by eliminating naturally-occurring flood flows in the Elbow River were not considered.	None at this time.	None at this time.	None at this time.	Ongoing: Working with Indigenous group.
			Samson Cree Nation requests that Alberta provide an evaluation of how this elimination of naturally-occurring conditions may affect aquatic				

1. Document or Meeting Reference	3. Project Specific Aspect of the Concern Expressed	2. Specific Concern Expressed ecology in the affected reach of	4. Proponent Response on Effort to Avoid or Mitigate Concern	5. Indigenous Groups Response to Proponent's Effort to Avoid or Mitigate Concern	6. Details on How Concerns Were Addressed, Including Avoidance or Mitigation Measures	7. Outcomes/Comments
		the Elbow River.				
15 March 26, 2018 Email from Samson Cree Nation to DEMA Land Services for Alberta Transportation	Information sources used in the EIA	Concerns regarding Stantec using information that was provided by Samson Cree Nation on different projects, not SR1, and assuming what Samson Cree Nation wants protected rather than collecting information directly from Samson Cree Nation.	In a letter dated July 20, 2018, Alberta Transportation detailed how information for Samson Cree Nation was used in the EIA. The sources used in the EIA were also listed and described. Alberta Transportation has asked for permission to use the information from the Traditional Land and Resource Use (TLRU) workshop on March 6, 2018 and September 17, 2018.	In an email on October 30, 2018, Samson Cree Nation requested that the information collected at the TLRU workshop not be used for any purpose or project without prior written consent.	None at this time.	Ongoing: Working with Indigenous Group
		Samson Cree Nation requested that their information be removed from the EIA tables being presented to other nations.				
16 November 29, 2016 Meeting between Alberta Transportation and Samson	Economic opportunities	Inquired if the project would create First Nation jobs.	At the meeting held on November 29, 2016, Alberta, Alberta Transportation indicated there is potential for the project to create First Nation jobs but nothing would be decided until the project is approved.	None at this time.	None at this time.	Ongoing: Working with Indigenous Group
Cree Nation.			In a letter dated June 18, 2019, Alberta Transportation stated they are committed to Indigenous participation in the Project including training, employment, and contracting opportunities.			
17 June 19, 2017 Letter from JFK Law Corporation on behalf of Samson Cree Nation	First Nations Involvement in the CEAA tour	Samson Cree Nation object to a tour of the Project area arranged by Alberta Transportation for the Natural Resources Conservation Board (NRCB) and the Canadian Environmental Assessment Agency (CEAA).	Alberta Transportation responded in a letter on June 22, 2017 to let the Samson Cree Nation know that the tour had been cancelled.	N/A	Alberta Transportation responded in a letter on June 22, 2017 to let the Samson Cree Nation know that the tour had been cancelled.	No further action required.
		Samson Cree Nation objected to the lack of representation of First Nations whose Treaty rights and traditional uses may be impacts by the proposed Project.				
		Samson Cree Nation was also concerned that they were not notified of the tour.				
		Samson Cree Nation requested that the tour be postponed until it can be conducted with proper notification to and involvement of First Nations.				
18 November 29, 2016 Meeting between Alberta Transportation and Samson Cree Nation.	Information sharing	Transportation should present to the South Saskatchewan Regional Planning Committee (SSRP).	At the meeting held on November 29, 2016, Alberta Transportation stated they will present if asked. Alberta Transportation presented at the SSRP First Nations Sub Group Meeting on May 24, 2017.	N/A	Alberta Transportation presented at the SSRP First Nations Sub Group Meeting on May 24, 2017.	No further action required.

Appendix 4-1 Indigenous Participation Plan (IPP) December 2019

APPENDIX 4-1 INDIGENOUS PARTICIPATION PLAN (IPP)



Appendix 4-1 Indigenous Participation Plan (IPP) December 2019



Indigenous Participation Plan

Project Overview

The Springbank Off-Stream Reservoir (referred to as the Project or SR1) is a flood mitigation infrastructure project aimed at protecting Calgary and southern Alberta from flooding along the Elbow River. It is a primarily dry reservoir that temporarily stores flood water and, in conjunction with the capacity of the permanent Glenmore Reservoir in Calgary, would accommodate flood waters at the level generated in 2013. SR1 covers 3,600 acres in an area 15 km west of Calgary near Springbank Road, north of the Elbow River, and predominantly east of highway 22. The Project consists of an off-stream storage reservoir, a diversion structure and channel, an off-stream storage dam, outlet works and road modifications. The goal of the project is to prevent future loss of life and costly damages to Calgary and southern Alberta infrastructure, both public and private, during flood events. The Project will undergo environmental reviews with provincial and federal regulators to ensure environmental impacts are understood and mitigated. Once approved, the Project will undergo 3 years of construction with partial operations being achieved in year 2.

Introduction

This Indigenous Participation Plan (IPP) will outline the efforts Alberta Transportation will undertake to identify contracting, employment and training opportunities with potentially affected Indigenous groups identified by the federal and provincial regulators for engagement on the Project. While many of these opportunities will be made available through the Project's general contractors, Alberta Transportation will maximize Indigenous participation opportunities for employment training and contracting by including requirements for its prime contractors to hire qualified and competitive Indigenous contractors and employees. Potential prime contractors will be evaluated on, among other things, their plans for Indigenous participation throughout the Project construction that meet or exceed the objectives of Alberta Transportation's Indigenous participation plan for the Project.

Indigenous Groups

Indigenous groups included in this plan are the Treaty 7 First Nations (Blood Tribe/Kainai First Nation, Piikani Nation, Siksika Nation, Stoney Nakoda Nations, Tsuut'ina Nation), Ermineskin Cree Nation, Louis Bull Tribe, Montana First Nation, Samson Cree Nation, Métis Nation of Alberta Region 3, and Foothills Ojibway Society.

Consultation and Engagement

Since the onset of the Project, Alberta Transportation has undertaken consultation activities and meetings with Indigenous groups on a regular basis. Through consultation and engagement activities, Alberta Transportation has heard Indigenous concerns related to economic participation in construction and development projects. This IPP is intended to identify Indigenous economic participation opportunities related to this project, and training or business support programs offered by the Government of Alberta or Government of Canada.

Economic Opportunities

Alberta Transportation is committed to providing Indigenous participation opportunities on the Project. There are many ways in which Indigenous groups, individuals, and companies may participate in the Project. In order to facilitate participation, individual capacity building or business development opportunities are identified below. Indigenous economic participation opportunities are primarily anticipated during the construction phase of the Project. Some pre- and post-construction opportunities are also anticipated.

Capacity Building Programs

Alberta Transportation will work with other provincial departments such as Indigenous Relations, Economic Development, Trade and Tourism, and Labour and Immigration to develop the capacity of individuals and businesses to participate in all stages of the Project. This may include:

- promotion of federal and provincial programs and services;
- inclusion of Indigenous training programs as a selection criteria when selecting contractors for the Project;
- providing information workshops to the Indigenous groups about tendering and bidding for contracts on Alberta Purchasing Connection and about employment and training opportunities;

Training and funding programs to support small businesses and entrepreneurs to expand their skills and operations to support the Project are available by both the Government of Alberta and the Government of Canada. Application processes and criteria to obtain funding under each program must be met and more information can be found online. Existing training and funding programs which may be applicable for some Indigenous groups are identified in the following sections. The Project will support Indigenous groups or people interested in applying for programs to build capacity for SR1 upon request, which, may include guidance on or assistance in completing applications, connecting individuals with program administrators, or workshops in communities to enhance awareness of programs available.

Employment Training

The Government of Alberta offers a number of programs to contribute to the development of Alberta's labour market. These programs build the capacity of individuals allowing them to enhance their skills and participate in Alberta's economy. Some of these programs support all Albertans while other programs specifically support Indigenous people in training to obtain and maintain long-term, sustainable employment. These programs create workplace training opportunities and support the development of partnerships between Indigenous groups, industry and government.

The Project's activities relative to employment and training opportunities aim to meet the Government of Alberta's objectives of its First Nations training to Employment Program which are to:

- Support First Nations members to obtain and maintain long-term, sustainable employment,
- Create workplace training opportunities for First Nations' members in occupations that are in labour market demand, and
- Support the development of partnerships between First Nations, industry and government.

As such, the Project will:

- Identify employment opportunities
- Facilitate knowledge sharing of how to access government programs for training and capacity building of Indigenous groups

The mechanism to achieve the knowledge sharing may include connecting Indigenous groups with their local Indigenous Skills and Employment Training program representatives or facilitating the delivery of workshops in Indigenous communities. Training programs which could support Indigenous participation in the SR1 project may include the following:

Provincial Training Programs

Ministry of Labour and Immigration

- First Nations Training to Employment Program (FNTEP): FNTEP supports the development of
 partnerships designed to create training and work experience projects that lead to employment for
 First Nations members living on reserve.
- Aboriginal Training to Employment Program (ATEP): ATEP supports the development of
 partnerships designed to create training and work experience projects that lead to employment for
 Indigenous Peoples across Alberta.
- Labour Market Partnerships (LMP): LMP is intended to enhance workplace development and labour
 market adjustment strategies through community partnerships. Eligible projects are designed to
 identify, develop and support projects with industry, organizations and community groups with
 common labour market needs.
- Canada-Alberta Job Grant (CAJG): CAJG is a training program where employers apply on behalf of their employees for eligible training costs based on training needed for their employees to fill current or future positions.

Business Development Funding

Both the Federal and Provincial governments offer programs aimed at building capacity for businesses. These programs support communities and businesses in the pursuit of economic opportunities to increase economic development and diversification. Business development programs which could support Indigenous business participation in the SR1 project may include the following:

Federal Funding Opportunities

- Community Opportunity Readiness Program (CORP): provides project-based funding for First Nations for a range of activities to support communities' pursuit of economic opportunities.
- Western Diversification Program (WDP): supports the development and diversification of the
 Western Canadian economy, and activities where economic and/or employment benefits accrue
 primarily in Western Canada.
- Indigenous Skills and Employment Training (ISET) Program: ISET is a co-developed program with Indigenous partners which is designed to help Indigenous people improve their skills and find employment.

Provincial Funding Opportunities

Ministry of Economic Development, Trade and Tourism

 Community and Regional Economic Support (CARES) program: the CARES funds initiatives of Indigenous communities and regions that enhance local economic conditions, leverage regional economic development resources, and build local and regional capacity for sustainable economic development delivery.

Employment and Contracting Opportunities

Alberta Transportation is committed to providing opportunities for economic participation to Indigenous people and companies. Should disparities arise during the procurement process for construction or during implementation of training and contracting opportunities, Alberta Transportation will work together with all parties to identify options to address those disparities.

Alberta Transportation will rely upon contracting opportunities to help meet the goal of Indigenous participation on the Project. The Project will utilize qualified and competitive companies and people to plan and build SR1. Employment and contracting opportunities for Indigenous peoples could be realized by various mechanisms including:

- setting aside a percentage of the construction, operations, maintenance and monitoring work for Indigenous peoples and companies;
- inclusion of requirements for prime contractors to hire qualified and competitive Indigenous contractors and employees;
- contracts for general contractors and sub-consultants could contain provisions that reflect the
 objectives of the Indigenous participation plan by identifying specific targets for Indigenous
 employment, training, and business opportunities; and
- evaluation criteria which includes contractors plans for inclusion of Indigenous participation.

To support this participation plan Alberta Transportation, working with Indigenous groups, could create an Indigenous business directory of qualified approved Indigenous businesses and vendors which would be made available to prime contractors.

Alberta Transportation could also work with selected general contractors to support measures to address potential training or education gaps of Indigenous peoples interested in employment on the Project where reasonably possible. Alberta Transportation expects to maximize opportunities to provide training for interested indigenous peoples considered "close to qualified", meaning an applicant who, with participation in a short-term training program, would be deemed qualified for the position by either Alberta Transportation or its general contractors.

Planning

Opportunities available to Indigenous contractors during this phase may include:

- Traditional Land Use and Traditional Ecological Knowledge use and knowledge of the land
- Survey and geotechnical

Pre-Construction

Opportunities during the pre-construction phase may include:

- Camp related support services
- Access road building and maintenance
- Temporary infrastructure
- Site clearing and preparation

Construction

Most employment opportunities will occur during the construction phase of the Project. The following work is anticipated for the Project during construction; however, additional opportunities may be available:

- Mobilization of equipment
- Excavation
- Construction
- Aggregate supply and/or delivery
- Heavy Equipment Operations
- Demobilization
- Cleanup
- Access Road building and maintenance
- Temporary construction facilities
- Site preparation
- Fencing
- Medical, safety, and security services
- Office, administrative, clerical services
- Fuel storage and delivery
- Vehicle and machine repairs
- Short-term accommodations
- Transportation
- Snow Clearing

Operations and Monitoring

During operations there are fewer opportunities available but some may include:

- Maintenance of facilities, roads and access, and equipment
- Transportation and delivery services
- Site access management
- General maintenance
- Short-term accommodations
- Transportation
- Snow Clearing

Post flood reclamation activities will offer additional opportunities including:

- Maintenance of facilities and roads
- Fish rescue
- Vegetation management

Post construction environmental monitoring is anticipated (typically 3-5 years) in the following areas:

- Vegetation
- Wildlife
- Groundwater
- Fish and fish habitat
- Air quality
- Cultural sites (during construction)

Ongoing environmental monitoring is anticipated in the areas of:

- Groundwater (pre- and post-flood)
- Surface water quality (water quality in the reservoir and in the Elbow River post-flood)
- Air quality

Cultural Awareness Training

In addition to employment opportunities for Indigenous peoples, all contractors and Government of Alberta staff on the Project site will be required to participate in Indigenous cultural awareness training to develop knowledge and skills to work together. Indigenous cultural awareness training requirements will be outlined in tenders with contractors. Indigenous cultural awareness training will be developed and delivered by Indigenous groups.

Engagement on Draft Indigenous Participation Plan

As part of Transportation's effort to ensure Indigenous groups are able to participate in the Project, the development of the Indigenous Participation Plan will include input from Indigenous groups. To obtain input, the draft plan will be shared with Indigenous community leaders during engagement meetings with a goal of obtaining input on how Indigenous groups would like to participate in the Project. Indigenous feedback on the plan will be used to further refine the draft Indigenous Participation Plan.

Reporting on Indigenous Participation

As part of the Project's commitment to Indigenous participation opportunities, monitoring and reporting will be implemented for the duration of the Project. Reporting will include details about how many opportunities and what types of opportunities were realized, and the total economic benefit to Indigenous people and groups as a result of these opportunities.

Appendix 9-1 Draft Guiding Principles and Direction for Future Land Use December 2019

APPENDIX 9-1 DRAFT GUIDING PRINCIPLES AND DIRECTION FOR FUTURE LAND USE



Appendix 9-1 Draft Guiding Principles and Direction for Future Land Use December 2019



DRAFT GUIDING PRINCIPLES AND DIRECTION FOR FUTURE LAND USE

PROPOSED SPRINGBANK OFF-STREAM RESERVOIR PROJECT

Introduction

The Elbow River flood of 2013 was a devastating event both socially and economically for many Albertans. The flood tragically resulted in 5 deaths and forced the evacuation of over 80,000 people (one of the largest evacuations in Canadian history). A study completed by IBI Group estimated that should a 2013 level flood event on the Elbow River occur again without adequate protection, up to \$1.5 billion of property and infrastructure damage is at risk which could result in permanent damage to the economic future of the region.

For reference, the 2013 flood was the most significant flood of record in Alberta on the Elbow River and had an estimated peak flow of 1,240 cubic meters per second (m³/s). Statistically, the 2013 flood has been estimated to be slightly greater than a 1:200-year flood. To put it another way, there is 0.5% chance of a similar flood occurring each year on the Elbow River.

Following the flood of 2013, the Government of Alberta undertook an assessment of mitigation strategies that could be used to reduce the risk of future floods. Communities in Calgary along the Bow and Elbow rivers were among the most heavily impacted. The proposed Springbank Off-Stream Reservoir (SR1 or the Project) was identified as the preferred option to mitigate flooding upstream of Calgary along the Elbow River.

The construction and management of a dry reservoir presents a unique opportunity with the conversion of private land to Crown land. If the proposed Project is approved, upon commissioning of the Springbank dam and diversion, Alberta Environment and Parks (AEP) will be responsible for land management and operation of the project infrastructure, and management of the associated Crown land for the reservoir.

This land is currently not accessible to the public without permission from the landowners. The future uses of the Land Use Area (LUA) will be determined, after engagement with First Nations and stakeholders regarding such future uses, in accordance with any applicable Government of Alberta policies and procedures at the time of engagement. This document provides direction around government intentions related to future land use, and the process for setting the management intent for these lands, if the project proceeds.

Alberta Transportation (AT) is seeking regulatory approval of SR1 which also includes securing any required private lands to be converted to Crown lands. AT is undertaking initial First Nations and stakeholder discussion around desired future land use and access. This document is intended to support AT's engagement during the regulatory process of SR1 and provide high level direction and certainty for land use by future users. Detailed land use planning will be undertaken following regulatory decisions on the Project. This detailed planning will be informed by the information gathered during the engagement conducted during the regulatory process, as well as by future engagement processes with First Nations and stakeholders.

Guiding Principles for Future Land Use

- 1. The primary and overarching use of the Crown land within the reservoir footprint is for flood mitigation. No activities may limit or otherwise hinder the ability of the reservoir to fill to full supply level for the purpose of flood mitigation or water management within the watershed.
- 2. The reservoir may fill at any point in the year without warning, including during periods below peak floods and may be inaccessible for an undetermined amount of time, post drawdown, due to silt and debris buildup or other unintended consequences requiring remediation.
- 3. Compensation will not be provided by the Crown for any impacts to land use activities resulting from operation of the Project infrastructure.
- 4. Safety is paramount in any decisions that allow for access onto the reservoir lands. Restrictions on some or all land uses will be issued during specified periods of the year as required to reduce risks to safety and property from flooding.
- 5. There will be no access permitted on or across the Project infrastructure at any time or for any purpose (see attached map and refer to dark pink areas). The Project infrastructure will include the intake structure on the Elbow River and main diversion canal, main dam, emergency spillway and outlet canal to the Elbow River in its entirety.
- 6. Use of the lands by First Nations may be considered a priority outside of flood and remediation periods in order to enable treaty rights and traditional uses.
- 7. Non-motorized recreational access may be considered, in accordance with approved land uses.
- 8. Access for specific purposes such as grazing may be considered and used as a tool to manage and maintain the grassland landscape in the SR1 area consistent with operational plans set by AEP.
- 9. All land use decision making will remain under the authority of AEP.
- 10. No non-flood related permanent or temporary infrastructure will be permitted in the reservoir or setback area.

Direction for Future Land Use Planning

The future uses of the LUA will be determined after engagement with First Nations and stakeholders regarding such future uses, in accordance with any applicable Government of Alberta policies and procedures at the time of engagement.

Land-use planning decisions will be implemented using the appropriate land-management tools available to the Government of Alberta, in accordance with legislation applicable at the relevant time.

The purpose of conducting engagement is to inform and gather input to be incorporated in the development of a future land use plan for the LUA. Through a series of engagement activities with First Nations and stakeholders, Government staff will gather information and analyze feedback to develop direction for future land use, having regard to the Government's need for flood mitigation and the information expressed by First Nations and stakeholders. The direction for future land use will be provided to First Nations and stakeholders for comment. It is expected that there will be a separate engagement process for First Nations.

First Nation engagement:

Use of existing forums that involve First Nations in Government planning may be used to initiate discussions. Through the South Saskatchewan Regional Planning process, there is a venue for regular discussions and sharing of information between First Nations and Government. Additional one-on-one meetings will be arranged with interested First Nations to allow for meaningful discussions.

Stakeholder engagement:

Stakeholders will be invited to a series of workshops and meetings to allow for the sharing of perspectives, issues/concerns, and desired use of the LUA. This could include technical workshops, online information, multi-stakeholder meetings and/or sector based meetings.

1. Primary Use - Flood mitigation and water management

Outcome: The land use is managed for the primary purpose of providing storage for flood mitigation to communities and infrastructure downstream of SR1.

Strategies:

- 1.1. SR1 will be used to divert and store water from the Elbow River for the purpose of flood mitigation and water management.
- 1.2. The timing and volume of water both stored and released from the SR1 reservoir will be coordinated with the larger water management system in the watershed.
- 1.3. AEP will be responsible for ongoing operation, management and maintenance of the reservoir footprint and flood management infrastructure.
- 1.4. AEP will engage with First Nations, stakeholders, municipalities and, local landowners as per the facilities engagement/communication plan.

2. Secondary Uses

In light of the Primary Use, the safety of anyone with access or land users will be an overriding factor.

A. First Nation Use

Outcome: Traditional First Nation access and use of land will be informed by the "Guiding Principles" outlined in this document.

Strategies:

- 2.1. The Government of Alberta commits to engaging with First Nations in the process to finalize the land use plan for the LUA.
- 2.2. In general, First Nations' traditional activities, including the exercise of treaty rights such as hunting, will be allowed.

2.3. The Government of Alberta will utilize regulations and policies enabling hunting access and staging areas.

B. Other activities

Outcome: Other activities will be considered where they align and are compatible with the overarching management intent of flood mitigation as per the Guiding Principles outlined in this document.

Strategies:

- 2.4. Vegetation and habitat management as well as any post-flood remediation actions will be in compliance and consistent with the regulatory approvals for the Project. Opportunities for Indigenous participation in these aspects are addressed in the project's Indigenous Participation Plan.
- 2.5. In general, only uses and activities that have a minimal impact on the land will be allowed.

 Therefore, the availability of surface dispositions will be limited.
- 2.6. Grazing permits may be issued for pasture land within designated zones, and at certain times, where determined by AEP as the appropriate tool to manage grasslands for ecosystem health or wildfire mitigation.
- 2.7. Non-motorized recreational access may be considered (e.g. hiking, biking, cross country skiing).

Land Use Planning Process

During the Project application period, Alberta Transportation will continue to explore opportunities and desired uses of the lands should the lands be acquired by the Crown and SR1 be approved. This will include meetings with First Nations, stakeholders and local landowners during the engagement process to discuss desired uses. Should the Project be approved, meeting results and desired direction determined during the approval period will be provided to AEP for incorporation or consideration into the land use planning process. AEP will initiate detailed land use planning if the Project receives all necessary provincial and federal approvals.

The land use plan will focus on how the Project lands are used and managed and will not include the operations of the SR1 infrastructure or water management planning in the watershed beyond the reservoir footprint. AEP will be the final decision maker in the land use planning process and management of all Crown lands associated with the Project. AEP is accountable to ensure objectives and outcomes of the Project are met.

Appendix 9-2 Land Use Tools December 2019

APPENDIX 9-2 LAND USE TOOLS



Appendix 9-2 Land Use Tools December 2019



Government of Alberta – Land Use Tools

	Alberta Land Stewardship Act act the Land Use Framework for each planning region in Alberta. The Land Use Framework is an blic lands in Alberta to achieve long-term economic, environmental and social outcomes.
South Saskatchewan Regional Plan (SSRP)	Contains strategies that support environmental, economic and social outcomes, including for environment and land management, energy development, sustainable farming and ranching, recreation, forest management and nature-based tourism.
Subregional or issue-specific plans	Provides operational guidance and sets mandatory requirements for land-use decision-makers and users.
Regulates public land allocations, the sc public land including recreational, com	Public Lands Act ale or transfer of public land to other levels of government or private entities, and the uses of mercial and industrial uses.
Vacant Public Land	 Alberta Environment and Parks manages the administration of public lands that are not subject to any formal disposition as "vacant public land". The public has a right to recreational access and use vacant public land up to 14 days without an authorization. Recreational activities longer than 14 days require an access permit. If an individual is exercising a treaty right, then no access permit is required for any length of activity.
Dispositions	 Grants permission for a development and/or activity and sets out the rules/conditions. There are three distinct types of dispositions: formal dispositions; authorizations; and approvals. Dispositions do not grant exclusive use of an area to a disposition holder, although holders of formal dispositions have the ability to limit access for other users based on the type and time of the activity. Dispositions are issued by directors under the Public Lands Act and are typically not issued to other departments of the government.

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Section 7(b) Disposition	 Can allow for a disposition for any special case for which no provision is made in the Public Lands Act. Terms and conditions may be included as needed for the special circumstances. Issued by a director under the Public Lands Act as authorized by the LGIC.
Public Land Use Zones (PLUZ)	 Created for a specific land base with unique conditions to assist in the management of recreational land uses and resources. A PLUZ is created by regulation of the LGIC.
Public Land Recreation Area (PLRA)	 Recreation areas outside of Provincial parks typically within a Public Land Use Zone. Provides staging areas for day use or trail access. A PLRA is created by order of LGIC.
Reservations and Notations	 Reservations are used under the Public Lands Act to set aside (reserve) land for use by government departments and other persons. Reservations can outline parameters of access to and use of the land (including prohibited uses). Examples include utility corridors, lands to transfer to Indigenous Services Canada, lands with identified commercial recreation and tourism values, and lands reserved for use by other departments, such as for forestry lookout towers. Lands that are reserved may also include conditions (notations) that are used by AEP and the AER to identify a management intent for particular public lands. The holder of the notation (often a division within AEP) must be consulted before any disposition is issued for the lands. Two common notations are: Protective Notations (PNT): have been used in planning to notify that lands have potential recreation or conservation requirements, for example, that threatened or endangered species are present in the vicinity. Consultative Notations (CNT): have been used in planning to identify an interest in the land by an agency or for a management intent. CNTs do not impose any land use restrictions. Authority to create reservations and notations have been delegated to directors under the Public Lands Act.

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