Assessment of Potential Effects on Traditional Land and Resource Use March 2018

Table of Contents

USE14.1	ABBR	EVIATIONS		14.III
14.1 SCOPE OF ASSESSMENT 14.1 14.1.1 Regulatory and Policy Setting 14.1 14.1.2 Engagement and Key Concerns 14.3 14.1.3 Potential Environmental Effects, Pathways and Measurable Parameters 14.9 14.1.4 Boundaries 14.15 14.1.5 Residual Environmental Effects Description Criteria 14.17 14.1.6 Significance Definition 14.19 14.1.7 Assumptions and Assessment Limitations 14.19 14.2 EXISTING CONDITIONS FOR TRADITIONAL LAND AND RESOURCE USE 14.22 14.2.1 Methods 14.23 14.2.2 Indigenous Groups 14.23 14.2.3 Overview of Current Use 14.38 14.2.4 Availability of Traditional Resources for Current Use 14.40 14.2.5 Access to Traditional Resources or Areas for Current Use 14.55 14.2.6 Current Use Sites or Areas 14.60 14.3.1 Analytical Assessment Techniques 14.60 14.3.2 Change in Availability of Traditional Resources for Current Use 14.61 14.3.3 Change in Access to Traditional Resources for Current Use 14.6	14.0			
14.1.2 Engagement and Key Concerns 14.3 14.1.3 Potential Environmental Effects, Pathways and Measurable Parameters 14.9 14.1.4 Boundaries 14.15 14.1.5 Residual Environmental Effects Description Criteria 14.17 14.1.5 Residual Environmental Effects Description Criteria 14.17 14.1.5 Residual Environmental Effects Description Criteria 14.17 14.1.6 Significance Definition 14.19 14.1.7 Assumptions and Assessment Limitations 14.19 14.2 EXISTING CONDITIONS FOR TRADITIONAL LAND AND RESOURCE USE 14.22 14.2.1 Methods 14.22 14.2.2 Indigenous Groups 14.23 14.2.2 Indigenous Groups 14.23 14.2.4 Availability of Traditional Resources for Current Use 14.40 14.2.5 Access to Traditional Resources or Areas for Current Use 14.51 14.2.6 Current Use Sites or Areas 14.60 14.3 ASSESSMENT OF RESIDUAL ENVIRONMENTAL EFFECTS ON TRADITIONAL 14.60 14.3.1 Analytical Assessment Techniques 14.61 14.3.2 <	14.1			
14.1.2 Engagement and Key Concerns 14.3 14.1.3 Potential Environmental Effects, Pathways and Measurable Parameters 14.9 14.1.4 Boundaries 14.15 14.1.5 Residual Environmental Effects Description Criteria 14.17 14.1.5 Residual Environmental Effects Description Criteria 14.17 14.1.5 Residual Environmental Effects Description Criteria 14.17 14.1.6 Significance Definition 14.19 14.1.7 Assumptions and Assessment Limitations 14.19 14.2 EXISTING CONDITIONS FOR TRADITIONAL LAND AND RESOURCE USE 14.22 14.2.1 Methods 14.22 14.2.2 Indigenous Groups 14.23 14.2.2 Indigenous Groups 14.23 14.2.4 Availability of Traditional Resources for Current Use 14.40 14.2.5 Access to Traditional Resources or Areas for Current Use 14.51 14.2.6 Current Use Sites or Areas 14.60 14.3 ASSESSMENT OF RESIDUAL ENVIRONMENTAL EFFECTS ON TRADITIONAL 14.60 14.3.1 Analytical Assessment Techniques 14.61 14.3.2 <		14.1.1	Regulatory and Policy Setting	14.1
Parameters 14.9 14.1.4 Boundaries 14.15 14.1.5 Residual Environmental Effects Description Criteria 14.15 14.1.6 Significance Definition 14.17 14.1.7 Assumptions and Assessment Limitations 14.19 14.1.7 Assumptions FOR TRADITIONAL LAND AND RESOURCE USE 14.22 14.2.1 Methods 14.22 14.2.2 Indigenous Groups 14.23 14.2.3 Overview of Current Use 14.38 14.2.4 Availability of Traditional Resources for Current Use 14.31 14.2.5 Access to Traditional Resources or Areas for Current Use 14.55 14.2.7 Indigenous Commercial Activities 14.60 14.3 ASSESSMENT OF RESIDUAL ENVIRONMENTAL EFFECTS ON TRADITIONAL LAND AND RESOURCE USE 14.60 14.3.1 Analytical Assessment Techniques 14.60 14.3.1 Analytical Assessment Techniques 14.60 14.3.2 Change in Availability of Traditional Resources for Current Use 14.60 14.3.6 14.60 14.3.3 Change in Current Use Sites or Areas 14.60 14.3.1 14.60 14.3.3 <		14.1.2		
14.1.4 Boundaries 14.15 14.1.5 Residual Environmental Effects Description Criteria 14.17 14.1.6 Significance Definition 14.19 14.1.7 Assumptions and Assessment Limitations 14.19 14.1.7 Assumptions and Assessment Limitations 14.19 14.2 EXISTING CONDITIONS FOR TRADITIONAL LAND AND RESOURCE USE 14.22 14.2.1 Methods 14.22 14.2.2 Indigenous Groups 14.23 14.2.3 Overview of Current Use 14.38 14.2.4 Availability of Traditional Resources for Current Use 14.40 14.2.5 Access to Traditional Resources or Areas for Current Use 14.51 14.2.6 Current Use Sites or Areas 14.55 14.2.7 Indigenous Commercial Activities 14.60 14.3 ASSESSMENT OF RESIDUAL ENVIRONMENTAL EFFECTS ON TRADITIONAL LAND AND RESOURCE USE 14.60 14.3.1 Analytical Assessment Techniques 14.60 14.33 Change in Availability of Traditional Resources for Current Use 14.60 14.3.3 Change in Current Use Sites or Areas 14.60 14.33 14.61 14.3.4		14.1.3	Potential Environmental Effects, Pathways and Measurable	
14.1.5 Residual Environmental Effects Description Criteria 14.17 14.1.6 Significance Definition 14.19 14.1.7 Assumptions and Assessment Limitations 14.19 14.1.7 Assumptions FOR TRADITIONAL LAND AND RESOURCE USE 14.22 14.2.1 Methods 14.22 14.2.2 Indigenous Groups 14.23 14.2.2 Indigenous Groups 14.23 14.2.4 Availability of Traditional Resources for Current Use 14.38 14.2.5 Access to Traditional Resources or Areas for Current Use 14.51 14.2.6 Current Use Sites or Areas 14.50 14.2.7 Indigenous Commercial Activities 14.60 14.3 ASSESSMENT OF RESIDUAL ENVIRONMENTAL EFFECTS ON TRADITIONAL LAND AND RESOURCE USE 14.60 14.3.1 Analytical Assessment Techniques 14.60 14.3.2 Change in Availability of Traditional Resources or Areas for Current Use 14.61 14.3.3 Change in Access to Traditional Resources or Areas for Current Use 14.61 14.3.4 Change in Current Use Sites or Areas 14.73 14.3.5 Change in Current Use Sites or Areas 14.61 14.			Parameters	14.9
14.1.6 Significance Definition 14.19 14.1.7 Assumptions and Assessment Limitations 14.19 14.2 EXISTING CONDITIONS FOR TRADITIONAL LAND AND RESOURCE USE 14.22 14.2.1 Methods 14.22 14.2.2 Indigenous Groups 14.23 14.2.3 Overview of Current Use 14.33 14.2.4 Availability of Traditional Resources for Current Use 14.40 14.2.5 Access to Traditional Resources or Areas for Current Use 14.40 14.2.6 Current Use Sites or Areas. 14.55 14.2.7 Indigenous Commercial Activities 14.60 14.3 ASSESSMENT OF RESIDUAL ENVIRONMENTAL EFFECTS ON TRADITIONAL LAND AND RESOURCE USE 14.60 14.3.1 Analytical Assessment Techniques 14.60 14.3.1 Analytical Assessment Techniques 14.60 14.3.2 Change in Availability of Traditional Resources or Areas for Current Use 14.61 14.33 14.3.4 Change in Current Use Sites or Areas 14.61 14.33 14.60 14.3.3 Change in Current Use Sites or Areas 14.61 14.35 14.61 14.35 14.61 14.35 14.8				
14.1.7 Assumptions and Assessment Limitations 14.19 14.2 EXISTING CONDITIONS FOR TRADITIONAL LAND AND RESOURCE USE 14.22 14.2.1 Methods 14.22 14.2.2 Indigenous Groups 14.23 14.2.3 Overview of Current Use 14.38 14.2.4 Availability of Traditional Resources for Current Use 14.40 14.2.5 Access to Traditional Resources or Areas for Current Use 14.51 14.2.6 Current Use Sites or Areas 14.55 14.2.7 Indigenous Commercial Activities 14.60 14.3 ASSESSMENT OF RESIDUAL ENVIRONMENTAL EFFECTS ON TRADITIONAL LAND AND RESOURCE USE 14.60 14.3.1 Analytical Assessment Techniques 14.60 14.3.2 Change in Availability of Traditional Resources for Current Use 14.60 14.3.3 Change in Availability of Traditional Resources or Areas for Current 14.60 14.3.4 Change in Availability of Traditional Resources or Areas for Current 14.60 14.3.5 Change in Current Use Sites or Areas 14.61 14.3.6 Summary of Project Residual Environmental Effects 14.82 14.3.6 Summary of Project Residual				
14.2 EXISTING CONDITIONS FOR TRADITIONAL LAND AND RESOURCE USE			Significance Definition	14.19
14.2.1Methods			Assumptions and Assessment Limitations	14.19
14.2.2Indigenous Groups14.2314.2.3Overview of Current Use14.3814.2.4Availability of Traditional Resources for Current Use14.4014.2.5Access to Traditional Resources or Areas for Current Use14.5114.2.6Current Use Sites or Areas14.5514.2.7Indigenous Commercial Activities14.6014.3ASSESSMENT OF RESIDUAL ENVIRONMENTAL EFFECTS ON TRADITIONAL14.6014.3.1Analytical Assessment Techniques14.6014.3.2Change in Availability of Traditional Resources for Current Use14.6114.3.3Change in Access to Traditional Resources or Areas for Current Use14.6114.3.4Change in Access to Traditional Resources or Areas for Current14.7314.3.5Change in Current Use Sites or Areas14.7614.3.6Summary of Project Residual Environmental Effects14.8214.4DETERMINATION OF SIGNIFICANCE14.8414.5ABORIGINAL AND TREATY RIGHTS14.8514.6PREDICTION CONFIDENCE14.8514.7EFFECTS ON INTANGIBLE COMPONENTS14.8514.8PROJECT EFFECTS ON TRADITIONAL LAND AND RESOURCE USE BY14.85	14.2			
14.2.3Overview of Current Use				
14.2.4Availability of Traditional Resources for Current Use14.4014.2.5Access to Traditional Resources or Areas for Current Use14.5114.2.6Current Use Sites or Areas.14.5514.2.7Indigenous Commercial Activities14.6014.3ASSESSMENT OF RESIDUAL ENVIRONMENTAL EFFECTS ON TRADITIONAL14.6014.3.1Analytical Assessment Techniques14.6014.3.2Change in Availability of Traditional Resources for Current Use14.6114.3.3Change in Access to Traditional Resources or Areas for Current14.7314.3.4Change in Current Use Sites or Areas14.7614.3.5Change in Indigenous Commercial Activities14.8214.3.6Summary of Project Residual Environmental Effects14.8214.4DETERMINATION OF SIGNIFICANCE14.8414.5ABORIGINAL AND TREATY RIGHTS14.8514.7EFFECTS ON INTANGIBLE COMPONENTS14.8514.8PROJECT EFFECTS ON TRADITIONAL LAND AND RESOURCE USE BY14.85			8	
14.2.5 Access to Traditional Resources or Areas for Current Use 14.51 14.2.6 Current Use Sites or Areas 14.55 14.2.7 Indigenous Commercial Activities 14.60 14.3 ASSESSMENT OF RESIDUAL ENVIRONMENTAL EFFECTS ON TRADITIONAL 14.60 14.3.1 Analytical Assessment Techniques 14.60 14.3.2 Change in Availability of Traditional Resources for Current Use 14.61 14.3.3 Change in Access to Traditional Resources or Areas for Current 14.73 14.3.4 Change in Current Use Sites or Areas 14.76 14.3.5 Change in Current Use Sites or Areas 14.76 14.3.4 Change in Current Use Sites or Areas 14.76 14.3.5 Change in Indigenous Commercial Activities 14.82 14.4 DETERMINATION OF SIGNIFICANCE 14.84 14.5 ABORIGINAL AND TREATY RIGHTS 14.84 14.6 PREDICTION CONFIDENCE 14.85 14.7 EFFECTS ON INTANGIBLE COMPONENTS 14.85 14.8 PROJECT EFFECTS ON TRADITIONAL LAND AND RESOURCE USE BY 14.85				
14.2.6Current Use Sites or Areas.14.5514.2.7Indigenous Commercial Activities14.6014.3ASSESSMENT OF RESIDUAL ENVIRONMENTAL EFFECTS ON TRADITIONAL14.6014.3ASSESSMENT OF RESIDUAL ENVIRONMENTAL EFFECTS ON TRADITIONAL14.6014.3.1Analytical Assessment Techniques14.6014.3.2Change in Availability of Traditional Resources for Current Use14.6114.3.3Change in Access to Traditional Resources or Areas for Current14.7314.3.4Change in Current Use Sites or Areas14.7614.3.5Change in Indigenous Commercial Activities14.8214.3.6Summary of Project Residual Environmental Effects14.8414.5ABORIGINAL AND TREATY RIGHTS14.8414.6PREDICTION CONFIDENCE14.8514.7EFFECTS ON INTANGIBLE COMPONENTS14.8514.8PROJECT EFFECTS ON TRADITIONAL LAND AND RESOURCE USE BY14.85				
14.2.7Indigenous Commercial Activities14.6014.3ASSESSMENT OF RESIDUAL ENVIRONMENTAL EFFECTS ON TRADITIONAL LAND AND RESOURCE USE14.6014.3.1Analytical Assessment Techniques14.6014.3.2Change in Availability of Traditional Resources for Current Use14.6114.3.3Change in Access to Traditional Resources or Areas for Current Use14.7314.3.4Change in Current Use Sites or Areas14.7614.3.5Change in Indigenous Commercial Activities14.8214.3.6Summary of Project Residual Environmental Effects14.8214.4DETERMINATION OF SIGNIFICANCE14.8414.5ABORIGINAL AND TREATY RIGHTS14.8514.7EFFECTS ON INTANGIBLE COMPONENTS14.8514.8PROJECT EFFECTS ON TRADITIONAL LAND AND RESOURCE USE BY14.85				
14.3 ASSESSMENT OF RESIDUAL ENVIRONMENTAL EFFECTS ON TRADITIONAL LAND AND RESOURCE USE 14.60 14.3.1 Analytical Assessment Techniques 14.60 14.3.2 Change in Availability of Traditional Resources for Current Use 14.61 14.3.3 Change in Access to Traditional Resources or Areas for Current 14.73 14.3.4 Change in Current Use Sites or Areas 14.76 14.3.5 Change in Indigenous Commercial Activities 14.82 14.3.6 Summary of Project Residual Environmental Effects 14.82 14.4 DETERMINATION OF SIGNIFICANCE 14.84 14.5 ABORIGINAL AND TREATY RIGHTS 14.85 14.6 PREDICTION CONFIDENCE 14.85 14.7 EFFECTS ON INTANGIBLE COMPONENTS 14.85 14.8 PROJECT EFFECTS ON TRADITIONAL LAND AND RESOURCE USE BY 14.85				
LAND AND RESOURCE USE14.6014.3.1Analytical Assessment Techniques14.6014.3.2Change in Availability of Traditional Resources for Current Use14.6114.3.3Change in Access to Traditional Resources or Areas for Current14.7314.3.4Change in Current Use Sites or Areas14.7614.3.5Change in Indigenous Commercial Activities14.8214.3.6Summary of Project Residual Environmental Effects14.8214.4DETERMINATION OF SIGNIFICANCE14.8414.5ABORIGINAL AND TREATY RIGHTS14.8414.6PREDICTION CONFIDENCE14.8514.7EFFECTS ON INTANGIBLE COMPONENTS14.8514.8PROJECT EFFECTS ON TRADITIONAL LAND AND RESOURCE USE BY14.85	140			14.60
14.3.1Analytical Assessment Techniques14.6014.3.2Change in Availability of Traditional Resources for Current Use14.6114.3.3Change in Access to Traditional Resources or Areas for Current14.7314.3.4Change in Current Use Sites or Areas14.7614.3.5Change in Indigenous Commercial Activities14.8214.3.6Summary of Project Residual Environmental Effects14.8214.4DETERMINATION OF SIGNIFICANCE14.8414.5ABORIGINAL AND TREATY RIGHTS14.8414.6PREDICTION CONFIDENCE14.8514.7EFFECTS ON INTANGIBLE COMPONENTS14.8514.8PROJECT EFFECTS ON TRADITIONAL LAND AND RESOURCE USE BY14.85	14.3			11/0
14.3.2Change in Availability of Traditional Resources for Current Use14.6114.3.3Change in Access to Traditional Resources or Areas for Current14.7314.3.4Change in Current Use Sites or Areas14.7614.3.5Change in Indigenous Commercial Activities14.8214.3.6Summary of Project Residual Environmental Effects14.8214.4DETERMINATION OF SIGNIFICANCE14.8414.5ABORIGINAL AND TREATY RIGHTS14.8414.6PREDICTION CONFIDENCE14.8514.7EFFECTS ON INTANGIBLE COMPONENTS14.8514.8PROJECT EFFECTS ON TRADITIONAL LAND AND RESOURCE USE BY14.85				
14.3.3Change in Access to Traditional Resources or Areas for Current Use14.7314.3.4Change in Current Use Sites or Areas14.7614.3.5Change in Indigenous Commercial Activities14.8214.3.6Summary of Project Residual Environmental Effects14.8214.4DETERMINATION OF SIGNIFICANCE14.8414.5ABORIGINAL AND TREATY RIGHTS14.8414.6PREDICTION CONFIDENCE14.8514.7EFFECTS ON INTANGIBLE COMPONENTS14.8514.8PROJECT EFFECTS ON TRADITIONAL LAND AND RESOURCE USE BY			5	
Use			0	14.01
14.3.4Change in Current Use Sites or Areas14.7614.3.5Change in Indigenous Commercial Activities14.8214.3.6Summary of Project Residual Environmental Effects14.8214.4DETERMINATION OF SIGNIFICANCE14.8414.5ABORIGINAL AND TREATY RIGHTS14.8414.6PREDICTION CONFIDENCE14.8514.7EFFECTS ON INTANGIBLE COMPONENTS14.8514.8PROJECT EFFECTS ON TRADITIONAL LAND AND RESOURCE USE BY		14.3.3	0	1172
14.3.5Change in Indigenous Commercial Activities14.8214.3.6Summary of Project Residual Environmental Effects14.8214.4DETERMINATION OF SIGNIFICANCE14.8414.5ABORIGINAL AND TREATY RIGHTS14.8414.6PREDICTION CONFIDENCE14.8514.7EFFECTS ON INTANGIBLE COMPONENTS14.8514.8PROJECT EFFECTS ON TRADITIONAL LAND AND RESOURCE USE BY		1/3/		
14.3.6Summary of Project Residual Environmental Effects14.8214.4DETERMINATION OF SIGNIFICANCE14.8414.5ABORIGINAL AND TREATY RIGHTS14.8414.6PREDICTION CONFIDENCE14.8514.7EFFECTS ON INTANGIBLE COMPONENTS14.8514.8PROJECT EFFECTS ON TRADITIONAL LAND AND RESOURCE USE BY				
14.4DETERMINATION OF SIGNIFICANCE14.8414.5ABORIGINAL AND TREATY RIGHTS14.8414.6PREDICTION CONFIDENCE14.8514.7EFFECTS ON INTANGIBLE COMPONENTS14.8514.8PROJECT EFFECTS ON TRADITIONAL LAND AND RESOURCE USE BY				
14.5ABORIGINAL AND TREATY RIGHTS	144		5 5	
 14.6 PREDICTION CONFIDENCE				
14.7 EFFECTS ON INTANGIBLE COMPONENTS				
14.8 PROJECT EFFECTS ON TRADITIONAL LAND AND RESOURCE USE BY				
				14.00
	14.0			1/1 87
14.8.1 Kainai First Nation				
14.8.2 Piikani Nation				
14.8.3 Siksika Nation				
14.8.4 Stoney Nakoda Nations (Bearspaw First Nation, Chiniki First				
Nation and Wesley First Nation)				14.93



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

	14.8.5	Tsuut'ina Nation	
	14.8.6	Ermineskin Cree Nation	
	14.8.7	Foothills Ojibway	
	14.8.8	Ktunaxa Nation	
	14.8.9	Louis Bull Tribe	
	14.8.10	Montana First Nation	
	14.8.11	Samson Cree Nation	
	14.8.12	Métis Nation of Alberta, Region 3	
	14.8.13	Métis Nation British Columbia	
14.9	REFERENC	CES	

LIST OF TABLES

Table 14-1	Potential Effects, Effects Pathways and Measurable Parameters for Traditional Land and Resource Use	14 13
Table 14-2	Characterization of Residual Effects on Traditional Land and	
	Resource Use	14.17
Table 14-3	Traditional Resources within the RAA	14.41
Table 14-4	Trails and Travelways identified within the RAA	14.53
Table 14-5	Current Use Sites and Areas within the RAA	14.58
Table 14-6	Mitigation for Change in Availability of Traditional Resources for	
	Current Use	14.67
Table 14-7	Mitigation for Change in Current Use Sites or Areas	14.79
Table 14-8	Project Residual Effects on Traditional Land and Resource Use	
	during Construction and Dry Operations	14.83
LIST OF FIGU	RES	

Figure 14-1	Traditional Land and Resource Use Spatial Boundaries	
Figure 14-2	Locations of First Nations	

LIST OF ATTACHMENTS

ATTACHMENT A INFORMATION SOURCES



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

Abbreviations

ACO	Aboriginal Consultation Office
ACT	Alberta Culture and Tourism
CEA Agency	Canadian Environmental Assessment Agency
CEAA	Canadian Environmental Assessment Act
EA	environmental assessment
EIA	environmental impact assessment
GPS	global positioning system
HRA	Historical Resources Act
KWBZ	Key Wildlife and Biodiversity Zone
LAA	local assessment area
NRCB	Natural Resources Conservation Board
PDA	project development area
RAA	regional assessment area
RAP	restricted activity period
TLRU	traditional land and resource use
TOR	Terms of Reference
TUS	traditional use studies
VC	valued component



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

14.0 ASSESSMENT OF POTENTIAL EFFECTS ON TRADITIONAL LAND AND RESOURCE USE

This section assesses potential changes in traditional land and resource use (TLRU) as a result of Springbank Off-stream Reservoir Project (the Project) activities. TLRU is a valued component (VC) because of the potential for the Project to affect traditional activities, sites and resources identified by Indigenous groups.

The Project is predominately situated on private land that has been used for ranching and agriculture since the late 1800s. There are also several acreages and commercial developments within the Project area. There is a small portion of the Project that is located on Crown land; it includes rights-of-way (ROWs) for roads and road allowances and the bed and banks of the Elbow River and its tributaries.

The Project area is wholly situated within the boundaries of Treaty 7. No First Nation reserves or Métis settlements under the *Metis Settlements Act* are intersected by the Project. In Alberta, First Nations have constitutionally protected rights to hunt, fish and trap for food on unoccupied Crown lands to which they have a right of access for such purposes.

This assessment assumes that the exercise of traditional activities depends on the health and abundance of traditionally harvested species and the continued availability of and access to traditional use sites and areas. A review of information gathered during the Indigenous engagement program for the Project, reports from traditional use studies (TUS) conducted for the Project, and publicly available literature, as well as the analysis of relevant biophysical and socio-economic assessments in the EIS, concludes that the Project has the potential to affect traditional activities, sites and resources identified by Indigenous groups.

14.1 SCOPE OF ASSESSMENT

14.1.1 Regulatory and Policy Setting

The assessment of TLRU is guided by:

• The Government of Alberta's Guidelines on Consultation with First Nations on Land and Resource Management (the Guidelines), which commits Alberta to consultation with First Nations where land management and resource development have the potential to adversely impact Treaty rights and traditional uses (GOA 2014).



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

- Alberta Environment and Sustainable Resource Development's Terms of Reference: Environmental Impact Assessment Report for Alberta Transportation's Proposed Springbank Off-stream Reservoir Project (TOR), which outlines the information required by provincial government agencies, including information related to traditional ecological knowledge and land use (AESRD 2015).
- Canadian Environmental Assessment Act, S.C. 2012, c. 19, s. 5 (CEAA 2012), which states the requirements for environmental assessments and defines effects with respect to Indigenous peoples.
- The Canadian Environmental Assessment Agency's Guidelines for the Preparation of an Environmental Impact Statement for the Springbank Off-Stream Reservoir Project pursuant to the Canadian Environmental Assessment Act, 2012 (the CEA Agency Guidelines for the Project), which outlines the minimum information requirements for the Project, including requirements related to current use of lands and resources for traditional purposes (CEA Agency 2016).

14.1.1.1 Provincial

Sections 5 and 7.2 of the Terms of Reference: Environmental Impact Assessment Report for Alberta Transportation's Proposed Springbank Off-stream Reservoir Project (AESRD 2015) requires, where an Indigenous group permits the public disclosure of such information,¹ the provision of:

- a map and description of TLRU activities (e.g., fishing, hunting, trapping, and nutritional, medicinal, or cultural plant harvesting) by affected Indigenous peoples
- a map of cabin sites, spiritual sites, cultural sites, graves and other traditional use sites considered historic resources under the Historical Resources Act
- a map of traditional trails
- a map of resource activity patterns
- a discussion of the availability of vegetation, fish and wildlife species for food, traditional, medicinal and cultural purposes in the traditional land use areas considering all project related impacts
- a discussion of access to traditional lands in the Project area during all phases
- a determination of effects on hunting, fishing, trapping, gathering, and traditional medicinal and cultural purposes
- an identification of mitigation measures

¹ Alberta Transportation has received TUS reports, but permission to disclose the location of sites and areas has not been provided, and in some cases Alberta Transportation was expressly asked not to disclose the location of sites and areas. Therefore, a map is not included.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

14.1.1.2 Federal

The TLRU assessment is particularly informed by Section 5(1)(c) of CEAA 2012:

" (c) with respect to Aboriginal peoples, an effect occurring in Canada of any change that may be caused to the environment on

- i) health and socio-economic conditions,
- ii) physical and cultural heritage,
- iii) the current use of lands and resources for traditional purposes, or
- iv) any structure, site or thing that is of historical, archaeological, paleontological or architectural significance (CEAA 2012)."

The TLRU assessment addresses "the current use of lands and resources for traditional purposes" as described in CEAA 2012 Section 5(1)(c). For potential effects on "health and socio-economic conditions," see Volumes 3A and 3B, Section 15 (Public Health) and Volumes 3A and 3B, Sections 16 and 17. For potential effects on "physical and cultural heritage" and "any structure, site or thing that is of historical, archaeological, paleontological or architectural significance," see Volumes 3A and 3B, Section 13.

The TLRU assessment is also guided by the CEA Agency Guidelines for the Project (CEA Agency 2016), which, in addition to citing CEAA 2012 Section 5(1)(c), also requires information regarding the potential adverse effects of the Project on Section 35 rights, title and related interests, in respect of the Crown's duty to consult, and where appropriate, to accommodate Indigenous peoples (CEA Agency 2016).

14.1.2 Engagement and Key Concerns

Alberta Transportation's engagement with Indigenous groups began in 2014 with the five Treaty 7 First Nations in accordance with the Consultation Guidelines and the First Nation Consultation Plan approved by the Aboriginal Consultation Office (ACO). A description of Alberta Transportation's Indigenous engagement program is provided in Volume 4, Appendix B. The Treaty 7 First Nations identified for engagement are:

- Kainai First Nation (Blood Tribe)
- Piikani Nation
- Siksika Nation
- Stoney Nakoda Nations (Bearspaw First Nation, Chiniki First Nation and Wesley First Nation)
- Tsuut'ina Nation



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

The Treaty 7 First Nations were provided with the opportunity to provide information regarding current use, to conduct site visits in the PDA and to conduct TUS (see Volume 4, Appendix B).

In June 2016, an additional eight Indigenous communities and organizations were identified for engagement in the CEA Agency Guidelines for the Project (CEA Agency 2016). Project information was sent to these additional communities and organizations and they were provided with an opportunity to learn more about the Project and its potential effects (see Volume 4, Appendix B).

The CEA Agency identified the following Indigenous groups for engagement (CEA Agency 2016):

- Ermineskin Cree Nation
- Foothills Ojibway
- Ktunaxa Nation
- Louis Bull Tribe
- Montana First Nation
- Samson Cree Nation

The CEA Agency also identified two Métis organizations for engagement (CEA Agency 2016):

- Métis Nation of Alberta, Region 3
- Métis Nation British Columbia

Alberta Transportation has been conducting Indigenous engagement prior to and throughout the Environmental Impact Assessment (EIA) process.

When contacted, Ktunaxa Nation stated that the Nation would not be participating in the engagement activities for the Project and would not be engaging with Alberta Transportation further on the Project (see Volume 4, Appendix B). In accordance with the CEA Agency Guidelines for the Project, Ktunaxa Nation has been included in the description of existing conditions; however, no assessment of potential effects on Ktunaxa Nation regarding TLRU is provided.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

In addition to specific TLRU sites and areas identified², issues and concerns related to effects of the Project on TLRU were reported by Indigenous groups through the Indigenous engagement program for the Project, including:

- destruction of critical fish and wildlife habitat, including a Key Wildlife and Biodiversity Zone and an Environmentally Significant Area (Tsuut'ina Nation) (see Section 14.3.2)
- loss of winter ungulate habitat and habitat fragmentation (Tsuut'ina Nation) (see Section 14.3.2)
- sediment deposition affecting fescue grassland and wetland habitat (Tsuut'ina Nation), as well as wildlife, fish, plants, wetlands, and associated traditional activities including through loss of land area for harvesting activities (Kainai First Nation) (see Volume 3B, Section 14.2.2)
- floodwater release reducing available wetland habitat for breeding, nesting and brood rearing for waterfowl and migratory birds (Tsuut'ina Nation) (see Volume 3B, Section 14.2.2)
- effects on wetlands (Louis Bull Tribe, Stoney Nakoda Nations, Tsuut'ina Nation, Piikani Nation) (see Section 14.3.2 and Volume 3B, Section 14.2.2)
- silt build up in Elbow River due to flood cessation affecting wildlife, plants, and the traditional activities that depend on those resources (Pikani Nation) (see Volume 3B, Section 14.2.2)
- debris left by a flood leading to loss or contamination of bird habitat (Tsuut'ina Nation) (see Volume 3B, Section 14.2.2)
- fluctuating water levels due to flooding affecting fish and fish habitat in Elbow River (Piikani Nation), and flood waters affecting plants that are harvested in the RAA (Tsuut'ina Nation) (see Volume 3B, Section 14.2.2)
- presence of gravel affecting trout spawning beds (Tsuut'ina Nation) (see Section 14.3.2)
- presence of scoured pools affecting fish overwintering habitat (Tsuut'ina Nation) (see Section 14.3.2)
- Highway 22 diversion, bridge construction, and sedimentation from construction and operation-related activities affecting fish habitat in the Elbow River and its tributaries (Tsuut'ina Nation) (see Section 14.3.2)
- flood affecting fish health and mortality (Piikani Nation, Tsuut'ina Nation, Kainai First Nation), including changes to water temperatures (Tsuut'ina Nation) (see Volume 3B, Section 14.2.2)
- fish becoming stranded in the off-stream reservoir or diversion structure when floodwater is drained (Piikani Nation, Tsuut'ina Nation) (see Volume 3B, Section 14.2.2)

² Specific TLRU sites and areas have been identified in TUS reports received by Alberta Transportation, but permission to disclose the location of sites and areas has not been provided. In some cases, Alberta Transportation was expressly asked not to disclose the location of sites and areas.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

- effects on one species affecting entire ecosystem (Piikani Nation) (see Section 14.3.2)
- changes to fish migration and elk, moose, and deer migration (Tsuut'ina Nation, Stoney Nakoda Nations) (see Section 14.3.2)
- effects on biodiversity (Tsuut'ina Nation, Métis Nation of Alberta, Region 3) (see Section 14.3.2)
- effects on fish, birds, and vegetation (Stoney Nakoda Nations) (see Section 14.3.2)
- effects on ability to continue exercising Treaty rights because local wildlife may be driven away, resulting in community members having to travel further to fish, trap, and hunt local wildlife or practice ceremonies (Stoney Nakoda Nations, Kainai First Nation) (see Section 14.3.2)
- tree clearing affecting several traditional resources, including water, soils, birds, roots, herbs, and medicines (Kainai First Nation) (see Section 14.3.2)
- ability to hunt, fish, and gather plants because of Project effects on species and habitats (Tsuut'ina Nation) (see Section 14.3.2)
- potential for the Project to affect Métis land use in the Kootenays (Métis Nation of British Columbia) (see Section 14.3.4)
- flooding the reservoir destroying burials, and inability to move artifacts for protection from a flood (Tsuut'ina Nation) (see Volume 3B, Section 14.2.4)
- sediment deposition destroying ceremonial sites, burial sites, and cultural landscapes or preventing their future use if the sites are no longer visible (Kainai First Nation) (see Volume 3B, Section 14.2.4)
- reclamation (Louis Bull Tribe) (see Section 14.8.9)
- removal of existing infrastructure, including pipelines (Tsuut'ina Nation, Siksika Nation, Stoney Nakoda Nations) (see Section 14.3.4)
- lack of wildlife crossing in Project design (Stoney Nakoda Nations) (see Section 14.3.2 and Section 14.7)
- potential for Project effects to extend past the PDA (Tsuut'ina Nation) (see Section 14.3.4)
- sediment deposition affecting air quality by wind transporting flood residue (Kainai First Nation, Piikani Nation) (see Volume 3B, Section 14.2.2)
- effects on the Bow and Elbow rivers, and Fish Creek (Tsuut'ina Nation) (see Section 14.3.2)
- effects on underground streams (Stoney Nakoda Nations) (see Section 14.3.2)



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

- upstream and downstream effects on waterways used as drinking water sources and water quality (Stoney Nakoda Nations; Kainai First Nation; Piikani Nation; Siksika Nation; Tsuut'ina Nation; Louis Bull Tribe; Métis Nation of Alberta, Region 3; Métis Nation of British Columbia) (see Section 14.3.2)
- upstream and downstream effects on the Elbow River, including the potential to change the flow of the river itself (Tsuut'ina Nation) (see Section 14.8.5)
- health of riparian vegetation, which requires flooding and scouring to survive (Piikani Nation) (see Section 14.3.2)
- lack of access to areas within traditional territories and why requests for access are questioned (Kainai First Nation, Piikani Nation, Siksika Nation) (see Section 14.3.3)
- cultural and spiritual sites rendered inaccessible as a result of the Project (Kainai First Nation, Piikani Nation, Siksika Nation) (see Section 14.3.3 and Volume 3B, Section 14.2.3)
- potential for Project to remove access to private land that is currently permitted for the pursuit of traditional activities (Tsuut'ina Nation) (see Section 14.3.3)
- limited or restricted access (Kainai First Nation, Piikani Nation, Siksika Nation) (see Section 14.3.3 and Volume 3B, Section 14.2.3)
- travel along the Elbow river and Old North Trail (Piikani Nation, Siksika Nation) (see Section 14.3.3 and Volume 3B, Section 14.2.3)
- ability to continue using the Elbow River as a transportation route (Tsuut'ina Nation, Siksika Nation) (see Section 14.3.3 and Volume 3B, Section 14.2.3)
- effects on physical and cultural heritage (Tsuut'ina Nation; Kainai First Nation; Siksika Nation; Métis Nation of Alberta, Region 3) (see Section 14.3.4 and Volume 3B, Section 14.2.4)
- loss of spiritual connection to ancestors due to destruction of cultural sites, or archaeological mitigation practices, which involves removal rather than preservation or protection (Kainai First Nation, Piikani Nation, Siksika Nation) (see Section 14.7)
- potential for outflow channel in a natural creek to affect surrounding hilltops and flats, damaging traditional use and cultural sites (Kainai First Nation, Siksika Nation) (see Section 14.3.4)
- destruction of wildlife crossings could affect transmission of traditional knowledge (Stoney Nakoda Nations) (see Section 14.7)
- the movement of water, surrounding pollution, fish and wildlife habitat, and changes in animals' patterns of movement (Kainai First Nation, Piikani Nation, Siksika Nation) (see Section 14.3.2)



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

Alberta Transportation's engagement with Siksika Nation, Kainai Nation, Piikani Nation, Tsuut'ina Nation, and Stoney Nakoda Nations began in 2014 and has included sharing of Project information and updates, on-going communication about the Project, face-to-face meetings, facilitation of site visits, and funding for Project-specific TUS (see Volume 4, Appendix B). Through the Indigenous engagement program for the Project, Alberta Transportation has provided the Treaty 7 First Nations with the opportunity to provide their views on the environmental effects of the Project and information used for describing and assessing effects on Indigenous peoples. This has been accomplished through providing information on the EIA and regulatory requirements to Indigenous groups.

Following the CEA Agency's identification of additional Indigenous groups that may be potentially affected in the CEA Agency Guidelines for the Project (CEA Agency 2016), Alberta Transportation's engagement with Ermineskin Cree Nation, Foothills Ojibway, Ktunaxa Nation, Louis Bull Tribe, Montana First Nation, Samson Cree Nation, Métis Nation of Alberta, Region 3, and Métis Nation British Columbia began in 2016. Engagement with these Indigenous groups has included letter notification about the Project and an invitation to participate in a dialogue to discuss any project-related issues, or concerns (see Volume 4, Appendix B). In addition, Alberta Transportation has held meetings to discuss the Project with Samson Cree Nation, Montana First Nation, Louis Bull Tribe and Métis Nation of Alberta, Region 3.

Alberta Transportation funded TUS for all of the Treaty 7 First Nations (see Volume 4, Appendix B).

As of March 16, 2018, Alberta Transportation received the following TUS reports:

- Kainai Consultation Office and Siksika Consultation Office. 2017. Springbank Off-stream Reservoir (SR-1) KCO and SCO TUS Research Study, Alberta Bow and Elbow River Flood Prevention and Mitigation Project: Joint Kainai & Siksika Interim Report. (March 9, 2017)
- Piikani Nation. No date. *Piikani report on Proposed Springbank Reservoir and Dam*. Prepared for Piikani Consultation by William Big Bull, Piikani Nation.

Information from these TUS reports has been included in the EIA for the Project, in accordance with the terms of use discussed with the Indigenous groups. TLRU sites and areas are identified in these TUS reports; however, permission to disclose the location of sites and areas has not been provided, and Piikani Nation has expressly asked not to disclose the location of sites and areas.

A draft TUS report from Tsuut'ina Nation has also been received, but permission to use the information in the report (in this assessment) had not been received as of March 16, 2018. Through the engagement program for the Project, Tsuut'ina Nation stated, "Tsuut'ina is still in the process of collecting project-specific Traditional Use data for the Project." Tsuut'ina Nation noted that the TUS results should be included in the EIS. Relevant TLRU information, concerns, and recommendations received on the Project by Indigenous groups after the EIA has been filed will be used for project planning and implementation purposes, where applicable. Project-



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

specific TLRU information will be reviewed against the results of the EIA and a formal response will be developed.

Additional TUS reports are anticipated from Stoney Nakoda Nations, Louis Bull Tribe, and Métis Nation of Alberta, Region 3, but they have not been received by Alberta Transportation as of March 16, 2018. Alberta Transportation will review TUS reports as they are made available by Indigenous groups. 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 will notify Alberta Environment and Parks and the CEA Agency upon receipt of any new TUS reports submitted by Indigenous groups during the regulatory process and of any considerations made in response to these reports.

14.1.3 Potential Environmental Effects, Pathways and Measurable Parameters

This section provides context for how potential effects of the Project on TLRU were identified, how the Project might interact with TLRU (pathways), and what parameters might be used to measure changes to TLRU. The context includes a summary of consideration of Aboriginal and Treaty rights in the selection of environmental effects, as well as defining the terms TLRU and current use for the purposes of this assessment.

14.1.3.1 Aboriginal and Treaty Rights

The CEA Agency Guidelines for the Project (CEA Agency 2016) require the EIS to assess potential adverse impacts of the Project on Section 35 rights, title, and related interests and where appropriate identify measures to mitigate or accommodate potential adverse impacts. The Guidelines also require the inclusion of the perspectives of Indigenous groups on the assessment of impacts to potential or established Aboriginal or treaty rights and on proposed mitigation measures.

Definition of Aboriginal and Treaty Rights

The CEA Agency Guidelines for the Project, citing the Updated Guidelines for Federal Officials to Fulfill the Duty to Consult (AANDC 2011), offer definitions of Aboriginal and treaty rights.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

Treaty rights are defined as:

Rights that are defined by the terms of a historic Treaty, rights set out in a modern land claims agreement or certain aspects of some self-government agreements. In general, Treaties (historic and modern) are characterized by the intention to create obligations, the presence of mutually binding obligations and a measure of solemnity (Simon, Sioui). A treaty right may be an expressed term in a Treaty, an implied term or reasonably incidental to the expressed Treaty right. The scope of Treaty rights will be determined by their wording, which must be interpreted in accordance with the principles enunciated by the Supreme Court of Canada (Badger 1996, Sundown 1999, Marshall 1999 (AANDC 2011:62).

Aboriginal rights are defined as:

Practices, traditions and customs integral to the distinctive culture of the Aboriginal group claiming the right that exist[ed] prior to contact with the Europeans (Van de Peet). In the context of Métis groups, Aboriginal rights means practices, traditions, and customs integral to the distinctive culture of the Métis group that existed prior to effective European control, that is, prior to the time when Europeans effectively established political and legal control in the claimed area (Powley). Generally, these rights are fact and site specific. For greater certainty, the Guidelines also define Aboriginal title as an Aboriginal right, (AANDC 2011:61)

In Alberta, the numbered Treaties 6, 7, and 8 were concluded in the late nineteenth century. The Project is located within the boundaries of Treaty 7. Treaty 7, as modified by the Natural Resources Agreement, generally provides reserves for the First Nations, cash annuities, material items such as ammunition, fishing equipment, and agricultural implements, and the right to hunt for food on unoccupied Crown land.

First Nations engaged on the Project are signatories to Treaty 7 and Treaty 6 (See Section 14.2.2). The CEA Agency Guidelines for the Project also identified Métis Nation of Alberta, Region 3 and Métis Nation British Columbia for engagement on the Project.

In Canada, Métis communities may hold Aboriginal rights provided that they meet the criteria set out by the Supreme Court of Canada in *R. v. Powley*, which includes the identification of a historical Métis community, which also has continuity with a modern Métis community. To date, no Métis communities in southern Alberta have demonstrated that they meet the Powley test.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

Assessment Method

Information regarding potential effects on Aboriginal and Treaty rights or traditional uses, is often obtained from information received directly from Indigenous groups, TUS reports and the EA process which seek to gauge the extent of past and present use of the land for traditional purposes including, but not limited to, hunting, fishing, trapping, plant gathering, as well as trails and travelways, habitation areas, and cultural and spiritual sites and practices.

When assessing the effect of a development project on Aboriginal and Treaty rights, the measurable parameter used is the degree to which the Project will affect the land and resource use upon which Aboriginal or Treaty rights depend. For the purposes of this assessment, effects on potential or established Aboriginal or Treaty rights or traditional uses are addressed through the assessment of the current use of lands and resources for traditional purposes. As noted in Section 14.1.3.2, current use of lands and resources for traditional purposes includes various traditional activities, practices, sites, areas and resources. Effects on Aboriginal and Treaty rights may be considered to occur to the extent that the Project has a residual effect on traditional harvesting (hunting, trapping, fishing, plant or material gathering) or on physical activities associated with traditional use (travel and navigation, use of habitation, cultural and spiritual areas). This approach recognizes a correspondence between practice-based rights and traditional uses, and the current use of lands and resources for traditional purposes by Indigenous peoples. Circumstances in which traditional resources necessary for the exercise of rights or traditional uses are diminished or in which lands accessed for traditional activities are disturbed may reasonably be understood to potentially adversely affect potential or established Aboriginal and Treaty rights or traditional uses.

14.1.3.2 Defining Current Use of Lands and Resources for Traditional Purposes

As discussed in Section 14.1.1, this assessment has been conducted in accordance with both provincial and federal regulatory requirements.

The Project TOR issued by Alberta Environment and Sustainable Resource Development (now Alberta Environment and Parks) requires a description of traditional land use areas, including fishing, hunting, trapping and nutritional, medicinal or cultural plant harvesting; availability of vegetation, fish and wildlife species for food, traditional, medicinal and cultural purposes; and access to traditional lands in the Project area (AESRD 2015).



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

CEAA 2012 Section 5(1)(c)(iii) identifies "current use of lands and resources for traditional purposes" as an environmental effect to be taken into account in an environmental assessment (CEAA 2012). The CEA Agency Guidelines for the Project indicate that current use of lands and resources for traditional purposes may include activities such as hunting, trapping, fishing, and plant gathering (CEA Agency 2016). In the remainder of this assessment, the term current is used to refer to "current use of lands and resources for traditional purposes," *Current use* encompasses various traditional activities, practices, sites, areas, and resources, including, but not limited to:

- hunting
- trapping
- fishing
- plant gathering
- use of trails and travelways, including navigation
- use of habitation areas (e.g., cabins, campsites, temporary shelters)
- use of cultural and spiritual sites and areas

Current use also accounts for the conditions of use, seasonal cycles, intergenerational knowledge transmission, landforms and named places, and other factors that provide context, setting or understanding for the practice of current use activities.

Current use as defined here meets both the ToR and CEA Agency Guidelines for the Project (AESRD 2015; CEA Agency 2016).

Current use must be understood in the context of past and future use. Past TLRU information and information based on community members' living memory situates contemporary activities and long-term observations of existing conditions. Future use pertains to the opportunities for generations of descendants of the Indigenous groups to continue to practice cultural traditions in a modern form. Framing traditional activities and practices in this way serves to acknowledge that TLRU—while having continuity with historic practices, traditions, or customs—is dynamic and changing. Conceived of in this way, current use situates long-standing cultural practices in a contemporary context.

Construction and dry operations can affect TLRU through a:

- change in availability of traditional resources for current use, affecting the availability of species relied upon to exercise TLRU activities (e.g., hunting, trapping, fishing, and plant gathering);
- change in access to traditional resources or areas for current use; or
- change in sites or areas for current use through the disruption or alteration of a traditional use site or location (e.g., habitation areas, trails and travelways, and cultural or spiritual practices sites and areas)



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

Characterizing the effects of the Project on TLRU uses parameters that can be used to evaluate each type of predicted effect. Ideally, these parameters are measurable and quantifiable (e.g., availability of habitat for harvested species). However, some effects on TLRU lack defined parameters to measure effects and are therefore evaluated qualitatively based on comments received from Indigenous groups, past project experience and professional judgment. Potential effects, effects pathways and measurable parameters used to characterize and assess effects on TLRU are provided in Table 14-1.

Potential Environmental Effect	Effect Pathway	Measurable Parameter(s)
Change in availability of traditional resources for current use	 Vegetation clearing associated with construction could result in a loss of habitat for species of traditional importance, including plants and animals relied on for traditional hunting, trapping, or plant harvesting Sensory disturbance has the potential to affect the availability of habitat for species of traditional importance Loss or alteration of habitat resulting from disturbance to watercourses Potential effects on wildlife health which could affect the availability of traditional resources Indirect effects on the experience of Indigenous peoples which adversely alter the perceived value of availability of traditional resources for current use 	 change in availability of habitat (ha) for traditionally used plant or animal species change in availability of habitat for fish species qualitative evaluation of change in hunting and fishing pressure as a result of the Project and other planned developments identification of change in resource from participating Indigenous groups
Change in access to traditional resources or areas for current use	 Construction and dry operations could result in the loss, alteration, or restriction of access (including trails and travelways) to current lands and resources used for traditional purposes Indirect effects on the experience of Indigenous peoples which adversely alter the perceived value of access to traditional resources for current use or current use sites and areas 	 number of trails and travelways no longer accessible area (ha) with access restrictions area (ha) of altered land use management time required to access different current use locations identification of change in access from participating Indigenous groups

Table 14-1Potential Effects, Effects Pathways and Measurable Parameters for
Traditional Land and Resource Use



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

Table 14-1Potential Effects, Effects Pathways and Measurable Parameters for
Traditional Land and Resource Use

Potential Environmental Effect	Effect Pathway	Measurable Parameter(s)
Change in sites or areas for current use	 Construction and dry operations could result in a loss or alteration of identified current use harvesting sites, habitation areas, cultural and sacred sites Indirect effects on the experience of Indigenous peoples which adversely alter the perceived value of current use sites or areas 	 number of or area (ha) of identified sites and areas affected identification of change in sites or areas from participating Indigenous groups identification of change in use of sites or areas from participating Indigenous groups

14.1.3.3 Tangible and Intangible Components

The use of lands and resources by Indigenous groups may have both tangible components and intangible components.

Tangible components include specific resources (e.g., fish, wildlife, plants), physical sites (e.g., trails, harvesting areas, cultural and spiritual sites), and observable activities (e.g., hunting, trapping, fishing, plant harvesting) that can be more readily considered in an effects assessment. Tangible components often have a demonstrable link to a biophysical VC (e.g., traditional hunting can be linked to wildlife and biodiversity). In considering effects on tangible components, this assessment adopts the conservative assumption that TLRU activities occur near the Project even if these activities are not specifically identified by participating Indigenous groups. Project effects on tangible components are subjected to a conventional environmental assessment method that characterizes residual effects.

Intangible components relate to beliefs, perceptions, values and qualitative experience. Potential effects on experiential values—such as cultural transmission, language retention, governance systems, and patterns of cultural behaviour—can only be meaningfully evaluated by individuals and communities experiencing these values in their cultural context. As such, these effects are not amenable to conventional residual effects characterizations which were developed for the assessment of objective, measurable phenomena from a Western scientific perspective. In addition, intangible effects might not realistically be mitigated in the context of an environmental assessment. For example, while it is entirely possible to mitigate effects on water quality to meet Health Canada thresholds, it is not possible to effectively mitigate someone's belief that the water is not fit to drink. Where there may be applicable mitigation measures, they should be identified by those individuals and communities experiencing effects on these experiential values. Consequently, potential effects on intangible components are not subject to an effects assessment or residual effects characterization.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

In this assessment, intangible components of TLRU are considered narratively when an Indigenous group has identified a related concern in a TUS report or through the Indigenous engagement program for the Project. Intangible components are considered in conclusions for each Indigenous group.

Both tangible and identified intangible components contribute to the conclusion for the TLRU assessment.

14.1.4 Boundaries

14.1.4.1 Spatial Boundaries

The spatial boundaries for the TLRU assessment are presented in Figure 14-1.

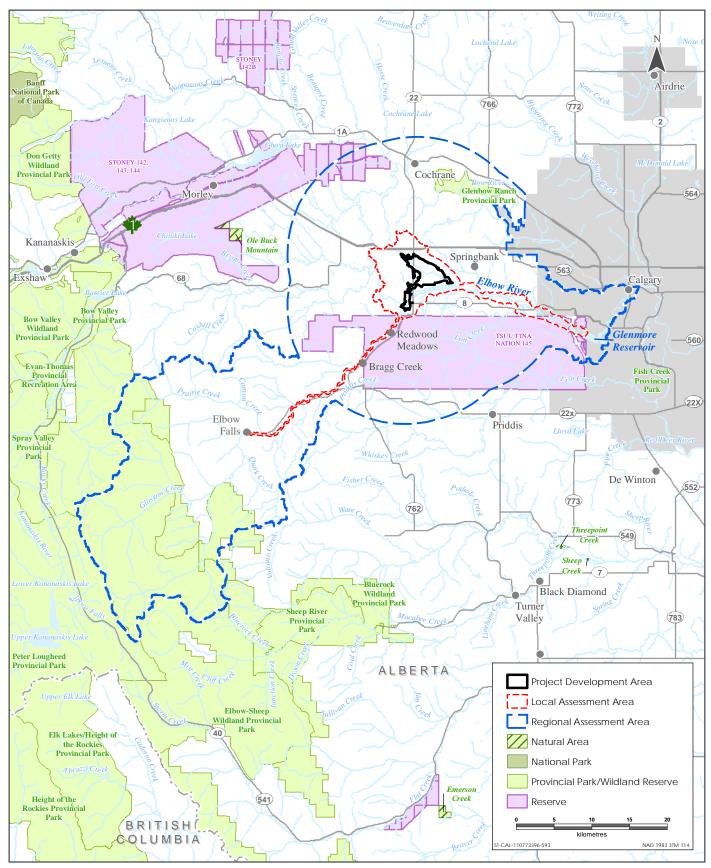
The project development area (PDA) includes the anticipated area of physical disturbance and workspace associated with construction and dry operations and is 1,440 ha.

The local assessment area (LAA) for TLRU follows the wildlife and biodiversity LAA, which is the PDA plus a 1-km buffer centred on the PDA. The aquatic LAA for TLRU follows the aquatic ecology LAA, which consists of the section of Elbow River from Elbow Falls to the inlet of Glenmore Reservoir. The TLRU LAA encompasses the LAAs described for the wildlife and biodiversity and aquatic ecology assessments because there are links between TLRU activities identified by Indigenous groups and these assessments (e.g., hunting and wildlife and biodiversity).

The regional assessment area (RAA) for TLRU follows the wildlife and biodiversity RAA, which is the PDA plus a 15-km buffer centred on the PDA. The aquatic RAA for TLRU is aquatic ecology RAA, which is the Elbow River watershed and includes Glenmore Reservoir. The TLRU RAA encompasses the RAAs described for the wildlife and biodiversity and aquatic ecology assessments because there are links between TLRU activities identified by Indigenous groups and these assessments (e.g., fishing and aquatic ecology).

Indigenous groups may identify spatial boundaries in relation to their traditional lands or traditional territories; however, boundaries identified by various Indigenous groups often vary considerably. Aligning the TLRU boundaries with those of wildlife and biodiversity and aquatic ecology provides consistent boundaries throughout the EIA.





Sources: Base Data - ESRI, Natural Earth, Government of Alberta, Government of Canada Thematic Data - ERBC, Government of Alberta, Stantec Ltd

Traditional Land and Resource Use Spatial Boundaries

Assessment of Potential Effects on Traditional Land and Resource Use March 2018

14.1.4.2 Temporal Boundaries

The temporal boundaries for the TLRU assessment in this section is for construction and dry operations.

For this assessment, current refers to the present time to within the last 25 years, or one generation. Twenty-five years is chosen because information regarding traditional practices or locales can be lost from an Indigenous group's collective knowledge if it is not used for a generation's time or passed on to younger generations.

14.1.5 Residual Environmental Effects Description Criteria

Table 14-2 describes how residual effects (those after mitigation has been applied) on traditional land and resource use are characterized.

Characterization	Description	Quantitative Measure or Definition of Qualitative Categories
Direction	The long-term trend of the residual effect	Positive – a residual effect that changes measurable parameters in a direction beneficial to TLRU relative to existing conditions.
		Adverse – a residual effect that changes measurable parameters in a direction detrimental to TLRU relative to existing conditions.
		Neutral – no net change in measurable parameters for TLRU relative to existing conditions.
Magnitude	The amount of change	Negligible – no measurable change
	in measurable parameters or the VC relative to existing conditions	Low – effect will increase the effort necessary to conduct TLRU activity but will not reduce the ability to conduct TLRU activity
		Moderate – effect will reduce the ability to conduct TLRU activity
		High – effect will greatly reduce or eliminate the ability to conduct TLRU activity
Geographic	The geographic area in	PDA – residual effects are restricted to the PDA
Extent	which a residual effect	LAA – residual effects extend into the LAA
	occurs	RAA – residual effects interact with those of other projects in the RAA
Frequency	Identifies how often the	Single event
	residual effect occurs	Multiple irregular event – occurs at no set schedule
	and how often during the Project or in a	Multiple regular event – occurs at regular intervals
	specific phase	Continuous – occurs continuously

Table 14-2Characterization of Residual Effects on Traditional Land and Resource
Use



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

Table 14-2 Characterization of Residual Effects on Traditional Land and Resource Use

Characterization	Description	Quantitative Measure or Definition of Qualitative Categories
Duration	The period of time required until the measurable parameter or the VC returns to its existing condition, or the residual effect can no longer be measured or otherwise perceived	Short-term – residual effect restricted to no more than the duration of the construction phase (3 years) Long-term – residual effect extends into dry operations (>3 years)
Reversibility	Whether a measurable parameter or the VC can return to its existing condition after the project activity ceases	Reversible – the residual effect is likely to be reversed after activity completion and reclamation Irreversible – the residual effect is unlikely to be reversed
Ecological and Socio-economic Context	Existing condition and trends in the area where residual effects occur	Undisturbed – area is relatively undisturbed or not adversely affected by industrial and agricultural activity Disturbed – area has been substantially previously disturbed by industrial and agricultural activity is still present
Timing	Periods of time where residual effects from Project activities could affect the VC	Time of day – residual effect is greater during the daytime or nighttime Seasonality – residual effect is greater in one season than another (e.g., spring/summer vs. fall/winter) Regulatory – provincial or federal restricted activity periods or timing windows (e.g., migration and breeding, spawning) related to the VC Not applicable - the residual effect of construction, dry operations or maintenance activities will have the same effect on the VC, regardless of timing



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

14.1.6 Significance Definition

Under CEAA 2012, there is a requirement to make a determination of significance for residual environmental effects on TLRU. The lack of laws, policies, management plans or standard industry practice regarding thresholds for effects on TLRU makes choosing and applying significance thresholds challenging. The subjective nature of describing and understanding the importance of effects on current use of lands and resources for traditional purposes means that selected thresholds might not evenly apply across Indigenous groups and circumstances. Indigenous groups themselves may have differing views on the meaning of significance that reflect oral history traditions and holistic understandings of natural phenomena.

Given these considerations, a significant adverse effect on TLRU is defined as a long-term loss of availability of traditional use resources or access to lands relied on for current use practices or current use sites and areas, such that current use is critically reduced or eliminated from the RAA. This may include disruption to current use activities and practices where biological resources or physical sites are not significantly affected in the RAA.

14.1.7 Assumptions and Assessment Limitations

Access

The Project is predominately situated on private land that has been used for ranching and agriculture since the late 1800s. Indigenous groups, including First Nations, do not have a right to access this land for TLRU purposes, including the exercise of Treaty rights, except where explicitly permitted by landowners.

During the engagement program, Indigenous groups indicated the following access to the PDA:

- Tsuut'ina Nation stated, "Our citizens are currently able to exercise their Treaty rights on the private lands surrounding our reserve."
- Kainai First Nation stated, "Current use has been limited due to these lands being private land some land owners do allow Blackfoot confederacy members to visit these sites but not all land owners do that."
- Correspondence received on behalf of Ermineskin Cree Nation, Samson Cree Nation, and Kainai First Nation stated, "At least six of the landowners in the proposed Project area allow First Nation access to their lands for Treaty hunting and fishing rights and other traditional lands uses."

Details regarding the history of these access arrangements, the frequency of access, the number of members who sought access or the purpose of the access were not provided. Indigenous groups may, however, have the ability to exercise rights on unoccupied Crown land or other Crown land to which they have a right of access for that purpose. A small portion of the



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

Project is located on Crown land and includes rights-of-way (ROWs) for roads and road allowances and the bed and banks of the Elbow River and its tributaries.

Assessment of Effects

Accordingly, this assessment conservatively assumes that TLRU activities have the potential to occur within the RAA, even if the Indigenous groups did not specifically identify TLRU activities or site-specific uses as occurring there. None of the Indigenous groups have been screened out of the assessment on the basis that there is no evidence that they undertake TLRU in the Project area and a full assessment of effects on current use is conducted for each Indigenous group, with the exception of Ktunaxa Nation, which informed Alberta Transportation they would not participate in Project engagement (see Section 14.1.2).

The best source of information for an assessment of effects is information provided directly by potentially affected Indigenous groups. For this Project, direct information was provided by Indigenous groups through the Indigenous engagement program, which includes TUS reports. As of March 16, 2018, two TUS reports had been received by Alberta Transportation in relation to the Project: a joint interim TUS report competed by Kainai Consultation Office and Siksika Consultation Office and a TUS report submitted by Piikani Consultation Office.

A draft TUS report from Tsuut' ina Nation has also been received, but permission to use the information in the report in this assessment had not been received as of March 16, 2018.

Alberta Transportation has also provided funding to Stoney Nakoda Nations, Louis Bull Tribe, and Métis Nation of Alberta, Region 3 to undertake TUS, but reports have not been received by Alberta Transportation as of March 16, 2018.

Through the Indigenous engagement program for the Project, including face-to-face meetings and facilitation of site visits, Alberta Transportation received relevant TLRU information from Treaty 7 First Nations. However, this information, while relevant and useful, tends to be high-level concerns and issues rather than specific information about current use sites, locations, activities and practices that may occur in the Project area.

Specific TLRU sites and areas have been identified in TUS reports received by Alberta Transportation, but permission to disclose the location of sites and areas has not been provided and, in some cases, Alberta Transportation was expressly asked not to disclose the location of sites and areas.

In assessing potential effects on current use, this assessment uses a conservative approach that recognises that a lack of TLRU information for a specific area or activity does not necessarily represent a lack of current use for that location or activity, especially where no Project-specific TLRU information is available. The assessment also assumes that traditionally-used species identified as being present in the RAA could be hunted, trapped, fished, or gathered by



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

Indigenous groups. The conclusions in this section are derived to a large extent from the conclusions of biophysical assessments. The assessments of wildlife and biodiversity, vegetation and wetlands and fisheries can inform an assessment of traditional harvesting activities, while assessments of other biophysical elements, such as air quality, noise, hydrology and surface water quality, can provide information regarding changes in the environment that may affect conditions for TLRU. However, biophysical effects may not fully align with effects on TLRU, nor do the mitigation measures for biophysical effects necessarily mitigate the effects on TLRU. This is considered when cross-referencing sections of the assessment.

Publicly-available TLRU information is also used 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 potentially affected Indigenous groups, as well as identifying potential issues and concerns that have been brought forward on other projects.

In an effort to represent the spatial parameters, the information that is geographically based (e.g., habitat) is selected based on its proximity to the assessment boundaries. Because of the limited amount of publicly available information on TLRU activities that are practiced in the RAA, this assessment relies on various sources of information that could be reasonably construed as applicable to the Project. The literature review considers information from projects located at considerable distance from the Project and for other types of developments, including pipelines and mines. For instance, concerns about the effects of construction on animal behaviour expressed regarding other projects have been considered in relation to this Project because it is assumed that Indigenous groups may raise similar concerns about effects of construction even if the projects are different in nature and the scale of the effects are not the same.

This assessment of Project effects on TLRU is undertaken with an awareness of these limitations. Alberta Transportation has received three TUS reports from four First Nations, is currently supporting the completion of TUS reports and reviews with three additional Indigenous groups, and continues to engage with other Indigenous groups in the area to share information on the Project and learn about potential concerns (Volume 4, Appendix B).

Where the conclusions drawn from scientific and technical knowledge are inconsistent with the conclusions drawn from traditional knowledge, the perspective of each is presented and an explanation for the conclusion is given.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

14.2 EXISTING CONDITIONS FOR TRADITIONAL LAND AND RESOURCE USE

14.2.1 Methods

The description of existing conditions for TLRU relies on results of the Indigenous engagement program for the Project, including available TUS reports. An interim joint TUS report was received from Siksika Nation and Kainai First Nation and a TUS report was received from Piikani Nation. A draft TUS report from Tsuut'ina Nation has also been received, but permission to use the information in the report in this assessment had not been received. Additional TUS reports are anticipated from Stoney Nakoda Nations, Louis Bull Tribe, and Métis Nation of Alberta, Region 3, but they had not been received by Alberta Transportation as of March 16, 2018 (see Section 14.1.2).

In addition, information was gathered through a review of publicly available literature containing TLRU information for Indigenous groups engaged on the Project to deepen the understanding of current use by these Indigenous groups. Confidential studies regarding TLRU or those stipulating one-time use were excluded from the literature review. The following types of information sources were considered³:

- regulatory TUS conducted by Indigenous groups
- TLRU regulatory assessments, supplemental filings, and hearing evidence for other developments
- government reports and databases
- historical and ethnographic literature
- relevant internet sources (such as Indigenous community websites)

Attachment A provides detailed information on each secondary source used to describe existing conditions, including a rationale for inclusion.

Alberta Transportation offered to hold a workshop with each Indigenous group during February or March 2018 to obtain feedback on how TLRU has been presented in the draft TLRU sections (Sections 14 of Volumes 3A and 3B), as well as obtain input on proposed mitigation measures, and discuss how Project-specific concerns have been addressed in the EIS. The intention was to validate the use of the traditional use information in the EIS and include any feedback received. Workshops were held 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). Each workshop was facilitated by CEAA Project Managers and the structure and format for each workshop was developed in



³ Information sources predating 1992 were not included.

Assessment of Potential Effects on Traditional Land and Resource Use March 2018

consultations with individual Indigenous groups. In accordance with protocols established at the start of each workshop and in recognition of the proprietary nature of TLRU, written summaries of the workshop proceedings were completed by Alberta Transportation and provided to each Indigenous group for review and validation before incorporating any information into the EIS. As of March 16, 2018, the summaries of the workshops had not been validated by Indigenous groups for use in updating the TLRU sections. Relevant TLRU information, concerns, and recommendations from workshops summaries validated and approved for use on the Project by Indigenous groups after the EIA has been filed 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.

Information relevant to the PDA, LAA, and RAA, or for understanding potential interactions with the Project is included in the existing conditions discussion. This includes species harvested and other resources required for TLRU, sites and areas of use, as well as trails, travelways, and other means of access to resources or sites. Concerns regarding the Project and concerns raised on other development projects that may apply to the Project are also presented.

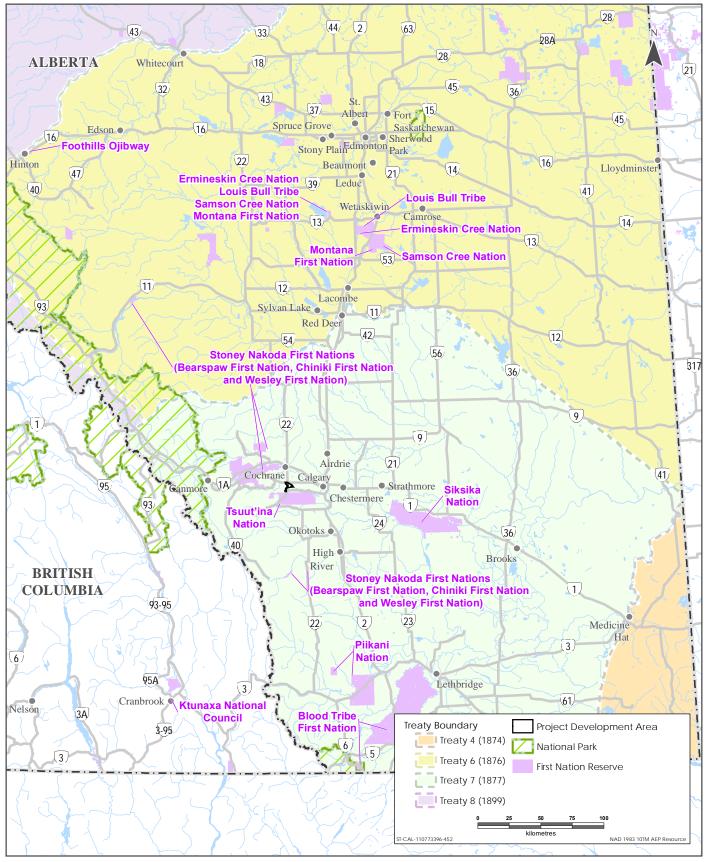
14.2.2 Indigenous Groups

The following overview provides brief profiles of each Indigenous group engaged on the Project, including reserve locations, population, governance structure, Treaty membership and tribal council associations, if applicable (see also Volume 4, Appendix B), as well as descriptions of traditional territories, where available. Alberta Transportation did not receive any description or maps of traditional territories through the Indigenous engagement program for the Project,⁴ except where those descriptions were included in the TUS reports received. Descriptions of traditional territories are included when directly attributable to Indigenous groups in publicly-available sources.⁵ The location of First Nation reserves and Treaty boundaries in relation to the Project is presented in Figure 14-2.

⁵ Maps of traditional territories presented by Indigenous groups are publicly available for Ktunaxa Nation, but they have not been included because they were not provided for use on the Project.



⁴ Alberta Transportation received a copy of a letter from Stoney Nakoda Nations, which included maps depicting the Stoney Nakoda Nations Traditional Territory that had also been attached to the Statement of Claim in action no. 0301-19586.



Sources: Base Data - ESRI, Natural Earth, Government of Alberta, Government of Canada Thematic Data - ERBC, Government of Alberta, Stantec Ltd

Locations of First Nations

Assessment of Potential Effects on Traditional Land and Resource Use March 2018

14.2.2.1 Kainai First Nation

Kainai First Nation (Band No. 435)⁶ is a signatory of Treaty 7 (KFN 2017; INAC 2017d; Historica Canada 2016). Kainai First Nation consists of two reserves: Blood 148 (134,293 ha), which is located 30 km south of the town of Fort McLeod; and Blood 148a (1,972 ha), which is located on the left bank of the Belly River, approximately 3 km north of the Canada/United States border (INAC 2017d).

As of December 2016, Kainai First Nation had a registered population of 12,300, with 8,297 members living on reserve, 210 members living on other reserves, 3 members living on Crown Land, and 3,790 members living off reserve (INAC 2017d). Kainai First Nation is governed under a custom electoral system, with a Chief and 12 Councillors (KFN 2017; INAC 2017d).

Kainai First Nation, together with Siksika Nation and Piikani Nation, are Blackfoot-speaking (Historica Canada 2016).

The PDA is located 170 km from Blood 148 reserve.

The Kainai First Nation website states that "[t]he traditional Blackfoot territory extends from the Rocky Mountains to the West; the Sand Hills to the East; to the North Saskatchewan in the North and the Yellowstone in the South." (KFN 2017)

Kainai First Nation has noted that some landowners within the Project area allow Kainai First Nation members access to private lands (see Section 14.1.7). Kainai First Nation participated in site visits to areas in the PDA in July and September 2016. Kainai Consultation Office, together with the Siksika Consultation Office, submitted a Project-specific TUS report: *Springbank Off-stream Reservoir (SR-1) KCO and SCO TUS Research Study, Alberta Bow and Elbow River Flood Prevention and Mitigation Project: Joint Kainai & Siksika Interim Report.* Permission to use spatial information from this report was requested, but, as of March 16, 2018, had not been received. All information regarding sites and areas in the TUS report are therefore generalized in this assessment and exact locations, including those in the PDA, are not provided. In addition to the specific sites identified in the TUS report and discussed generally in this assessment, Kainai First Nation also identified sites, areas, and activities in the Project area through the engagement program.

Alberta Transportation offered to hold a workshop with Kainai First Nation during February or March 2018 to obtain feedback on how traditional use information has been presented in the draft TLRU sections (Sections 14 of Volumes 3A and 3B). The intention was to validate the use of the traditional use information in the EIS and include any feedback received. As of March 16, 2018, discussions regarding a workshop with Kainai First Nation were ongoing.

⁶ Note that Indigenous and Northern Affairs Canada refers to Band no. 435 as Blood.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

14.2.2.2 Piikani Nation

Piikani Nation (Band No. 436) is a signatory of Treaty 7 (INAC 2017j; Historica Canada 2016; PN 2017). Piikani Nation consists of two reserves: Piikani (42,699 ha), which is located 13 km southwest of the town Fort McLeod; and Peigan Timber Limit 'B' (2,979 ha) (INAC 2017j).

As of December 2016, Piikani Nation had a registered population of 3,716 members with 2,391 members living on reserve, 35 members living on other reserves and 1,290 members living off reserve. Piikani Nation is governed under a custom electoral system with a Chief and eight Councilors elected to a four-year term (INAC 2017j).

Piikani Nation, together with Siksika Nation and Kainai First Nation, are Blackfoot-speaking (Historica Canada 2016).

The PDA is located 144 km from Peigan Timber Limit 'B' reserve.

In the TUS report, Pikani Nation states that " at the time of first contact siksikait-tsitapii [Blackfoot] occupied a territory ranging from the present day Manitoba west over the eastern range of the Rocky Mountains [to] the present states of Montana, Washington, Idaho Wyoming and Utah, āputt"sōma"k' iit"taa - North Big River, North Saskatchewan River, īy'kimik-koo - coulee or gap that divides the hills, Cyprus Hills, p̄onokāit"taa - Elk River, Yellowstone River, considered for generations the southern boundary of Blackfoot Territory." (PN n.d.)

Piikani Nation has reported that the Blackfoot people "marked their Blackfoot territory since time immemorial by significant Blackfoot landmarks, in the north by the North Saskatchewan River, on the east beyond the Great Sand Hills, on the south by the Yellowstone River, on the west by the Continental Divide" (PN 2015).

Piikani Nation participated in site visits to areas in the PDA in August 2016. Piikani Nation submitted a Project-specific TUS report: *Piikani Report on Proposed Springbank Reservoir and Dam*. Piikani Nation granted permission to use the information contained in the report, but requested that spatial coordinates identifying the location of sites, including those in the PDA, not be included in this assessment. In addition to the specific sites identified in the TUS report and discussed generally in this assessment, Piikani Nation also identified sites, areas, and activities in the Project area through the engagement program.

Alberta Transportation offered to hold a workshop to be held with Piikani Nation during February or March 2018 to obtain feedback on how traditional use information has been presented in the draft TLRU sections (Sections 14 of Volumes 3A and 3B). The intention was to validate the use of the traditional use information in the EIS and include any feedback received. As of March 16, 2018, discussions regarding a workshop with Piikani Nation were ongoing.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

14.2.2.3 Siksika Nation

Siksika Nation (Band No. 430) is a signatory of Treaty 7 (INAC 2017I; Historica Canada 2016). Siksika Nation has one reserve, Siksika 146 (71,088 ha), located approximately 80 km east of Calgary (INAC 2017I).

As of December 2016, Siksika Nation had a registered population of 7,406 with 4,051 members living on reserve, 192 members living on other reserves, 9 members living on Crown land, and 3,154 members living off reserve (INAC 2017I). Siksika Nation is governed under a custom electoral system and is represented by a Chief and 12 Councillors elected to a three-year term (INAC 2017I; SN 2017).

Siksika Nation, together with Piikani Nation and Kainai First Nation, are Blackfoot-speaking (Historica Canada 2016).

The PDA is located 78 km from Siksika 146.

Through the engagement program for the Project, Siksika Nation indicated that the project is within Siksika Nation Traditional Territory. A description of the Siksika Nation Traditional Territory presented by Siksika Nation is not available publicly.

Siksika Nation participated in site visits to areas in the PDA in July and August 2016. Siksika Consultation Office, together with the Kainai Consultation Office, submitted a Project-specific TUS report: Springbank Off-stream Reservoir (SR-1) KCO and SCO TUS Research Study, Alberta Bow and Elbow River Flood Prevention and Mitigation Project: Joint Kainai & Siksika Interim Report. Permission to use spatial information from this report was requested, but, as of March 16, 2018, had not been received. All information regarding sites and areas in the TUS report are therefore generalized in this assessment and exact locations, including those in the PDA, are not provided.

Alberta Transportation and Siksika Nation held a workshop on February 26, 2018 to obtain feedback on how traditional use information has been presented in the draft TLRU sections (Sections 14 of Volumes 3A and 3B). A second workshop was scheduled for February 27, 2018 was postponed and as of March 16, 2018, discussions regarding a workshop with Siksika Nation were ongoing. In accordance with protocols established at the start of each workshop and in recognition of the proprietary nature of TLRU, written summaries of the workshop proceedings were completed by Alberta Transportation and provided to Siksika Nation for review and validation before incorporating any information into the EIS. As of March 16, 2018, the summary of the workshop had not been validated by Siksika Nation for use in updating the TLRU sections.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

14.2.2.4 Stoney Nakoda Nations (Bearspaw First Nation, Chiniki First Nation and Wesley First Nation)

Stoney Nakoda Nations (Band No. 471)⁷ is a signatory to Treaty 7. Stoney Nakoda Nations is composed of three bands: Chiniki First Nation (Band No. 433), Bearspaw First Nation (Band No. 473), and Wesley First Nation (Band No. 475) (RMN 2017). These bands consist of four reserves: Big Horn 144a (2,127 ha); Eden Valley 216 (1,691 ha) located 80 km southwest of Calgary; Stoney 142-143-144 (39,265 ha) located 56 km west of Calgary; and Stoney 142B (5,692 ha) located 48 km northwest of Calgary (INAC 2017e; INAC 2017c; INAC 2017o).

Chiniki First Nation is governed under a custom electoral system with a Chief and four Councillors elected to a four-year term (INAC 2017e). As of December 2016, Chiniki First Nation had a registered population of 1,782, with 1,571 members living on reserve, 53 members living on other reserves, 1 member living on Crown land, and 157 members living off reserve (INAC 2017e).

Bearspaw First Nation is governed under a custom electoral system with a Chief and four Councillors elected to a three-year term (INAC 2017c; OWW 2016). As of December 2016, Bearspaw First Nation had a registered population of 1,969 members, with 1,763 members living on reserve, 54 members living on other reserves, 1 member living on Crown land, and 151 members living off reserve (INAC 2017c).

Wesley First Nation is governed under a custom electoral system with a Chief and four Councillors elected to a four-year term (INAC 2017o). As of December 2016, Wesley First Nation had a registered population of 1,843 members, with 1,589 members living on reserve, 60 members living on other reserves, 5 members living on Crown land and 189 members living off reserve (INAC 2017o).

Stoney Nakoda Nations members continue to speak the traditional language of the *lyāħé* Nakoda, or "Mountain People," (RMN 2017).

The PDA is located 28 km from Stoney 142B reserve.

⁷ Note that Indigenous and Northern Affairs Canada refers to Band No. 471 as Stoney.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

Through the engagement program for the Project, Stoney Nakoda Nations indicated that the project is within Stoney Nakoda Nations Traditional Territory. ⁸ Stoney Nakoda Nations describes "Traditional Lands" as:

An area bounded on the west by the Rocky Mountain divide, <u>on the north by</u> <u>approximately 54° latitude North</u>, on the south by the 49th Parallel <u>of latitude, and</u> on the east by <u>approximately Highway 22...Seven additional areas in the regions of Sundre, Tay</u> <u>River, Nordegg-Edson, Buck Lake, Rimby, Pigeon Lake, and Sharphead</u>. (SIB 2014; emphasis in source)

Stoney Nakoda Nations also describes "Traditional Use Lands" as:

An area bounded on the west by the Rocky Mountain divide, on the south by the 49th Parallel, on the east by the Alberta-Saskatchewan border, and to the north by approximately 54° latitude North...Further particulars of this area include an area in the south-eastern corner of Alberta, being the Cypress Hills region and known to the Îyârhe Nakoda as "Wotawa Baha", bounded on the west by 111 degrees longitude, on the north by 50 degrees North latitude, on the east by the Alberta-Saskatchewan border and on the south by the 49th parallel (SIB 2014; emphasis in source).

Stoney Nakoda Nations participated in site visits to areas in the PDA in October and November 2016. A TUS report is anticipated, but had not been received as of March 16, 2018. Through the engagement program for the Project, Stoney Nakoda Nations identified sites, areas, and activities in the Project area.

Alberta Transportation and Stoney Nakoda Nations held a workshop on February 12, 2018 to obtain feedback on how traditional use information has been presented in the draft TLRU sections (Sections 14 of Volumes 3A and 3B). A follow-up workshop has been scheduled to occur March 20, 2018. In accordance with protocols established at the start of each workshop and in recognition of the proprietary nature of TLRU, written summaries of the workshop proceedings were completed by Alberta Transportation and provided to Stoney Nakoda Nations for review and validation before incorporating any information into the EIS. As of March 16, 2018, the summary of the workshop had not been validated by Stoney Nakoda Nations for use in updating the TLRU sections. During the February 12, 2018 workshop, Stoney Nakoda Nations requested that the report, Stoney Nakoda Nations Cultural Assessment for the "Enhancing grizzly bear management programs through the inclusion of cultural monitoring and traditional ecological knowledge" be reviewed. Results of this review have been integrated into the EIS.

⁸ Stoney Nakoda Nations has filed a Statement of Claim, no. 0301-19586, with the Alberta Court of Queen's Bench (SIB 2014).



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

14.2.2.5 Tsuut'ina Nation

Tsuut'ina Nation (Band No. 432), previously known as Sarcee Nation, is a signatory of Treaty 7 (INAC 2017n; Historica Canada 2016). Tsuut'ina Nation consists of one reserve: Tsuut'ina 145 (29,417 ha), adjacent to the city of Calgary, Alberta.

As of December 2016, Tsuut'ina Nation had a registered population of 2,300 members, with 1,991 members living on reserve, 118 members living on other reserves, 2 members living on Crown land, and 189 members living off reserve (INAC 2017n). Tsuut'ina Nation is governed under a custom electoral system, with a Chief and 12 Councillors elected to a two-year term (INAC 2017n; TN 2017).

Members of Tsuut'ina Nation speak the Tsuut'ina language, which belongs to the Dene and Athabaskan language families (Historica Canada 2016).

Through the engagement program for the Project, Tsuut'ina Nation stated that "[t]he Project is located squarely within our traditional territory." A description of the Tsuut'ina Nation Traditional Territory presented by Tsuut'ina Nation is not available publicly.

Tsuut'ina Nation has noted that some landowners within the Project area allow Tsuut'ina Nation members access to private lands (see Section 14.1.7). Tsuut'ina Nation participated in site visits to areas in the PDA in October 2016. Tsuut'ina Nation has provided a draft, Project-specific TUS report, but, as of March 16, 2018, had not released the report for use in the environmental assessment. Tsuut'ina Nation identified sites, areas, and activities in the Project area through the engagement program.

Alberta Transportation and Tsuut'ina Nation held a four-day workshop on March 1, 5, 6, and 7 2018 to obtain feedback on how traditional use information has been presented in the draft TLRU sections (Sections 14 of Volumes 3A and 3B). Two of these days were site tours with Tsuut'ina Nation Elders. In accordance with protocols established at the start of each workshop and in recognition of the proprietary nature of TLRU, written summaries of the workshop proceedings were completed by Alberta Transportation and provided to Tsuut'ina Nation for review and validation before incorporating any information into the EIS. As of March 16, 2018, the summary of the workshop had not been validated by Tsuut'ina Nation for use in updating the TLRU sections.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

14.2.2.6 Ermineskin Cree Nation

Ermineskin Cree Nation⁹ (Band No. 443) is a signatory to Treaty 6 and is one of the Four Nations of Maskwacis, Alberta. Ermineskin Cree Nation's land base is traditionally known by members as *Maskwacheesihk* ('Bear Hills') and the official language of Maskwacis territory is *Maskwacîs Nêhîyawêwin* ('Cree') (ECN n.d.). As of January 1, 2014, the Hobbema area's name officially changed from Hobbema to Maskwacis (Ponoka News 2014; SCN 2013). The Four Nations of *Maskwacîs* (Ermineskin Cree Nation, Louis Bull Tribe, Montana First Nation, and Samson Cree Nation) adopted the *Maskwacîs Nžhîyawžwin* Declaration, which proclaims that the official language of *Maskwacîs* is *Nžhîyawžwin* ('Cree') on June 21, 2016 (Ponoka News 2016).

Ermineskin Cree Nation has two reserves: Ermineskin 138, totaling 10,295.8 ha and the location of the administrative offices, is 13 km south of Wetaskiwin; and Pigeon Lake 138A, totalling 1,921 ha, is 39 km west of Wetaskiwin. The Pigeon Lake reserve is shared by the Four Nations of Maskwacis (Ermineskin Cree Nation, Louis Bull Tribe, Montana First Nation and Samson Cree Nation).

As of December 2016, Ermineskin Cree Nation had a registered population of 4,668, with 3,175 members on reserve, 321 members on other reserves, 106 members on Crown land, and 1,066 members off reserve (INAC 2017f). Ermineskin Cree Nation is governed under a custom electoral system and is represented by a Chief and eight Councillors, elected to a three-year term (INAC 2017f).

The PDA is located 204 km from Ermineskin 138 reserve.

Through the engagement program for the Project, Ermineskin Cree Nation indicated that the Project is within Ermineskin Cree Nation Traditional Territory. A description of the Ermineskin Cree Nation Traditional Territory presented by Ermineskin Cree Nation is not available publicly. Through the engagement program for the Project, Ermineskin Cree Nation has noted that some landowners within the Project area allow Ermineskin Cree Nation members access to private lands (see Section 14.1.7). Ermineskin Cree Nation, through the engagement program for the Project, also reported having cultural and historical resources in the Project area and indicated that the Project area is in a region of cultural and historical importance.

Alberta Transportation offered to hold a workshop with Ermineskin Cree Nation during February or March 2018 to obtain feedback on how traditional use information has been presented in the draft TLRU sections (Sections 14 of Volumes 3A and 3B). The intention was to validate the use of the traditional use information in the EIS and include any feedback received. As of March 16, 2018, discussions regarding a workshop with Ermineskin Cree Nation were ongoing.

⁹ Note that Indigenous and Northern Affairs Canada refers to Band No. 443 as Ermineskin Tribe.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

14.2.2.7 Foothills Ojibway

Foothills Ojibway is a non-status Nation of Anishinabe ancestry that self-identifies as an Indigenous community. The administrative office of Foothills Ojibway is located in Hinton, Alberta. It is comprised of approximately 250 members who did not sign Treaty 6 in the late 19th century, or in mid-20th century when some members broke away from the leadership to adhere to Treaty 6 and settled on the O'Chiese Reserve (FOFN 2012; FOFN 2016).

Foothills Ojibway has described the traditional territory as being "in and near the eastern slopes of the Rocky Mountains in Alberta" (FOFN 2016).

Alberta Transportation offered a workshop to be held with Foothills Ojibway during February or March 2018 to obtain feedback on how traditional use information has been presented in the draft TLRU sections (Sections 14 of Volumes 3A and 3B). The intention was to validate the use of the traditional use information in the EIS and include any feedback received. As of March 16, 2018, Foothills Ojibway had not responded to Alberta Transportation's offer of a workshop.

14.2.2.8 Ktunaxa Nation

Ktunaxa Nation is comprised of four member communities: *?akisqnuk* First Nation, *?akinkum‡asnuq‡i?it* (Tobacco Plains Indian Band), *?aq`am* (St. Mary's), and *Yaqan Nuykiy* (Lower Kootenay Band) (KN 2017). The Ktunaxa language (also known as Kootenai, Kutenai, or Kootenay) is an isolated linguistic group and efforts are being made for language renewal (KN 2017; FPLMBC n.d.).

Pakisqinuk First Nation (Band No. 604) has one reserve, Columbia Lake 3 (3,272 ha), located on Windermere Lake (INAC 2017a). *Pakisqinuk* First Nation is governed under a custom electoral system, with a Chief and four-member Council elected to a four-year term (INAC 2017a). As of December 2016, *Pakisqinuk* First Nation had a registered population of 273 members, with 157 members on reserve and 118 members off reserve (INAC 2017a).

?akink'um#asnuq#i?it¹⁰ (Band No. 603) has one reserve, Tobacco Plains 2 (4,278 ha), located adjacent to the Canada-United States border, approximately 6 km east of Newgate (INAC 2017m).
?akink'um#asnuq#i?it is governed under a custom electoral system, with a Chief and four-member Council elected to a four-year term (INAC 2017m). As of December 2016,
?akink'um#asnuq#i?it had a registered population of 207 members, with 93 members on reserve and 114 members off reserve (INAC 2017m).

¹⁰ Note that Indigenous and Northern Affairs Canada refers to Band No. 603 as Tobacco Plains.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

?aq'am (Band No. 602) has five reserves:

- Bummers Flat 6 (78 ha) is located on the left bank of the Kootenay River approximately 5 km above the mouth of the St. Mary's River
- Cassimayooks (Mayook) 5 (63 ha) is located approximately 14 km east of Cranbrook
- Isidore's Ranch 4 (277 ha) is located approximately 13 km east of Cranbrook
- Kootenay 1 (7,446 ha) is located on the right bank of the Kootenay River at the mouth of the St. Mary's River
- St. Mary's 1 (62 ha) is located in the Kootenay district (INAC 2017b)

Paq'am is governed under a custom electoral system, with a Chief and four-member Council elected to a four-year term (INAC 2017b). As of December 2016, *Paq'am* had a registered population of 391 members, with 218 members on reserve and 173 members off reserve (INAC 2017b).

Yaqan Nuykiy¹¹ (Band No. 606) has eight reserves:

- Creston 1 (740 ha) is on the right bank of Kootenay River approximately 6 km north of the Canada-United States border
- Lower Kootenay 1A (184 ha) is east of Kootenay River
- Lower Kootenay 1B (483 ha) is in townships 7 and 8 of the Kootenay land district
- Lower Kootenay 1C (538 ha) is on both banks of the Kootenay River north of the mouth of the Goat River
- Lower Kootenay 2 (202 ha) is on the left bank of Kootenay River
- Lower Kootenay 3 (64 ha) is on the left bank of Kootenay River approximately 6 km northwest of Creston
- Lower Kootenay 5 (202 ha) is on the left bank of Kootenay River approximately 10 km northwest of Creston
- Lower Kootenay No. 4 (41 ha) is on the right bank of Kootenay River approximately 8 km northwest of Crestron (INAC 2017h)

¹¹ Note that Indigenous and Northern Affairs Canada refers to Band No. 606 as Lower Kootenay.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

Yaqan Nuykiy is governed under a custom electoral system, with a Chief and four-member Council elected to a three-year term (INAC 2017h). As of December 2016, Yaqan Nuykiy had a registered population of 241 members, with 122 members on reserve and 119 members off reserve (INAC 2017h).

In addition, St. Mary's 1A (793 ha) is located approximately 10 km north of Cranbrook on St. Mary's River and is shared by the four Ktunaxa Nation communities (INAC 2017a; INAC 2017b; INAC 2017h; INAC 2017m).

The closest Ktunaxa Nation reserve is 180 km from the PDA.

The Ktunaxa Nation website states that the traditional territory, which encompasses approximately 70,000 km², is located in the Kootenay region of southeastern British Columbia. Historically, it included parts of Alberta, Montana, Washington and Idaho (KN 2017). Ktunaxa Nation has more specifically described the territory as extending from "the 'Big Bend' of the Columbia River in the north to Montana in the south and from the east side of the Rockies to west of the Arrow Lakes" (KNC 2010). As noted in Section 14.1.2, Ktunaxa Nation has informed Alberta Transportation that they were not interested in participating in the engagement activities for the Project and no assessment of potential effects on Ktunaxa Nation's TLRU has been undertaken.

Alberta Transportation offered to hold a workshop with Ktunaxa Nation during February or March 2018 to obtain feedback on how traditional use information has been presented in the draft TLRU sections (Sections 14 of Volumes 3A and 3B). The intention was to validate the use of the traditional use information in the EIS and include any feedback received. As of March 16, 2018, Ktunaxa Nation had not responded to Alberta Transportation's offer of a workshop.

14.2.2.9 Louis Bull Tribe

Louis Bull Tribe (Band No. 439) is a signatory to Treaty 6, and one of the Four Nations of Maskwacis (Ponoka News 2016). As of January 1, 2014, the Hobbema area's name officially changed from Hobbema to Maskwacis ('Bear Hills') (Ponoka News 2014; SCN 2013). The Four Nations of *Maskwacis* (Ermineskin Cree Nation, Louis Bull Tribe, Montana First Nation, and Samson Cree Nation) adopted the *Maskwacis Nžhiyawžwin* Declaration that proclaims the official language of *Maskwacis* is *Nžhiyawžwin* ('Cree') on June 21, 2016 (Ponoka News 2016).

Louis Bull Tribe has two reserves: Louis Bull 138B (3,388 ha), approximately 16 km southwest of Wetaskiwin, Alberta; and Pigeon Lake 138A (1,921 ha), approximately 39 km west of Wetaskiwin. The Pigeon Lake reserve is shared by the Four Nations of Maskwacis (Ermineskin Cree Nation, Louis Bull Tribe, Montana First Nation and Samson Cree Nation (INAC 2017g). Through the Indigenous engagement program for the Project, Louis Bull Tribe indicated that some members currently live on the Tsuut'ina Reserve.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

As of December 2016, Louis Bull Tribe had a registered population of 2,285 with 1,566 members on reserve, 244 members on other reserves, 10 members on Crown land, and 465 members off reserve (INAC 2017g). Louis Bull Tribe is governed under a custom electoral system and is represented by a Chief and eight-member council, elected to a five-year term (INAC 2017g).

The PDA is located 207 km from Louis Bull 138B reserve.

A description of the Louis Bull Tribe Traditional Territory presented by Louis Bull Tribe is not available publicly. Louis Bull Tribe conducted a site visit in July 2016. Through the engagement program for the Project, Louis Bull Tribe reported cultural sites in and around the Project area. A TUS report From Louis Bull Tribe is anticipated.

Alberta Transportation offered a workshop to be held with Louis Bull Tribe during February or March 2018 to obtain feedback on how traditional use information has been presented in the draft TLRU sections (Sections 14 of Volumes 3A and 3B). The intention was to validate the use of the traditional use information in the EIS and include any feedback received. As of March 16, 2018, discussions regarding a workshop with Louis Bull Tribe were ongoing.

14.2.2.10 Montana First Nation

Montana First Nation (Band No. 442) is a signatory of Treaty 6 and one of Four Nations of Maskwacis, Alberta (MFN n.d.). As of January 1, 2014, the Hobbema area's name officially changed from Hobbema to Maskwacis (Ponoka News 2014; SCN 2013). The Four Nations of the *Maskwacis* (Ermineskin Cree Nation, Louis Bull Tribe, Montana First Nation, and Samson Cree Nation) adopted the *Maskwacis Nžhiyawžwin* Declaration that proclaims the official language of *Maskwacis* is *Nžhiyawžwin* ('Cree') on June 21, 2016 (Ponoka News 2016).

Montana First Nation has two reserves: Montana 139 (2,825 ha) is located approximately 24 km south of Wetaskiwin; and Pigeon Lake 138A (1,921 ha) is shared by the Four Nations of Maskwacis and located approximately 39 km west of Wetaskiwin (INAC 2017i).

As of December 2016, Montana First Nation had a registered population of 1,024, with 691 members on reserve, 75 members on other reserves, 1 member on Crown land, and 257 members off reserve (INAC 2017i). Montana First Nation is governed under a custom electoral system and is represented by a Chief and four-member council, elected to a three-year term (INAC 2017i).

The PDA is located 194 km from Montana 139 reserve.

A description of the Montana First Nation Traditional Territory presented by Montana First Nation is not available publicly.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

Alberta Transportation offered to hold a workshop with Montana First Nation during February or March 2018 to obtain feedback on how traditional use information has been presented in the draft TLRU sections (Sections 14 of Volumes 3A and 3B). The intention was to validate the use of the traditional use information in the EIS and include any feedback received. As of March 16, 2018, discussions regarding a workshop with Montana First Nation were ongoing.

14.2.2.11 Samson Cree Nation

Samson Cree Nation (Band No. 444) is a signatory to Treaty 6 and is one of the Four Nations of *Maskwacis*, Alberta (SCN 2013). As of January 1, 2014, the Hobbema area's name officially changed from Hobbema to Maskwacis ("Bear Hills") (Ponoka News 2014; SCN 2013). The Four Nations of *Maskwacis* (Ermineskin Cree Nation, Louis Bull Tribe, Montana First Nation, and Samson Cree Nation) adopted the *Maskwacis Nžhiyawžwin* Declaration that proclaims the official language of *Maskwacis* is *Nžhiyawžwin* ('Cree') on June 21, 2016 (Ponoka News 2016).

Samson Cree Nation has three reserves: Samson 137 (13,552 ha), located approximately 76 km south of Wetaskiwin; Samson 137A (134 ha), located within portions of Townships 43 and 44 and Range 24; and Pigeon Lake 138A (1,921 ha), located approximately 39 km west of Wetaskiwin (INAC 2017k). The Pigeon Lake reserve is shared by the Four Nations of *Maskwacîs* (Ermineskin Cree Nation, Louis Bull Tribe, Montana First Nation and Samson Cree Nation) (INAC 2017k).

As of January 2017, Samson Cree Nation had a registered population of 8,501, with 5,954 members on reserve, 504 members on other reserves, 4 members on Crown land, and 2,031 members off reserve (INAC 2017k). Samson Cree Nation is governed under a custom electoral system and is represented by a Chief and twelve-member council, elected to a three-year term (INAC 2017k).

The PDA is located 198 km from Samson 137 reserve.

Samson Cree Nation has identified their traditional territory as "includ[ing] all of the Treaty 6 region and also rang[ing] beyond [Treaty] 6 at least as far north as Lesser Slave Lake, west to the Rocky Mountains, south to the Bow River and as far east as Manitoba," (SCN 2009). Through the engagement program for the Project, Samson Cree Nation reported having cultural and historical resources in the Project area.

Alberta Transportation and Samson Cree Nation held a workshop on February 23, 2018 to obtain feedback on how traditional use information has been presented in the draft TLRU sections (Sections 14 of Volumes 3A and 3B). In accordance with protocols established at the start of each workshop and in recognition of the proprietary nature of TLRU, written summaries of the workshop proceedings were completed by Alberta Transportation and provided to Samson Cree Nation for review and validation before incorporating any information into the EIS. As of March 16, 2018, the summary of the workshop had not been validated by Samson Cree Nation for use in updating the TLRU sections.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

14.2.2.12 Métis Nation of Alberta, Region 3

The Métis Nation of Alberta governance structure is divided into six regional areas, and represents 35,000 members in the province of Alberta. Each designated region has a regional council consisting of a President, Vice-President and representatives of Métis Locals for the region. The Métis Nation of Alberta Head Office is in Edmonton (MNA 2017). Métis Nation of Alberta, Region 3 is located in southern Alberta with the administrative offices location in Calgary (MNA 2017).

Through the Indigenous engagement program for the Project, Métis Nation of Alberta, Region 3 stated, "The Metis, along with First Nations, historically used, travelled and occupied these lands and waterways. The Metis have documentation that provides clues to how our ancestors lived on the land and waterways since coming west. Specifically, Hudson Bay trading posts: Fort Calgary, Berry's Post, Bow River Post, Livingston Post, Bow Fort and the Canmore NWMP [Northwest Mounted Police] Barrack which were established as early as 1832 and continued as late as 1929. For these forts/posts to survive they relied upon the Metis to bring supplies, trade goods along with building and living within the areas they occupied."

A description of Métis traditional lands used by Métis Nation of Alberta, Region 3 members or Métis Locals, presented by Métis Nation of Alberta, Region 3, is not available publicly. Through the engagement program for the Project, Métis Nation of Alberta, Region 3 reported use of the Project area. A TUS report is anticipated, but had not been received as of March 16, 2018. Through the engagement program for the Project, Métis Nation of Alberta, Region 3 members explained that their TUS is ongoing and additional sites, areas, and descriptions about Métis Nation of Alberta, Region 3 TLRU and history may be forthcoming.

Alberta Transportation and Métis Nation of Alberta, Region 3 held a workshop on February 22, 2018 to obtain feedback on how traditional use information has been presented in the draft TLRU sections (Sections 14 of Volumes 3A and 3B). In accordance with protocols established at the start of each workshop and in recognition of the proprietary nature of TLRU, written summaries of the workshop proceedings were completed by Alberta Transportation and provided to Métis Nation of Alberta, Region 3 for review and validation before incorporating any information into the EIS. As of March 16, 2018, the summary of the workshop had not been validated by Métis Nation of Alberta, Region 3 for use in updating the TLRU sections.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

14.2.2.13 Métis Nation British Columbia

Métis Nation British Columbia was established in 1996, formally incorporating as the Métis Provincial Council of British Columbia (MNBC 2017). Comprising seven Regional Governance Councils, Métis Nation British Columbia represents thirty-five Métis Charter Communities and 15,000 registered Métis citizens throughout the province (MNBC 2017).

MNBC reports that, historically, Métis worked in freighting, trading, and farming, as well as commercial hunting and fishing from the eastern slopes of the Rocky Mountains to Jasper House, Hinton, Lac Ste. Anne, Hudson's Hope, Fort St. John, and the Mackenzie River Valley. Métis history is linked to the fur trade and while trapping has declined in popularity, it remains a part of the modern economy of Métis groups focused, for MNBC members, primarily in the northwestern region of British Columbia (MNBC 2013 as cited in PRGT 2014).

Through the engagement program for the Project, Métis Nation British Columbia noted that Métis have a long history in the Kootenay region.

Alberta Transportation offered a workshop to be held with Métis Nation British Columbia during February or March 2018 to obtain feedback on how traditional use information has been presented in the draft TLRU sections (Sections 14 of Volumes 3A and 3B). The intention was to validate the use of the traditional use information in the EIS and include any feedback received. As of March 16, 2018, Métis Nation British Columbia had not responded to Alberta Transportation's offer of a workshop.

14.2.3 Overview of Current Use

The Project is in an area that has been substantially modified, starting before the signing of Treaty 7 in 1877, by existing physical activities, including the church, Our Lady of the Peace, founded in 1872 and land conversion for agricultural purposes, which began in the 1870s. Since the late 1800s, land privatization; creation of transportation networks, pipeline rights-of-way and utility corridors; tourism and recreation activities; and commercial and residential development have contributed to the modification of land use in the area. At existing conditions, 33.8% of the terrestrial RAA contains anthropogenic lands (see Table 11-7). These developments have already contributed substantially to effects on TLRU by altering the distribution and abundance of traditionally harvested resources, reducing the extent of lands available for traditional activities, disturbing or restricting access to TLRU sites and areas, and changing conditions such as air quality, water quality, aesthetics and noise that may influence TLRU. However, some current land use by Indigenous groups may continue in the RAA on unoccupied Crown lands, such as the riparian zone along the banks of the Elbow River, and other lands to which Indigenous groups have been granted permission to access by private landowners.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

Through the engagement program for the Project, current use was identified by a number of Indigenous groups, including:

- Tsuut'ina Nation stated, "Our citizens continue to depend on the lands and waters in our traditional territory, including the Project area12, to support traditional activities. These include hunting, fishing, and harvesting of various species including medicinal plants."
- Tsuut'ina Nation, Stoney Nakoda Nations, Kainai First Nation, Siksika Nation and Piikani Nation also identified trails and travel routes, fishing, plant gathering, trapping, as well as cultural and archaeological sites13 within the RAA.
- Kainai First Nation, Ermineskin Cree Nation and Samson Cree Nation have or may have cultural and historical resources in the Project area.
- Siksika Nation explained that "the natural resources and heritage sites found there [Project area] are central to our culture."
- Stoney Nakoda Nations explained that a Stoney Nakoda cultural story talks about Springbank Creek

In addition, resources and environmental features for current use by Indigenous groups are present in the RAA.

Métis Nation of Alberta, Region 3 noted the potential for "Métis homesteads, cart trails, historical use areas and potential burial site within the proximity of the [Project]." Métis Nation of Alberta, Region 3 stated, "the homesteads and cart trails physically are not there anymore, [but] this may not be the case with the possible burial sites." The locations of these potential sites had not been identified as of March 16, 2018.

14.2.3.1 Overview of Literature Review

The literature review did not identify recorded current use sites or areas, or trails and travelways within the RAA that are used by Indigenous groups other than the Treaty 7 First Nations identified for engagement by the ACO.

The literature review shows that traditional hunting, trapping, fishing and plant harvesting practices continue to be important for Indigenous groups engaged on the Project, although no site-specific information regarding TLRU activities, practices, sites, or locations relative to the PDA was obtained through this review. The literature review suggests that hunting can occur year-round for subsistence, medicinal and cultural purposes, as well as for clothing, shelter, tools

¹³ TLRU sites and areas identified by Indigenous groups engaged on the Project may or may not align with archaeological and paleontological sites as defined by the Heritage Resources Act and identified in Section 13.



¹² "Project area" is used in cases where specific areas were not provided by Indigenous groups; "Project area" is assumed to be the RAA in this assessment.

Assessment of Potential Effects on Traditional Land and Resource Use March 2018

and decoration (TMP 2013; Riversdale 2015; AMEC 2010). Trapping is an important practice for many Indigenous groups (AMEC 2009; Riversdale 2015; AMEC 2010; Hannis 2006). Hunting, fishing, and plant harvesting are important traditional practices for all Indigenous groups engaged for the Project (AMEC 2009; SCN 2015a; AMEC 2010; Riversdale 2015; MNBC 2013 as cited in PRGT 2014). Plants are harvested for subsistence, medicinal, spiritual and ceremonial purposes, as well as for constructing tools, camps and canoes (Lower Kootenay Band 2015 as cited in Riversdale 2015; Riversdale 2015; AMEC 2009; AMEC 2010; MNBC 2013 as cited in PRGT 2014; TCS 2013; SCN 2015a; SCN 2015d; TMP 2013; MLT 2011). The literature review shows that consumption of traditional resources also remains an important way of life for Métis communities due to the health benefits, reduced cost, preferential taste, and enjoyment of the harvesting process (MNBC 2013 as cited in PRGT 2014).

This review has been used to identify resources and land use features for current use that could be present in the RAA. Specifically, regulatory applications provided insights into concerns regarding other industrial development projects that could apply to the Project and changes that have affected existing conditions for current use.

14.2.4 Availability of Traditional Resources for Current Use

Through the engagement program for the Project, Stoney Nakoda Nations reported that pockets of underground streams exist within the Project area. Stoney Nakoda Nations also indicated that Elders have songs about Chiefs and sand dunes, pointing to the cultural importance of sand bars, which occur in the Elbow River. In the TUS report for the Project, Kainai First Nation and Siksika Nation noted the Elbow River and its associated sloughs to be important habitat for fish and wildlife (KCO & SCO 2017). At a meeting with representatives from Kainai First Nation, Piikani Nation, and Siksika Nation regarding the Project, a Kainai First Nation Elder expressed concern regarding water from the mountains and pollution in the area, stating, "That water comes from the mountains—a vein into the Bow River. Looking around trees are cut down; it is hurting water." Tsuut'ina Nation stated that water is a critical part of Tsuut'ina Nation identity, explaining that water quality is important not only for survival, but also for ceremonies, songs, stories and Tsuut'ina Nation culture (TN 2013). Water sources of concern to Tsuut'ina Nation include Bow River, Elbow River, and Fish Creek (TN 2013). Through the engagement program for the Project, Tsuut'ina Nation noted that members depend on the water from Elbow River. Through the engagement program for the Project, Stoney Nakoda Nations explained that members used to listen to bison moving by listening to the vibrations of underground streams; "the oral history told us about the water table and flood plain." Through the engagement program for the Project, Siksika Nation noted the importance of Elbow River as a long-standing travel route.

Through the Indigenous engagement program for the Project, Tsuut'ina Nation explained that the Project is within "an area where our citizens exercise their Aboriginal, Treaty and Inherent rights." Tsuut'ina Nation also explained that the Project area is used for plant harvesting: "Our



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

citizens rely on various medicinal plants that grow on the sensitive riparian areas of Elbow River and its tributaries as well as the wetlands." Through the Indigenous engagement program for the Project, Stoney Nakoda Nations reported undertaking cultural practices in the Project area, including hunting, fishing, trapping, plant gathering, and camping; however, Stoney Nakoda Nations Elders explained that they do not camp in river valleys.

Through the engagement program for the Project, Stoney Nakoda Nations stressed the importance of wildlife crossings, because elk, deer and moose currently migrate seasonally through the study area. Stoney Nakoda Nations also explained that logging in the region has resulted in the displacement of wildlife such as grizzly bears to the foothills and plains, and that it would take up to a century for wildlife migration patterns to be restored to normal.

Based on the available information (EEP 2016; Riversdale 2015; SCN 2015a; SCN 2015c; SNN n.d.; TERA 2015; MNBC 2013 as cited in PRGT 2014; TCS 2013; TMP 2013; Lifeways 2012; SCN 2012a; SCN 2012b; ECN 2011; LBT 2011; MFN 2011; MLT 2011; Parlee 2011; Dempsey 2001; AMEC 2010; AMEC 2009; Lifeways 2008; Snow 1977 as cited in Parlee 2011), including results of the engagement program for the Project, Table 14-3 summarizes traditional resources that are generally known to be used by Indigenous groups which also can be found in the area of the Project. The information in the table is based on available sources; it 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 has no use in the RAA.

	Traditionally Used Resource	Kainai First Nation	Piikani Nation	Siksika Nation	Stoney Nakoda Nations	Tsuut'ina Nation	Ermineskin Cree Nation	Foothills Ojibway	Louis Bull Tribe	Montana First Nation	Samson Cree Nation	Métis Nation of Alberta, Region 3	Métis Nation British Columbia
Wildlife	badger		~										
	bear (black, grizzly)		~		~		~	~		~	~	~	~
	beaver	✓	✓		~		✓			✓	✓	✓	
	bobcat, bobtail						✓					✓	
	cougar						✓				✓	✓	
	coyote	✓	✓			~		✓				✓	
	deer (mule, white-tailed)	~	~	~	~	~	~	~	~	~	~	~	~
	duck (American coot)	✓	✓	✓		✓	✓		✓		✓	✓	✓



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

	Traditionally Used Resource	Kainai First Nation	Piikani Nation	Siksika Nation	Stoney Nakoda Nations	Tsuut'ina Nation	Ermineskin Cree Nation	Foothills Ojibway	Louis Bull Tribe	Montana First Nation	Samson Cree Nation	Métis Nation of Alberta, Region 3	Métis Nation British Columbia
Wildlife	eagle (golden, bald)	✓	✓		✓	✓							
(cont'd)	elk	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	fox (red)	✓	✓			✓						~	
	fisher									✓			
	goose (Canada, white, dark)	~	~	~		~	~		~		~	~	~
	gopher		~										
	grebe											✓	
	grouse (including prairie ¹⁴ , mountain ¹⁵)		~	~			~				~		~
	hare, rabbit	~	✓		✓	~	✓		✓		✓	\checkmark	\checkmark
	lynx						✓			✓	✓	\checkmark	
	marten									✓			
	moose	~	✓		✓	✓	✓	✓	~	✓	✓	\checkmark	\checkmark
	mountain goat	✓	✓			✓	✓						✓
	mink	✓								✓	✓		
	muskrat	~			~		✓		~	~	~	~	
	owl		~										
	partridge (chukar)	~	~										✓
	pheasant											~	✓
	porcupine	~	~			~							
	ptarmigan												✓
	sheep (bighorn sheep)	✓	✓	✓		~	✓	✓		✓	✓		\checkmark
	skunk										✓		
	sprague's pipit										✓		



¹⁴ Assumed to be sharp-tailed grouse.

¹⁵ Assumed to be spruce and ruffed grouse.

Assessment of Potential Effects on Traditional Land and Resource Use March 2018

	Traditionally Used Resource	Kainai First Nation	Piikani Nation	Siksika Nation	Stoney Nakoda Nations	Tsuut'ina Nation	Ermineskin Cree Nation	Foothills Ojibway	Louis Bull Tribe	Montana First Nation	Samson Cree Nation	Métis Nation of Alberta, Region 3	Métis Nation British Columbia
Wildlife	Squirrel	~	~			~	✓			~	✓		
(cont'd)	swan	✓	✓	~		✓					~		
	weasel						✓				~		
	wolverine							~			~	✓	
	wolf	✓	~			✓	✓	~			~		
Fish	burbot				✓		~						✓
	pike (northern), jackfish				~		✓		~	~	✓	~	\checkmark
	trout (bull, cutthroat, rainbow)	~			~		~		~	~	~		~
	sucker				✓		✓		~	~	✓		✓
	whitefish (mountain)				✓		✓		~	~	✓		✓
Vegetation	alsike clover						✓						
and Fungus	aspen						✓						
	bearberry, kinnikinnick	✓	✓			~	~		~	✓			✓
	bear root*					~			~				
	bitter berry*										~		
	black root*								✓		✓		
	blueberry (high-bush, low-bush, dwarf)						~		~	~	~	~	✓
	bunchberry						✓						
	camas	✓	✓										
	caribou weed*												✓
	cattail											~	✓
	cedar (including western red)				~		~		~		~		~
	chokecherry	✓	✓				✓		~	~	~	~	✓
	cloudberry, dewberry										~	~	
	cohosh, honeysuckle											~	



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

	Traditionally Used Resource	Kainai First Nation	Piikani Nation	Siksika Nation	Stoney Nakoda Nations	Tsuut'ina Nation	Ermineskin Cree Nation	Foothills Ojibway	Louis Bull Tribe	Montana First Nation	Samson Cree Nation	Métis Nation of Alberta, Region 3	Métis Nation British Columbia
Vegetation and Fungus	cottonwood (black), poplar		~		~	~							~
(cont'd)	cow parsnip												
	cranberry (low-bush), eye berry, mooseberry						~		~	~	~	~	~
	currant												
	dandelion												✓
	diamond willow fungus									✓	~		✓
	fireweed	✓											✓
	frog plant*16									✓			
	fungus* (tree, wood, green wood-cup)					~	~					~	
	goldenrod												✓
	gooseberry (northern)						✓		✓	\checkmark	✓	✓	
	green alder						✓					✓	
	horse grass*										✓		
	huckleberry						✓		✓		✓		✓
	juniper (ground, berry)	✓	✓			✓	✓				✓		✓
	king root*										✓		
	Labrador tea, muskeg tea, muskeg leaves					~	~		~	~	~		
	lichen* (tree)		✓			✓							
	mint, peppermint, wild mint						~		~	~	~	~	~
	moss* (spike, sponge)	~									~		
	mushrooms* (chanterelle, morel, pine, puff balls)											~	~

Table 14-3 Traditional Resources within the RAA

¹⁶ "Frog plant" is assumed to be frog pants (pitcher plant).



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

	Traditionally Used Resource	Kainai First Nation	Piikani Nation	Siksika Nation	Stoney Nakoda Nations	Tsuut'ina Nation	Ermineskin Cree Nation	Foothills Ojibway	Louis Bull Tribe	Montana First Nation	Samson Cree Nation	Métis Nation of Alberta, Region 3	Métis Nation British Columbia
Vegetation	northern bedstraw											~	\checkmark
and Fungus (cont'd)	old-man's beard												✓
	old-man's whiskers	~											
	onion (wild, prairie)						~				✓	✓	✓
	pigweed (lamb's quarter, red)											~	
	pine (lodgepole, sweet)	~	~			~	~			~	~		
	pineapple weed											✓	
	pin cherry								✓	✓		✓	
	plantain (common, whiteman's foot)						~					~	~
	prairie clover*											✓	
	prairie coneflower											✓	
	rabbit root										✓		
	raspberry (wild)					✓	✓			✓	✓	✓	\checkmark
	red clover												\checkmark
	red osier dogwood, nipiswasiskwatew						~						
	rosehip												✓
	sage (bush, prairie)	~					~		✓		~	~	✓
	saskatoon berry	✓	✓				✓		✓	✓	✓	✓	✓
	saw-grass*												✓
	silverberry, wolf willow, white sage berry	~										~	
	smelly root*										~		
	soapberry, hoshum												✓
	spruce				\checkmark		✓			✓	✓		\checkmark



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

	Traditionally Used Resource	Kainai First Nation	Piikani Nation	Siksika Nation	Stoney Nakoda Nations	Tsuut'ina Nation	Ermineskin Cree Nation	Foothills Ojibway	Louis Bull Tribe	Montana First Nation	Samson Cree Nation	Métis Nation of Alberta, Region 3	Métis Nation British Columbia
Vegetation	stinging nettle											✓	✓
and Fungus (cont'd)	strawberry						✓		✓		✓	✓	✓
(001110)	sweetgrass	✓			✓	✓	✓		✓		✓		
	tiger lily									~			
	tumbleweed										✓		
	twinberry											\checkmark	
	western dock											\checkmark	
	wheat						✓						
	white birch		✓								~		✓
	wild asparagus												✓
	wild carrot						~						
	wild chives						✓						
	wild potato						✓						✓
	wild rice										✓		
	wild rose	✓	~				✓						
	wild tobacco*		~										
	wild turnip	~	~										
	willow (red)		~			✓	~		~	~		✓	✓
	yarrow	~	~										✓
Land formations	sand bars				~								
Minerals	black chert						✓						
	crushing stone						✓						
	ochre	✓	✓										
	quartzite						~						
	soapstone						✓						



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

	Traditionally Used Resource	Kainai First Nation	Piikani Nation	Siksika Nation	Stoney Nakoda Nations	Tsuut'ina Nation	Ermineskin Cree Nation	Foothills Ojibway	Louis Bull Tribe	Montana First Nation	Samson Cree Nation	Métis Nation of Alberta, Region 3	Métis Nation British Columbia
Water	water sources				~	✓					~		
Wood	firewood (timber)									✓		~	✓
NOTE:	·										•		•

Table 14-3 Traditional Resources within the RAA

distribution of the resource could not be confirmed.

Country Foods

Country foods include traditionally used resources that are trapped, fished, hunted, harvested, or grown by Indigenous groups for subsistence or medicinal purposes outside of the commercial food chain. Through the engagement program for the Project, Stoney Nakoda Nations reported hunting, trapping, fishing in the Project area. Kainai First Nation, Siksika Nation, and Piikani Nation identified herbs and medicinal plants in the Project area during site visits, and Tsuut'ina Nation reported medicinal plant harvesting in the Project area and fishing in the Elbow River. Although herbs and medicinal plants were identified within the Project area during site visits by Kainai, Siksika, and Piikani members, the exact locations where country foods are harvested in the area of the Project have not been disclosed. Nor was any information regarding frequency of consumption of country foods provided by Indigenous groups through the Indigenous engagement program for the Project, including the Project-specific TUS, or through the review of publicly available literature. Table 14-3 summarizes traditionally used species that occur within the Project area and that are generally harvested by Indigenous groups. The Project is predominantly situated on private land, which has limited the ability of Indigenous groups to harvest country foods within the area of the Project. However, Kainai First Nation and Tsuut'ina Nation have reported that some land owners permit access for TLRU activities.

Drinking Water

Through the Indigenous engagement program, Tsuut'ina Nation indicated that they depend on the groundwater in the Elbow River Alluvial Aquifer for the reserve's drinking water. Five registered water wells have been identified on the Tsuut'ina Nation reserve within the RAA. Tsuut'ina Nation also identified Elbow River as a source of drinking water and noted the importance of the river's connection to groundwater. It is understood that Tsuut'ina Nation holds



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

a license to withdraw water from Elbow River, located upstream of the PDA. Although they do not identify sources of drinking water, Stoney Nakoda Nations noted that the waters that flow through the traditional lands have sustained the Stoney Nakoda Nations since time immemorial.

No other sources of drinking water used by Indigenous groups in the area of the Project were identified through the engagement program or the literature review.

14.2.4.1 Environmental Features Related to Availability of Resources

Through the literature review, Indigenous groups have also identified general environmental features associated with TLRU (environmental features associated with, for example, hunting, trapping, fishing, and plant gathering) that could occur within the RAA. Of note, the environmental features discussed in this section have not been identified by Indigenous groups through the Indigenous engagement program for the Project, including the Project-specific TUS. The general discussion of these features represents the conservative approach undertaken in this report.

Ermineskin Cree Nation has, in other circumstances, reported that salt licks, where ground water comes to the surface, are good places to hunt game (Lifeways 2008). Similarly, Samson Cree Nation has described salt licks as areas where game is drawn to and hunted (SCN 2014). Pikani Nation and Kainai First Nation have reported that trapping fur bearing animals traditionally occurred along creeks, streams and trails (AMEC 2009; AMEC 2010). Ermineskin Cree Nation has explained that animals migrate on routes that are parallel to larger rivers (TMP 2013). Métis Nation of Alberta, Region 3 has identified wooded areas as prime, traditionally used areas for hunting moose, deer, rabbits, muskrats, prairie chickens, ducks and geese. Muskrats, which were the most important species to trap, are typically found around lakeshores and shallow waterbodies (EEP 2016). Métis Nation of Alberta, Region 3 has also noted that hunting and trapping occurs in wooded areas, coulees, river valleys, and along lakeshores and shallow waterbodies (EEP 2016).

Samson Cree Nation members fish in estuaries, waterways and streams (SCN 2012a). Métis Nation of Alberta, Region 3 has indicated that fishing occurs in large waterways including rivers, streams, and tributaries (EEP 2016).

Samson Cree Nation has reported that medicinal plants can be found in mossy areas (SCN 2015c) and most traditionally-harvested plants, including herbs, are found near riparian areas and regions with water (SCN 2015a; SCN 2014). Siksika Nation has reported that medicinal and ceremonial plants can be found in "fertile micro-systems and other sunny slopes" (Riversdale 2015). Ermineskin Cree Nation has explained that "medicines are gathered throughout their asserted traditional territory and that they consider the entire region to be their pharmacy," (TMP 2013). Ermineskin Cree Nation considers any site where a traditionally-used plant is located as a potential plant harvesting site because, prior to the signing of treaties,



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

family groups shared resources throughout the region (TMP 2013). Kainai First Nation and Piikani Nation gathered plants that did not grow in the prairies and other resources such as ochre in the Rocky Mountains (Riversdale 2015). Montana First Nation has reported travelling from the mountains to the prairies to harvest plants, including medicines and roots and noted that in the past, people would gather in locations where there was an abundance of resources such as wildlife, plants, berries, and fish (TERA 2015; TMP 2013).

Samson Cree Nation has noted that water is important for all aspects of life, "not just for the members themselves, but for all the natural elements, biosphere, and Natural Law around and inclusive to plants, animals, other resources and the land itself," (SCN 2015a).

14.2.4.2 Contextual Information on Availability of Resources

The literature review has also provided insights into changes already experienced regarding the general availability of resources for current use, and are presented below. These concerns have not been identified by Indigenous groups through the Indigenous engagement program for the Project, including the Project-specific TUS.

Water quality has been affected by pollution and contamination, which has affected Samson Cree Nation's ability to undertake traditional practices (SCN 2012a; SCN 2014; SCN 2015a; SCN 2015d). Samson Cree Nation members used to melt snow, collect rain water and drink water from rivers, but they no longer do so because of contamination (SCN 2012a; SCN 2015d). Samson Cree Nation has witnessed water sources and waterways where there are no wild game tracks because they are polluted; animals have to travel greater distances to get good water (SCN 2014). Samson Cree Nation has attributed the contamination to industrial development and the establishment of agriculture (SCN 2015a; SCN 2015d).

Samson Cree Nation has explained that medicinal plants are found in mossy areas, but that these areas are increasingly scarce (SCN 2015c). Ermineskin Cree Nation has also noted that sweetgrass is increasingly scarce (TMP 2013). Increased activity has reduced the number of deer and moose available for harvesting by Samson Cree Nation (SCN 2012a). Some animals are sick and the meat is inedible due to pollution (SCN 2012a; SCN 2015a).

Ermineskin Cree Nation, Samson Cree Nation, and Montana First Nation have all noted the growing difficulty in locating some traditionally used plants (TMP 2013, SCN 2015b, TERA 2015). "[T]here is a lot of medicines that have -- that are gone, that still today I search for what my mother had been asking for and I can't find it. I go in northern part of Alberta to central, south, just to go and see that -- just to find that one flower and I haven't" (SCN 2012a). Montana First Nation has stated: "It is a challenge to harvest locally because there are fewer traditional plants and berries" (TERA 2015). Specifically, medicinal plants can be found in mossy areas; however, "our moss is all gone, it's gone. There's nothing," (SCN 2015c).



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

14.2.4.3 Concerns Raised on Other Development Projects

Indigenous groups engaged on the Project have also expressed general concerns regarding the effects of other industrial development projects on the current use of resources for traditional purposes that reflect broader concern for the pace of development and the further disturbance of traditional resources.

In a review of publicly available sources, Samson Cree Nation has expressed concerns regarding the "introduction to [sic] foreign material to traditional territory, such as the pipeline, noise, influx of people, the activity around the plant and animal life that will affect our traditional hunting, gathering areas, exploitation, expropriation of lands, natural resources, cultural, people, environmental degradation, devastation, impoverishment of our people, destruction of indigenous plants and animals. I've always been concerned of manipulation, appropriation, marginalization, commodification, destruction of our way of life and destruction of our land and land base," (SCN 2012a).

Samson Cree Nation has expressed concern regarding effects of development on wildlife populations, wildlife habitat and harvesting practices, and explained that animals avoid developed or disturbed areas (Riversdale 2015; SCN 2012a; MLT 2011). Samson Cree Nation has noted that increased access to an area resulting from development activities may increase predator activity, which results in a decrease in the amount of game available to harvest (Riversdale 2015; SCN 2015b). Disturbances to wildlife migration patterns and loss of game trails, mineral licks, and water sources affect Samson Cree Nation members' ability to hunt because game move out of an area after being disturbed (Riversdale 2015, SCN 2015b). Samson Cree Nation has stated that effects on culturally important species may occur as a result of loss, reduction or alteration of suitable habitat; changes in wildlife movement patterns; sensory disturbance; or increased direct and indirect mortality (MLT 2011).

In relation to other developments, Kainai First Nation has expressed concern that noise and traffic related to construction activities may affect animals' patterns of movement (AMEC 2009) and Samson Cree Nation has expressed concern for fish health as a result of construction activities affecting water quality (SCN 2015a; TMP 2013).

In relation to another project, Ermineskin Cree Nation has expressed concerns that more development will further affect the availability of sweetgrass, which is an important plant for Ermineskin Cree Nation (TMP 2013).

Through the Indigenous engagement program for the Project and in the TUS report for the Project, Piikani Nation provided the Oldman Dam as an example of a past development project that has affected Piikani Nation (PN n.d.). The Oldman Dam is located approximately 8 km west of Piikani Reserve 147 and is used to divert water from the Oldman River to be used for irrigation in the Lethbridge Northern Irrigation District. Piikani Nation has observed a "white spider web-like



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

film on the rocks and on the river bed and shoreline" as a result of silt build up on the dam basin floor (PN n.d.). Following the 1995 flood, the dam floor basin was exposed due to low water flow, and winds carried silt from the basin floor into the Piikani Nation community, which limited visibility and changed ground flow wind patterns (PN n.d.). Downstream of the Oldman Dam is the cottonwood river valley. Piikani Nation stated that the river valley "has eroded considerably from the 1995 flood and ongoing mitigation of annual flood control to seed the cottonwood. The result is what exist[s:] a valley void of the original riverbed created by flood control and a cottonwood forest in the advanced stages of decay," (PN n.d.).

Samson Cree Nation has also witnessed declining air quality; children are getting sick as a result of changing air quality, and Samson Cree Nation has stated that sickness and cancer is caused by pollutants (; SCN 2012a; SCN 2015d). Samson Cree Nation has also expressed concerns about greenhouse gas emissions related to development projects (SCN 2015b).

Métis Nation British Columbia has noted several concerns in relation to water impoundment projects, including potential effects on wildlife, wildlife habitat, and biodiversity. In this regard, concerns were raised about ungulates and ungulate habitat, including moose, elk, deer, caribou, bison and stone sheep (SCFNET 2013). Métis Nation British Columbia also noted the potential for effects on fish, fish habitat, fish species composition, and fish passage upstream and downstream of in-stream developments (SCFNET 2013). Métis Nation British Columbia has also expressed concern regarding potential effects on water quality, farmland and agriculture, and greenhouse gas emissions (SCFNET 2013).

14.2.5 Access to Traditional Resources or Areas for Current Use

Travel by land and water continues to be an important activity for Indigenous groups in the region. Indigenous groups have historically travelled seasonally throughout the region to access cultural sites and areas, including Blackfoot traditional camps (KCO & SCO 2017; Indigenous engagement program results), and in the pursuit of resources (PN n.d.; KCO & SCO 2017; Indigenous engagement program results; Riversdale 2015; Galileo 2010).

Through the engagement program for the Project, Kainai First Nation stated that in the past, the Blackfoot people would travel along riverways. In the TUS report for the Project, Siksika Nation and Kainai First Nation identified Elbow River as an important Blackfoot travel route, which is used year-round to travel between the plains and the mountains (KCO & SCO 2017). Siksika Nation, through the engagement program for the Project, explained "that the Elbow River is a major transport corridor for Siksika members and has been for millennia." Through the engagement program for the Project to affect their ability to use the river as a transportation route, and noted that a historical trading route falls within the Project area.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

Through the engagement program for the Project and in the TUS report, an old trail referred to as the old Stoney Trail (Old North-South Trail) was identified during Piikani Nation and Kainai First Nation site visits near the Robinson property (PN n.d). A trail referred to as the Stoney Trail was also identified during Siksika Nation site visits to the Robinson property; however, Siksika Nation explained that the trail was not the Stoney Trail but the North-South Trail "used by the Blackfoot travelling from Montana into Northern Alberta within their territory." In the TUS report for the Project, Kainai First Nation and Siksika Nation identified an old Blackfoot trail (KCO & SCO 2017). Stoney Nakoda Nations members travelled annually in the spring from the Bow River area, which is in the RAA, to hunting grounds near Sheep River and Highwood River areas and further south (Galileo 2010). Trails and travelways used by Siksika Nation are present in mountain and prairie regions; Siksika Nation travelled through the prairies and mountains, including for subsistence and trade (Riversdale 2015).

In addition, through the Indigenous engagement program for the Project, Stoney Nakoda Nations expressed concern regarding potential effects of the Project on members' ability to exercise their Treaty rights and carry out cultural practices such as fishing, hunting and trapping by driving away and/or reducing the availability of local wildlife such as, birds, fish and other wildlife resulting in members having to travel farther to fish, trap and hunt local wildlife. Kainai First Nation also stated through the engagement program that the Project may affect members' ability to exercise Treaty rights and to gather, hunt, fish, and practice ceremonies.

At a meeting with representatives from Kainai First Nation, Piikani Nation, and Siksika Nation regarding the Project, participants noted that many cultural and spiritual sites are no longer accessible and cannot be identified, but are still significant. One participant stated, "Our concern is not having access to our traditional territory and why there are questions as to why access is being requested."

Based on the available information (PN n.d.; KCO & SCO 2107; TMP 2013; Galileo 2010), including results of the engagement program for the Project, Table 14-4 summarizes trails and travelways for each Indigenous group. The information in the table is based on available sources; it 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 does not use trails or travelways in the RAA. General references to trails and travelways are not included in Table 14-4.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

Project Boundary	Site or Area	Kainai First Nation	Piikani Nation	Siksika Nation	Stoney Nakoda Nations	Tsuut'ina Nation	Ermineskin Cree Nation	Foothills Ojibway	Louis Bull Tribe	Montana First Nation	Samson Cree Nation	Métis Nation of Alberta, Region 3	Métis Nation British Columbia
PDA	Elbow River	~		~		~							
	Old Stoney Trail (Old North- South Trail) ¹⁷	~	~										
	Old Blackfoot trail	~		~									
	Historical trading route					~							
RAA	Bow River				~								

Table 14-4 Trails and Travelways identified within the RAA

Recreational Waters

There was no reference to the use of waterways for recreational purposes by Indigenous groups through either the Indigenous engagement program for the Project and literature review. Presumably this is because Indigenous peoples tend not to regard travel by water for traditional purposes as a recreational activity. Travel for current use practices and activities, whether by water or overland routes, is primarily a purposeful activity for Indigenous groups, involving subsistence, economic, social or ceremonial activities (perhaps several of these at once). As noted above, several Indigenous groups have identified travel by water as an important activity that supports access to traditional resources and areas for current use. For the purposes of this assessment, any travel by water by Indigenous groups is considered to include use of waterways for recreational purposes.

¹⁷ The specific location of the old Stoney Trail (Old North-South Trail) could not be confirmed; however, it was identified during a site visit to the Robinson property, which is within the PDA. It is assumed that a portion of this trail intersects the PDA.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

14.2.5.1 Environmental Features Related to Access

Through the literature review, Indigenous groups have also identified general environmental features associated with travel that could occur within the RAA. Of note, these have not been identified through the Indigenous engagement program for the Project, including the Project-specific TUS.

Ermineskin Cree Nation has explained that navigable waterways were travel routes (TMP 2013). Samson Cree Nation has noted that an extensive network of trails that were used for trade in the past continues to be used to access harvesting areas (SCN 2015d; Riversdale 2015).

14.2.5.2 Contextual Information on Access

The literature review has also provided insights into changes already experienced regarding the access to resources and current use areas, and are presented below. These concerns have not been identified by indigenous groups through the Indigenous engagement program for the Project, including the Project-specific TUS.

Samson Cree Nation has noted having to travel long distances to harvest plants: "We go to the States -- State of Montana to pick up some herbs that they don't grow here" (SCN 2015d). Access to plant-gathering areas has also been restricted due to private land ownership and fencing, as explained by Samson Cree Nation: "Years ago, it was open for us to go anywhere to any bush to pick our traditional -- our berries for survival. Now, today, there's fences along that's owned by ownerships. We can't cross -- we cannot cross on those fence, and it's very painful for us. So, we have to go in a ditch or a trunk road to go pick berries and medicine," (SCN 2012a).

Hunting legislation, loss of hunting areas, overuse of fishing areas, and contamination of waterbodies have resulted in people having to travel farther to hunt and fish (Montana First Nation: TERA 2015; Samson Cree Nation: TMP 2013, SCN 2014). Samson Cree Nation noted specifically travelling to the mountains or farther north to engage in subsistence practices because of these difficulties (SCN 2015a). Samson Cree Nation members are also finding it increasingly difficult to harvest traditional foods due to restricted access to harvesting areas as a result of industrial development, private ownership and agriculture (SCN 2015a; SCN 2012a). A Samson Cree Nation member reported shooting a buck and noticing that the deer had a big slice behind his leg, the animal had been cut with the barbed wire, "It stunk so bad I had to pray. I had to give it back to nature," (SCN 2014). Samson Cree Nation also stated that members no longer have access to many sacred areas where ceremonies were held (SCN 2015c).

Samson Cree Nation members have had to move to outside reserve locations to actively practice traditional ways of life; areas such as Rimbey, Ram Falls, and Edson. However, Samson Cree Nation members are frustrated that the Crown is now telling them that they can no longer hunt or fish in these areas (SCN 2014).



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

14.2.5.3 Concerns Raised on Other Development Projects

Indigenous groups engaged on the Project have also expressed general concerns regarding the effects of other industrial development projects on access to traditional resources or sites and areas for current use that reflect broader concern for the pace of development and the further disturbance of access to those resources and areas.

In relation to other projects, Indigenous groups have reported that access to cultural, spiritual and harvesting areas has been limited by the presence of private lands and fences. Ermineskin Cree Nation noted concern about declining access to plant-harvesting locales and the potential for development to force members to travel farther to hunt and fish (TMP 2013). Samson Cree Nation is also concerned about reductions in access to important cultural and spiritual sites as well as harvesting areas as a result of private lands, fences, gun restrictions, and the need for permits to access some harvesting areas (SCN 2015a).

Samson Cree Nation expressed concern regarding restrictions to the ability to access lands available to hunt, trap, fish and gather plants (MLT 2011).

Samson Cree Nation also expressed concern regarding the potential destruction of trails, thereby limiting the ability to access harvesting areas (Riversdale 2015).

14.2.6 Current Use Sites or Areas

Through the engagement program for the Project, Tsuut'ina Nation stated that the Project is "in an area where our citizens exercise their Aboriginal, Treaty and Inherent rights." In the TUS report for the Project, Siksika Nation and Kainai First Nation noted that the Project area is known to be an area that was well used in the past, with known Blackfoot traditional use sites (KCO & SCO 2017). Through the Indigenous engagement program for the Project, Ermineskin Cree Nation indicated the Project area is in a region of cultural and historical importance, including important Cree names that reflect the meanings of these places. Through the engagement program for the Project, Métis Nation of Alberta, Region 3 indicated having utilized the Project, Métis Nation British Columbia also noted that Métis have a long history in the Kootenay region, and the Project has the potential to affect land use in that area.

Through the Indigenous engagement program for the Project and in the TUS report for the Project, Kainai First Nation and Siksika Nation identified the presence of medicinal plant locales within the PDA, including on both sides of Elbow River at the proposed location of the diversion inlet and service sluiceway (KCO & SCO 2017) and on the Robinson property.

Through the engagement program for the Project, Tsuut'ina Nation members noted that members depend on the water from the Elbow River and McLean Creek. Water sources of concern to Tsuut'ina Nation include the Bow River and Elbow River (TN 2013). Through the



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

engagement program for the Project, Tsuut'ina Nation members identified Elbow River as a fishing area and a gathering area.

Siksika Nation and Kainai First Nation expressed the importance of the Elbow River to Blackfoot traditions and culture in the TUS report for the Project (KCO & SCO 2017). At a meeting with representatives from Kainai First Nation, Piikani Nation, and Siksika Nation regarding the Project, participants noted that many cultural and spiritual sites are no longer accessible and cannot be identified, but are still significant.

Tsuut'ina Nation, through the engagement program for the Project, noted that several archaeological and cultural sites are known in the PDA, including tipi sites, rock cairns, and portions of a medicine wheel, however exact locations had not been provided as of March 16, 2018. Tsuut'ina Nation explained that the rock cairns within the study area mark burial places. At a meeting held during the engagement program, a representative of Tsuut'ina Nation explained that "Tsuut'ina people practiced tree burials and recognizing that the tree burials would not remain intact forever, they would place rock cairns marking the spot where loved ones had been buried. In more recent times, after the signing of Treaty 7, the government established a medical station at Morley and while many of the Tsuut'ina people who travelled to Morley for treatment came home, many passed away during the journey and became tree burials with rock cairns to mark their final resting place."

At a meeting with representatives from Kainai First Nation, Piikani Nation, and Siksika Nation regarding the Project, participants identified important cultural and archaeological sites which are now overgrown with willows in the Project area. These sites are associated with ceremonies that have been practiced along the river for many years and this area may be associated with the North Trail.¹⁸ Siksika Nation and Kainai First Nation reiterated that there are Blackfoot artifacts and ceremonial areas within the Project area. In the TUS report for the Project, Siksika Nation and Kainai First Nation 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). A reported traditional medicine wheel may also be located in this area (KCO & SCO 2017). Through the engagement program for the Project, Kainai First Nation identified tipi rings on the north side of the unnamed creek, adjacent to the proposed reservoir outfall;¹⁹ Kainai First Nation expressed concern that if tipi rings are disturbed by the Project, they will have no meaning. Piikani Nation, also through the engagement program for the Project, identified tipi rings and old campgrounds on either side of the unnamed creek. Through the engagement program for the Project, Siksika Nation identified rocks on the east side of the unnamed creek, sheltered hills on the west side, and tipi rings, indicating that the area was a wintering ground for Blackfoot many years ago.

¹⁹ It is assumed that the outfall discussed by Kainai First Nation is the low-level outlet channel.



¹⁸ Assumed to be old Stoney Trail (Old North-South Trail).

Assessment of Potential Effects on Traditional Land and Resource Use March 2018

During the archaeological field studies in the southwest portion of the Project area, a spearhead (biface), historical locations such as a church and a cairn, and a marking for a Blackfoot wintering camp were identified. At a meeting with representatives from Kainai First Nation, Piikani Nation, and Siksika Nation regarding the Project, participants indicated that the cairn is associated with a Blackfoot wintering site and that it is important to understand the Blackfoot Nations' territory. Through the engagement program for the Project, Kainai First Nation identified wintering grounds, with many tipi rings,²⁰ in the proposed reservoir. Siksika Nation and Kainai First Nation explained in the TUS report for the Project that the spearhead (biface) is comparable to one found near Lethbridge which has been dated to approximately 11,000 years ago and seems to pre-date the arrival of other Indigenous groups in the area (KCO & SCO 2017).

At a meeting with representatives from Kainai First Nation, Piikani Nation, and Siksika Nation regarding the Project, participants commented that Iniskims are fossils that are considered culturally significant and are incorporated into bundles; arrowheads and other ceremonially significant items are also placed in bundles. A Kainai First Nation Elder stated, "The traditional lands-we are a part of that land, this is what happened, this is the story, this is the spiritual stuff the Creator gave us, this is where it happened. We know that stuff, you will find, all of those animals and fossils we use incorporated back into the bundle. Our way of life is not dead, it is still there and we still have our ceremonies so those things that we did, our stories, the ceremonies are all the same. It may have been held under for a while but it has resumed." In the TUS report for the Project, Pikani Nation conducted a site visit of the Project area and identified tipi rings at numerous sites. One of the tipi ring sites was buried in tall muskeg and was difficult to locate. Many fire hearth stones were identified near concentrated areas of tipi rings. One tipi ring site was located west of the main concentration of tipi ring sites, possibly because it was once the lodge of kipiltoyiss, 'the old woman.' Another site was identified that included a half circle of stones, which represents a upplimaan, a four pole-covered smoke lodge (PN n.d.). Pikani Nation also identified a historical camp site, including fire hearth stones, while conducting a site visit of the Robinson property²¹ (PN n.d.).

Through the Indigenous engagement program for the Project, Stoney Nakoda Nations members indicated that the Project area is used for trapping, and that two traplines²² are located nearby.

²² Based on available information, these are not registered traplines.



²⁰ It is not known if the wintering grounds identified by Kainai First Nation are the same wintering grounds as those identified by Kainai First Nation, Pikani Nation, and Siksika Nation at the meeting regarding the Project.

²¹ This historical camp site and other sites identified by Piikani Nation may correspond with the Blackfoot traditional camps identified by Kainai First Nation and Siksika Nation.

Assessment of Potential Effects on Traditional Land and Resource Use March 2018

Through the engagement program for the Project, Métis Nation of Alberta, Region 3 explained that the location of a short-lived fort, the Old Bow Fort, also known as Peigan Post, built by the Hudson's Bay Company in 1832, is near the Project; the exact location was not provided.²³

Based on the available information (PN n.d.; KCO & SCO 2017; Riversdale 2015; Galileo 2010), including results of the Indigenous engagement program for the Project, Indigenous groups identified for engagement by the ACO and CEA Agency have reported traditional use sites and areas in the RAA (see Table 14-5). Other important traditional use sites or areas may occur near the Project even if these sites were not specifically identified by Indigenous groups.

Project Boundary	Site or Area	Kainai First Nation	Piikani Nation	Siksika Nation	Stoney Nakoda Nations	Tsuut'ina Nation	Ermineskin Cree Nation	Foothills Ojibway	Louis Bull Tribe	Montana First Nation	Samson Cree Nation	Métis Nation of Alberta, Region 3	Métis Nation British Columbia
PDA	Elbow River (fishing, gathering, water source)					~							
	Medicinal plant gathering areas	~		~									
	Blackfoot traditional camps	~		~									
	Archaeological and cultural sites	~	~	~		~							
	Archaeological and cultural sites		~										
LAA	Bow River					~							
RAA	McLean Creek					~							
	Archaeological and cultural sites		~										

Table 14-5 Current Use Sites and Areas within the RAA

²³ For the purposes of this assessment, it is assumed that the Old Bow Fort noted by Métis Nation of Alberta, Region 3 is the same as the Bow Fort, located on the Stoney Nakoda Nations reserve, outside of the RAA for the Project.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

14.2.6.1 Environmental Features Related to Sites and Areas

In addition to specific sites associated with the Project, information from the literature review indicates that some environmental features are associated with ceremonies, habitation, and spiritual or sacred areas and could occur within the RAA. Of note, these have not been identified through the Indigenous engagement program for the Project, including the Project-specific TUS.

Montana First Nation reported travelling from the mountains to the prairies to harvest plants, including medicines and roots (TERA 2015; TMP 2013).

Piikani Nation has reported that rock formations are indicative of areas suitable for habitation, and noted that they are normally found on hilltops and in proximity to trees and water sources (PN 2015).

Although no Sundance sites have been identified in the RAA, Piikani Nation has described sacred Sundance sites as areas consisting of rocks, willow, poplar, and a place to set-up camp (PN 2015). Kainai First Nation also continues to perform spiritual and cultural ceremonies, including Sundances (AMEC 2009). Samson Cree Nation stated the importance of Sundances: "It's a church. A lot of people go there for -- to pray and offer to the Creator for the kids and their loved ones, for good health and happiness and whatever their sickness is, to be healed," (SCN 2012a). Samson Cree Nation members participate in ceremonies including sweat lodges, Sundances, pipe ceremonies and trade ceremonies (SCN 2012a).

Although no such sites have been identified in the RAA, Stoney Nakoda Nations has described having meditation sites, vision quest sites, sacred lodges, and tipis (Riversdale 2015). Piikani Nation explained that many spiritual practices such as vision quests and gathering red ochre occur at high elevation. Vision quest sites are defined as, "sacred places to stay for an extended period of time for spiritual purposes often in an isolated environment with a view at a higher elevation such as a mountain" (Riversdale 2015) and no such sites have been identified in the RAA. Piikani Nation and Kainai First Nation members access areas that were used as bison jumps and sites that contain rock formations or cairns for spiritual and cultural purposes (AMEC 2009, AMEC 2010), but no such sites have been identified in the RAA. Piikani Nation noted that rock formations generally hold historical and cultural importance, denoting historical battles, burials, large gatherings, medicine wheels, and Sundances (Riversdale 2015).



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

14.2.6.2 Concerns Raised on Other Development Projects

Indigenous groups engaged on the Project have also expressed general concerns regarding the effects of other industrial development projects on current use sites and areas that reflect broader concern for the pace of development and the further disturbance of remaining cultural sites.

Some sacred and ceremonial sites are reported as having already been affected by industrial development (SCN 2015a). For instance, some Samson Cree Nation ancestors were buried in the Kindersley area, and the burials were excavated in this area without Samson Cree Nation being notified or consulted (SCN 2015d). Samson Cree Nation explained that the disturbance or destruction of culturally important sites has affected the way Samson Cree Nation maintains traditional systems, and that these are passed down to younger generations (SCN 2015d). As such, Samson Cree Nation youth are at risk of losing their traditional way of life due, in part, to disturbance of sacred areas (SCN 2015d). On another project, Samson Cree Nation specifically expressed concern regarding the potential for further disturbance to archaeological and sacred sites and, consequently, the ability to perform ceremonies (SCN 2015a).

14.2.7 Indigenous Commercial Activities

The Project is in an area where Indigenous commercial activities occur. Specifically, Tsuut'ina Nation's business ventures identified in the RAA include Sarcee Gravel Product Ltd. gravel pits, Bragg Creek paintball, and Redwood Meadows Golf and Country Club. Although these identified Indigenous commercial activities are not directly related to TLRU activities and practices, there is the potential for effects on these activities to occur.

14.3 ASSESSMENT OF RESIDUAL ENVIRONMENTAL EFFECTS ON TRADITIONAL LAND AND RESOURCE USE

14.3.1 Analytical Assessment Techniques

The assessment of residual environmental effects on TLRU presents project interactions and pathways, mitigation measures and residual effects for each potential project effect on TLRU.

The sections on potential interactions and pathways include information from biophysical and socioeconomic assessments where they apply to the potential Project effect on TLRU. Information gathered from Project-specific TUS and results of the Indigenous engagement program for the Project is presented where potential interactions have been identified by Indigenous groups in relation to the Project. Information from the literature review was also considered where Indigenous groups have identified potential pathways on other development projects that could occur on the Project.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

A number of recommendations and mitigation measures were identified during the engagement process with the Indigenous groups as well as requested by the First Nations through TUS reports. The mitigation measures sections list those measures proposed by Indigenous groups and present mitigation measures that would be implemented for the Project.

The analysis of residual effects on TLRU is based on information from Project-specific TUS reports, the results of the Indigenous engagement program for the Project, the results of the literature review, the conclusions of relevant biophysical and socioeconomic assessments, and feedback on the assessment from participating Indigenous groups. Although residual effects are considered on a community-specific basis, Project residual effects on TLRU are summarized and presented in a single table. Separate conclusions regarding Project effects for each Indigenous group are presented in Section 14.8.

Current use depends on the conditions for TLRU being present, that is, that traditional resources are available to be harvested and lands are accessible including sites, such as trails, sacred areas, campsites, and harvesting areas. The assessment of residual effects considers change in the distribution, diversity and abundance of traditionally used resources, access to those resources and areas, and changes to the sites and areas themselves. Project effects on current use include the conclusions of related project assessments, the specific environmental effects related to each current use activity and potential effects identified by Indigenous groups. Indigenous groups may choose not to practice traditional activities or use traditional sites and areas near the Project and this is also taken into account.

14.3.2 Change in Availability of Traditional Resources for Current Use

14.3.2.1 Project Interactions and Pathways

The Project has the potential to affect the availability of traditional resources during construction and dry operation. Construction components include vegetation clearing, channel excavation, water diversion construction, dam and berm construction, road construction, bridge construction, lay down areas, borrow extraction, reclamation and utility alignments. Dry operation components include maintenance activities. The following describes potential pathways that could affect the availability of traditional resources. The specific information presented in this section is in response to potential interactions and pathways identified by Indigenous groups (see also Section 14.1.7).

Change in Habitat (Vegetation, Wildlife, Fish)

The Project could lead to changes in habitat for traditionally used plant or animal species, which support hunting, trapping, fishing, or plant gathering activities. Changes are anticipated from the direct habitat loss, reduction, or alteration during construction (e.g., vegetation clearing and ground disturbance; change in sediment concentrations, water temperatures, habitat structure, and nutrient concentrations and food supply) and indirect effects from sensory disturbance



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

(e.g., noise and artificial light), during construction, and to a lesser extent during dry operations, which can reduce habitat effectiveness for wildlife. These pathways are further described under Section 8 (Aquatic Ecology), Section 10 (Vegetation and Wetlands), and Section 11 (Wildlife and Biodiversity).

These potential pathways have also been identified by Indigenous groups in relation to the Project. Through the engagement program for the Project, Tsuut'ina Nation noted that winter ungulate habitat may be lost and that habitat fragmentation may increase as a result of construction and dry operations. Through the engagement program for the Project, Ermineskin Cree Nation and Louis Bull Tribe expressed concern for eagle nesting, as well as effects on other wildlife, such as bears, elk, moose and deer. Kainai First Nation, Piikani Nation, and Siksika Nation expressed concern about the potential for effects on the homes of animals, such as beaver, from construction. Through the engagement program for the Project, Métis Nation of Alberta, Region 3 noted the potential for effects on wildlife from construction.

Tsuut'ina Nation also reported through the engagement program for the Project that trout spawning beds may be affected due to the presence of gravel; fish overwintering habitat may be affected due to the presence of scoured pools; fish habitat in Elbow River and its tributaries may be affected as a result of sedimentation from construction and operation-related activities; and fish habitat may be affected as a result of the Highway 22 diversion and bridge construction. Tsuut'ina Nation also expressed concern about the potential destruction of critical fish and wildlife habitat. Through the engagement program for the Project, Kainai First Nation noted the potential for effects on fish and fish habitat because of in-stream construction work; Kainai First Nation also expressed concern for potential temporary downstream effects from construction. Siksika Nation, through the engagement program for the Project, also noted the potential for effects on downstream waters and riparian areas from construction.

Through the engagement program for the Project, Louis Bull Tribe, Stoney Nakoda Nations, Tsuut'ina Nation, and Piikani Nation expressed concern regarding the potential for the Project to affect wetlands. Stoney Nakoda Nations also stated the importance of water, crossings, and wetlands for wildlife, fish, birds, and vegetation as well as for traditional activities. Ermineskin Cree Nation, Louis Bull Tribe, and Kainai First Nation expressed concern about the potential loss of medicinal plants. Siksika Nation, through the engagement program for the Project, also expressed concern regarding effects on ceremonial and medicinal plants from the Project.

Given the importance of Elbow River, Siksika Nation, as communicated through the engagement program for the Project, expects that effects on Siksika traditional use "will be substantial." Stoney Nakoda Nations, through the engagement program for the Project, also expressed concerns for cultural practices and current use of lands and resources for traditional purposes in the Project area, as well as the effects of the Project on water and wetlands for wildlife, fish, birds, and vegetation. Stoney Nakoda Nations expressed concern that the Project will drive away or minimize the availability of birds, fish, and wildlife. Through the Indigenous



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

engagement program for the Project, Tsuut'ina Nation reported that the Project may affect citizens' ability to hunt, fish, and gather plants by affecting species and habitats that support these activities. Through the engagement program for the Project, Samson Cree Nation expressed concerned that traditional gathering activities would be affected by the Project and noted that it was likely that members of Tsuut'ina Nation harvested in the study area. Siksika Nation, through the engagement program for the Project, anticipates that construction will have in-stream and riparian effects that will in turn affect Siksika traditional use in the areas of the offstream reservoir, downstream along the Elbow River, and the high-bank riparian habitat upstream.

In the TUS report for the Project, Piikani Nation reported that the proposed flood basin is habitat for a variety of vegetation and wildlife species and if one species is altered, the whole ecosystem may be affected (PN n.d.).

Change in Movement Patterns (Wildlife, Fish)

The Project could change movement patterns of wildlife, which support hunting and trapping activities. These pathways are further described in Section 11 (Wildlife and Biodiversity). Specifically, movement can be affected by project infrastructure, access roads and road realignments that create physical barriers or sensory disturbance hindering wildlife's ability to move throughout the landscape during project construction and operations.

This has been identified as a potential pathway by Indigenous groups on other development projects. For example, Samson Cree Nation has noted the potential for a project to affect migration patterns and game trails (Riversdale 2015; SCN 2015b) and Kainai First Nation has expressed concern that construction noise and traffic may affect wildlife movement patterns (AMEC 2009). In addition, Ermineskin Cree Nation has explained that animals migrate on routes that are parallel to larger rivers (TMP 2013).

The Project could also lead to changes in the distribution and abundance of fish in the Elbow River, which support fishing activities, through changes in fish access during construction. This pathway is further described in Section 8 (Aquatic Ecology).

This potential pathway has also been identified by Indigenous groups in relation to the Project. Through the Indigenous engagement program for the Project, Tsuut'ina Nation noted that fish migration may be affected as a result of the construction and operation of the diversion channel. Tsuut'ina Nation also expressed concern for the effects of the Project on the migratory herds of elk in the area. Through the engagement program for the Project, Ermineskin Cree Nation and Louis Bull Tribe expressed concern regarding the maintenance of migratory patterns, as well as game trails for wildlife, while Stoney Nakoda Nations expressed concern that the Project will act as a barrier to the migration of fish and wildlife. Also through the engagement program on the Project, Stoney Nakoda Nations expressed concern for wildlife crossings over



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

Highway 22 and Highway 8 and for the potential for fencing to restrict animal movement; without proper management, Stoney Nakoda Nations stated that wildlife crossings could be a problem for the Project.

Similarly, in other regulatory assessments, Indigenous groups have identified change in movement patterns of fish as a potential effect. Métis Nation British Columbia has previously noted the potential for effects on fish passage upstream and downstream from a dam project (SCFNET 2013).

Change in Wildlife Biodiversity

The Project could lead to a change in wildlife biodiversity as a result of changes in species, community, and landscape diversity during construction and dry operation. These pathways are further described in Section 11 (Wildlife and Biodiversity). Biodiversity can affect the availability of wildlife, which support hunting and trapping activities.

This potential pathway has also been identified by Indigenous groups in relation to the Project. Through the Indigenous engagement program for the Project, Tsuut'ina Nation noted the potential for effects on a Key Wildlife and Biodiversity Zone (KWBZ) and an Environmentally Significant Area in the Project area. Tsuut'ina Nation also reported that there is potential for effects on wildlife biodiversity as a result construction and dry operations. Through the Indigenous engagement program for the Project, Métis Nation of Alberta, Region 3 noted the potential for project effects on biodiversity (including migratory birds and animals), wildlife and hunting, and fishing.

Similarly, in another context unrelated to this Project, Métis Nation British Columbia also noted the potential for a project to affect wildlife biodiversity (SCFNET 2013).

Change in Mortality (Wildlife, Fish)

The Project could change wildlife mortality risk due to physical destruction of wildlife habitat features from vegetation clearing during construction and as a result of animal-vehicle collisions during construction and operation. These pathways are further described in Section 11 (Wildlife and Biodiversity). Wildlife mortality can affect the availability of wildlife, which support hunting and trapping activities.

This has been identified as a potential pathway by Indigenous groups on other development projects. For example, Samson Cree Nation has noted that sensory disturbance and increased wildlife mortality, both direct and indirect, can occur as a result of development (Riversdale 2015; SCN 2015b; MLT 2011).



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

Fish mortality as a direct result of the Project due to increased sedimentation, stranding or impingement of fish, equipment operations in the watercourse, and materials placement could also occur during construction and dry operation. These pathways are further described in Section 8 (Aquatic Ecology). Fish mortality can affect the availability of fish, which support fishing activities.

This potential pathway has also been identified by Indigenous groups in relation to the Project. Through the engagement program for the Project, Tsuut'ina Nation reported that there is potential for "serious harm to fish that are part of our Aboriginal fishery." Tsuut'ina Nation also noted the potential for effects on bull trout in Elbow River as a result of Project construction from diversion structures.

This has also been identified as a potential pathway by Indigenous groups on other development projects. For example, regarding a different project, Samson Cree Nation has noted the potential for effects on fish health resulting from construction activities affecting water quality (SCN 2015a; TMP 2013). Métis Nation British Columbia has also indicated that fish mortality may occur as a result of spills (SCFNET 2013).

Change in Water Quantity and Quality

Changes in groundwater quantity and quality in and near the PDA could occur as a result of local, shallow and temporary subsurface dewatering that might be required to facilitate construction. Changes to groundwater quantity and quality may also occur through groundwater seepage into the diversion channel when dry. These pathways are further described in Section 5 (Hydrogeology). Change in groundwater quality and quantity could affect the conditions for current use.

This potential pathway has also been identified by Indigenous groups in relation to the Project. Through the Indigenous engagement program for the Project, Stoney Nakoda Nations noted the potential for effects on underground streams in the Project area and Tsuut'ina Nation stated concerns regarding the effects on Elbow River and groundwater.

Changes in surface water quality, including change in suspended sediment concentration during construction, and change in concentration of herbicides during operation could occur as a result of the Project. These pathways are further described in Section 7 (Surface Water Quality). Change in surface water quality could affect the conditions for current use.

This potential pathway has also been identified by Indigenous groups in relation to the Project. Through the engagement program for the Project, several participating Indigenous groups expressed concern for the potential effects of the Project on water, including upstream and downstream effects on waterways and water quality.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

Changes in Conditions for Current Use

The Project could lead to changes to conditions for current use (e.g., air quality [including ambient air quality and ambient light], noise, terrain stability, soil quality and quantity). These pathways are further described in Section 3 (Air Quality and Climate), Section 4 (Acoustic Environment), and Section 9 (Terrain and Soils).

This has been identified as a potential pathway by Indigenous groups on other development projects. Regarding a different project, Samson Cree Nation noted the potential for declining air quality, greenhouse gas emissions, and dust contamination because of construction (SCN 2015b).

Change in Riparian Vegetation

Through the Indigenous engagement program for the Project, Piikani Nation noted that there is potential for effects on the health of riparian vegetation, which require flooding and scouring to survive. However, the Project would not eliminate flooding and scouring of Elbow River; the off-stream reservoir would only divert water from Elbow River that cannot be handled by the Glenmore Reservoir during larger floods. Therefore, this has not been further analyzed as a potential Project pathway for TLRU.

Change in Country Foods

Potential effects on traditionally harvested wildlife, fish and vegetation resources may result in corresponding effects on the consumption of country foods by Indigenous groups. The potential for health risk to people from their exposure to chemical hazards, including those in country foods, is discussed in Section 15.

Change in Drinking Water

Through the Indigenous engagement program for the Project, Tsuut'ina Nation expressed concern that effects of the Project on Elbow River would affect their ability to use the river as a source of drinking water. It is understood that Tsuut'ina Nation hold a license to withdraw water from the Elbow River, located upstream of the PDA.

Through the Indigenous consultation program for the Project, Tsuut'ina Nation reported that groundwater in the Elbow River Alluvial Aquifer is a source of drinking water for the reserve. Five registered water wells have been identified on the Tsuut'ina Nation reserve within the hydrogeology RAA.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

14.3.2.2 Mitigation Measures

Table 14-6 presents recommendations and mitigation requests made by Indigenous groups to address changes in availability of traditional resources for current use. Also included are the chosen mitigation measures that will be implemented for the Project.

Table 14-6Mitigation for Change in Availability of Traditional Resources for Current
Use

Recommendations and Mitigation Requests from Indigenous groups	Mitigation Measures to be Implemented on the Project
Kainai First Nation, Siksika Nation and Stoney Nakoda Nations asked for the protection of sloughs associated with Elbow River and riparian areas within the Project area in the TUS report (KCO & SCO 2017) and through the engagement program for the Project.	Wetlands are present in the LAA, with most occurring along drainages and adjacent to Elbow River. To the extent possible, wetlands would be avoided (including temporary disturbance). Where avoidance is not possible, disturbance will be minimized. Permanent project disturbances would result in the permanent clearing of vegetation and wetlands. During the construction phase, areas of temporary disturbance would only have above ground vegetation clearing, leaving the soils intact, though there are some areas of soil disturbance; wetlands will be recontoured and seeded with an approved custom native wetland seed mix. Construction and dry operation of the Project would result in the loss of 31 ha of wetland area in the PDA. However, permanent disturbance of wetland area will be replaced or compensated for in accordance with the Alberta Wetland Policy (see Volume 3A, Section 10.1.1). No vegetation and wetland land units would be completely lost, and no lasting effects to vegetation and wetlands would be anticipated. Accordingly, with application of mitigation recommended in the Vegetation and Wetlands section (see Volume 3A, Section 10), no additional mitigation is needed.
Siksika Nation and Kainai First Nation recommended relocating medicinal and ceremonial plants to another area where they would not be affected by the Project for future use (KCO & SCO 2017).	Alberta Transportation will provide opportunities for harvesting or relocating medicinal and ceremonial plants prior to construction.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

Table 14-6Mitigation for Change in Availability of Traditional Resources for Current
Use

Recommendations and Mitigation Requests from Indigenous groups	Mitigation Measures to be Implemented on the Project
Through the engagement program for the Project, Stoney Nakoda Nations reported concern with the lack of wildlife crossings currently incorporated into the Project design, including the adjacent highways (i.e., Highway 22, Highway 8) and asked that wildlife crossings be implemented into the Project design.	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 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 Section 11).
Through the engagement program for the Project, Louis Bull Tribe expressed concern regarding reclamation of the Project area.	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.
Through the engagement program for the Project, Ermineskin Cree Nation asked that any project built in the area preserve and allow for natural growth.	Herbicide use in the immediate vicinity of a watercourse will not be allowed unless approved by DFO and AEP. Weeds will be controlled during construction through multiple measures, such as herbicide, mowing, wicking, and hand picking. After construction, disturbed areas will be stabilized and reclaimed.
	Temporary work spaces will be reclaimed using native species that are compatible with pre-construction site conditions, as outlined in the reclamation plan (see Volume 4, Appendix D).
	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.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

In addition, changes in availability of traditional resources for current use would be mitigated as follows:

- Herbicides will not be applied within 30 m of plant species or ecological communities of management concern, wetland or waterbody. Spot spraying, wicking, mowing, or hand picking will be acceptable measures for control of regulated weeds in this area.
- 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.
- 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 KWBZ identified along Elbow River (December 15 to April 30) will be avoided or reduced.

Additionally, mitigation measures discussed in the various biophysical and socio-economic VC sections would reduce or eliminate effects on resources for current use, and reduce or eliminate effects on conditions that may prohibit or deter current use.

Project-specific recommendations made by Indigenous groups that do not pertain directly to potential effects of the Project on TLRU are described in the discussion of the Indigenous engagement program in Volume 4, Appendix B.

14.3.2.3 Residual Effects

Project-specific TUS reports, the Indigenous engagement program for the Project, and the literature review identified traditionally harvested plant and animal species within the Project area. Tsuut'ina Nation, Stoney Nakoda Nations, Kainai First Nation and Siksika Nation identified fishing, plant gathering, and trapping within the RAA, and resources and environmental features for current use by Indigenous groups are present in the RAA.

The Project is anticipated to result in a change in the availability of traditional resources for current use through alteration, reduction, or loss of habitat. The PDA consists of 168 ha of permanent structures with the remaining area represented by temporary workspace (566 ha). Within the PDA, 34% is previously disturbed lands, while the remaining land most directly affected includes shrubland, grassland, and smaller amounts of wetland and mixed forest (see Volume 3A, Section 11.4.2). Habitat for traditionally important plant and animal species will be directly affected due to vegetation removal and grading associated with construction. 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 Section 10.4). Following construction, temporary workspace will be reclaimed, and native trees and shrubs should re-establish over time.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

Vegetation clearing during construction will reduce riparian area and result in the loss of 29.5 ha of wetland area in the PDA, but it is anticipated that any resulting changes in community abundance will be limited to temporary disturbances and in the immediate area of the dam, diversion channel and diversion structure (see Section 10.4). Wetland cover types are common in the LAA and permanent disturbance of wetland area will be replaced in accordance with the Alberta Wetland Policy (see Section 10.1.1).

Construction and operation of the Project has the potential to hinder the movement of traditionally harvested animals within the LAA due to physical barriers (i.e., permanent structures, access roads, and road realignments) and sensory disturbance. Specifically, there is potential for construction of the Project to create sensory disturbance in spring and fall when grizzly bears are likely to be travelling through the Elbow River valley. If maintenance activities overlap with the bear's seasonal use of the Elbow River valley, there is potential for sensory disturbance during dry operations. However, a measurable change in the abundance of grizzly bears is unlikely. There is also potential for sensory disturbance during construction to affect ungulate movement in the LAA; a measurable change in the abundance and distribution of ungulates in the LAA is possible, but that change will be primarily due to the un-crossable gaps of riprap (see Section 11.4). Proposed mitigation for the diversion channel and floodplain berm, such as covering riprap with material suitable for crossing at regular intervals and revegetation, will reduce effects on wildlife, but effects are predicted to be continuous and occur over the long-term. The placement of a culvert at the intersection of Highway 22 and Springbank Road may function as a passageway for smaller wildlife.

Increased mortality of traditionally harvested wildlife may occur as a result of animal-vehicle collisions during construction, and to a lesser extent, during dry operation, but mortality risk is expected to be relatively low because the Project will not create additional primary or secondary roads. Sensory disturbance associated with construction activities can affect nest site selection, particularly for raptors such as bald eagle, which have been shown to have higher rates of nest abandonment and nest failure if human activity occurs near to active nests; however, pre-construction surveys and adherence to RAPs for nesting migratory birds and raptors will mitigate effects to mortality risk.

Overall, the change in biodiversity is predicted to be low in magnitude because measurable changes in plant (upland and wetland) communities are not expected to affect the sustainability of community, landscape, and wildlife diversity in the LAA or RAA (see Section 11.4). A measurable change in the abundance of migratory birds in the LAA is possible (see Section 11.4.7). Habitat fragmentation would occur if wildlife chooses not to cross the diversion channel. However, overall in the RAA, wildlife species richness and abundance are not expected to be influenced by habitat fragmentation.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

Construction of the diversion channel will result in the permanent alteration of 1,854 m² of fish habitat on the bed and banks of Elbow River, and 300 m of fish habitat will be destroyed by the interception of the unnamed tributary. The analysis in Section 8 shows that increased localized flows, elevated sediment levels, habitat alterations, and changes in fish passage could permanently alter the distribution and abundance of fish species in Elbow River; however, many of these changes will be mitigated through project design. With the implementation of mitigation measures outlined in Section 8 (Aquatic Ecology), it is unlikely that fish mortality (including eggs) would occur at a level that reduces the productivity or sustainability of a CRA fishery. During dry operations, there will be no changes to flow in Elbow River, and therefore no alterations to the quality of fish habitat.

Through the engagement program for the Project, a Kainai First Nation Elder noted that tree clearing associated with the Project would affect several traditional resources, including water, soils, birds, roots, herbs, and medicines. There is the potential for riparian vegetation removal or grading to increase erosion, resulting in mobilization of sediments to a waterbody (see Section 7.4), but it is anticipated that mitigation measures outlined in Section 7 (Surface Water Quality) would reduce the effect. Vegetation clearing associated with construction is expected to cause changes in habitat and mortality risk for birds, and biodiversity more generally. The potential for effects is identified specifically for olive-sided flycatcher and Sprague's pipit; see Section 11.1.2 for an explanation of the species chosen for assessment and see Section 11.4 for the assessment of residual effects for these species.

There is potential for sediment and herbicide to enter the waterways, but both effects are anticipated to be short term and reversible (see Section 7.4). The Surface Water Quality assessment (Section 7) concludes that the effect of sediment from construction on downstream water quality in the Elbow River and the Glenmore Reservoir is negligible. During dry operations, effects on water quality from potential herbicide use is expected to be low; however, given the very low frequency of herbicide detection in the watershed, the effect is reversible through dilution. Regarding effects on groundwater and underground streams, groundwater quantity and quality are not expected to be materially affected due to the limited extent and duration of Project effects on groundwater (see Section 5). Effects will be limited to the LAA and the Project will not decrease the yield of groundwater supply wells to the point where they can no longer be used (see Section 5.4). In respect of these conclusions, it is anticipated that there will be no effects on the ability of Tsuut'ina Nation to use groundwater in Elbow River Alluvial Aquifer or Elbow River for drinking water; effects to functioning of the identified wells on the Tsuut'ina Nation reserve within the Hydrogeology RAA are not anticipated. Similarly, it is anticipated that there will be no effects to waters that flow through the Stoney Nakoda Nations traditional lands that may be used for sustenance.

Residual effects on water, wildlife, fish, and vegetation have the potential to affect the activities that are supported by these resources, including hunting, fishing, trapping, plant harvesting, and camping. However, appropriate conditions for current use entail more than the availability of



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

traditional resources and this assessment acknowledges that Indigenous groups may choose not to pursue TLRU activities near the Project for a variety of personal, practical, aesthetic, and spiritual reasons, including lack of existing access. Various biophysical and socio-economic environmental conditions may also affect harvesting. For example, a change in air or water quality, noise, or altered visual aesthetics may deter individuals from harvesting traditional resources. Refer to the acoustic environment assessment (Section 4), air quality assessment (Section 3), and public health and safety assessment (Section 15) for further details on effects of noise, light, and air emissions on land users in the assessment areas. Residual effects on these related valued components are predicted to be not significant.

Potential effects on traditionally harvested resources may result in corresponding effects on consumption of country foods by Indigenous groups. The Project is located predominantly on private lands and although some land owners permit access to Indigenous groups for TLRU activities, opportunities for harvesting country foods are not expected to be extensive (see Section 14.1.7). As noted in Section 14.2.4, through the engagement program for the Project, Stoney Nakoda Nations reported hunting, trapping, fishing in the Project area; Kainai First Nation, Siksika Nation, and Piikani Nation identified herbs and medicinal plants in the Project area and fishing in Elbow River. Therefore, opportunities for the harvest of country foods could exist. The locations where country foods are harvested in the area of the Project or the frequency of consumption of country foods was not provided by Indigenous groups through the Indigenous engagement program for the Project, including the Project-specific TUS, or through the review of publicly available literature. Consequently, it is not possible to reliably estimate consumption rates of country foods harvested by Indigenous groups from the RAA.

In addition, the assessment of effects on public health concludes that there are no project interactions for changes in human health from consumption of country food during construction and dry operations (see Section 15.3.2). 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 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.

Overall, the residual effects of the Project on the availability of traditional resources for current use are predicted to be moderate in magnitude. The Project will remove traditionally harvested plant species from the PDA and affect the distribution and abundance of wildlife and fish species in the LAA; however, the direct and indirect loss of habitat is relatively small compared to the remaining habitat availability in the RAA. Residual effects on wildlife and fish will not pose



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

a threat to the long-term persistence and viability of species in the RAA. Similarly, residual effects on vegetation will not result in the loss of vegetation communities in the LAA. With the application of mitigation, residual effects on downstream water quality are negligible. The residual adverse effects of the Project on the availability of traditional resources for current use will extend to the LAA, be long-term in duration, and irreversible. Timing is daily andseasonal, based on RAPs of wildlife movement and habitat availability, as well as the seasonality of vegetation for traditional purposes.

14.3.3 Change in Access to Traditional Resources or Areas for Current Use

14.3.3.1 Project Interactions and Pathways

The Project has the potential to affect access to traditional resources or areas during construction and dry operation. Construction components include vegetation clearing, channel excavation, water diversion construction, dam and berm construction, road construction, bridge construction, lay down areas, borrow extraction, reclamation, and utility alignments. Dry operation components include maintenance activities. Access to traditional resources and areas for current use is already hindered in the RAA by the amount of private land, commercial developments, transportation and utility networks, tourism and recreation activities, and other infrastructure.

The following describes potential pathways that could affect access to traditional resources or areas for current use.

Access to traditional resources or areas for current use can be affected through the direct loss or alteration of trails or travelways, restrictions on the ability to navigate to and through current use area, or limitations on the ability to undertake current use activities in proximity to the Project. Loss and alteration can result from direct physical disturbance or destruction (e.g., destruction of a traditional trail), physical deterrents or obstructions (e.g., fencing) that prevent access or increase effort required either spatially or temporally, changes in the landscape (e.g., vegetation clearing) that make an aspect of a trail or travelway unrecognizable either partially or completely, or changes in the conditions (e.g., construction traffic) required for current use of trails and travelways.

Indigenous groups have identified potential ways in which the Project could affect access to traditional resources or sites. At a meeting with representatives from Kainai First Nation, Piikani Nation, and Siksika Nation regarding the Project, participants expressed concern that there is potential for cultural and spiritual sites in the traditional territories to become inaccessible as a result of the Project. Through the engagement program for the Project, Montana First Nation asked whether the Project lands that would be acquired would become Crown land, while Stoney Nakoda Nations inquired whether Crown land would be set aside to offset effects of the Project.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

In the TUS report, Siksika Nation and Kainai First Nation identified Elbow River as an important travel route and its importance to Blackfoot traditions and culture (KCO & SCO 2017). Through the engagement program for the Project, Siksika Nation explained that the Project "is in the middle of a prime transport corridor for our people along the Elbow River between the prairies and the mountains." Through the engagement program for the Project, Tsuut'ina Nation identified that there is potential for the Project to affect the Nation's ability to use Elbow River as a transportation route. Through the engagement program for the Project and in another information source, Kainai First Nation and Ermineskin Cree Nation reported that, in general, navigable waterways were travel routes (TMP 2013). In the Kainai First Nation and Siksika Nation TUS and the Piikani Nation TUS, two trails were identified during fieldwork. Few details were provided about these trails, but they occur on private lands and appear to be primarily historical. Through the engagement program for the Project, Kainai First Nation reported that there is a travelway in the Project area on the Robinson property.

Indigenous groups have noted effects of other development projects on access to traditional resources and sites. Regarding a different project, Ermineskin Cree Nation noted that access to some plant-harvesting locales has decreased and the travel distance required to hunt and fish has increased as a result of development (TMP 2013).

14.3.3.2 Mitigation Measures

- Through the engagement program for the Project, Métis Nation of Alberta, Region 3 asked that access to the reservoir be permitted when it is dry and not being used to retain flood waters.
- Prior to the start of construction, the Government of Alberta would acquire the privately-owned land (surface rights only) that is required for the Project and landowners will be compensated appropriately. Post-development land classifications are shown in Figure 2-3 (see Volume 1: Project Description):
 - 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 AEP and the area will be restricted for operational and safety reasons. 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.
 - 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.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

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.

Alberta Transportation considered the Métis Nation of Alberta, Region 3 request for access to the reservoir be permitted when dry. However, for operational and safety reasons, access to the reservoir needs to be restricted as described above.

Changes in access to traditional resources or areas for current use will be mitigated as follows:

- 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, including for hunting and fishing and Alberta Transportation would advise Indigenous groups on post-construction access management

Project-specific recommendations that do not pertain directly to potential effects of the Project on TLRU are described in Volume 4, Appendix B.

14.3.3.3 Residual Effects

Access routes identified in Section 14.2 are not considered an exhaustive list of travel routes used for TLRU purposes. In recognition of the historic use of the land by Indigenous groups, other trails and travelways may occur near the Project, even if these sites have not been specifically identified by Indigenous groups. Two trails, known as Old Blackfoot Trail and Old Stoney Trail (Old North-South Trail), and a historical trading route, identified by Indigenous groups are assumed to be partially intersected by the PDA. However, because the exact location of the portions of the trails and the trading route that are intersected have not been disclosed (see Table 14-4), and because the trails are located on private lands, it is conservatively assumed that the footprint of a permanent structure would interrupt access along these trails.

Once the Project is constructed, access will be available in Area A and Indigenous groups would have the ability to access this area for traditional use purposes. There will be no public access in Areas B and D. Private land in the PDA will be acquired and managed by Alberta Environment and Parks. A permanent portage for Elbow River would also be developed around the in-stream water intake components. The portage has been planned for safety and to facilitate the use of Elbow River around project components. The use of Elbow River as an access route will be affected during construction and dry operation by the permanent portage. This effect on the use of Elbow River is also considered an effect on the use of waterways for recreational purposes by Indigenous groups (See Section 14.2.5).



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

Appropriate conditions for current use entail more than access to traditional resources, sites and locations and that Indigenous groups may choose not to pursue TLRU activities near the Project for a variety of personal, practical, aesthetic and spiritual reasons.

Although the specific degree to which the PDA is being accessed for traditional purposes is unknown, given that the majority of the land is private, the residual effects of the Project on access to traditional resources, current use sites or locations are anticipated to be high in magnitude because of the loss of access to Areas B, C, and D. The permanent portage may marginally affect the use of Elbow River for transportation, including the use of waterways for recreational purposes by Indigenous groups, by forcing users to avoid the in-stream water intake components. Fencing of infrastructure would restrict access to traditional resources or current use areas in certain areas of the Project. The effects of the Project will extend to the LAA, be continuous, long-term in duration and irreversible. Timing is not applicable because the loss of access to traditional resources, current use sites, or locations would occur regardless of time of day or season.

14.3.4 Change in Current Use Sites or Areas

14.3.4.1 Project Interactions and Pathways

The Project has the potential to affect current use sites or areas during construction and dry operation. Construction components include vegetation clearing, channel excavation, water diversion construction, dam and berm construction, road construction, bridge construction, lay down areas, borrow extraction, reclamation, and utility alignments. Dry operation components include maintenance activities. The following describes potential pathways that could affect current use sites or areas.

Current use sites and areas, including, but not limited to sites and areas for cultural or spiritual practices, or archaeological and palaeontological sites and areas,²⁴ have the potential to be affected by direct physical disturbance associated with Project construction and dry operation.

Indigenous groups have raised the potential for the Project to affect current use sites or areas. Through the Indigenous engagement program for the Project, Tsuut'ina Nation also identified the potential for effects on both physical and cultural heritage resources as a result of construction activities, and expressed concerns regarding the removal of existing infrastructure, including pipelines. Tsuut'ina Nation also noted that a historical trading route falls within the Project area. Through the Indigenous engagement program for the Project, Tsuut'ina Nation also stated there are several possible archaeological and cultural sites in the Project area, including tipi sites, rock cairns, and portions of a medicine wheel and explained that the Project area is an

²⁴ TLRU sites and areas identified by Indigenous groups engaged on the Project may or may not align with archaeological and paleontological sites as defined by the Heritage Resources Act and identified in Section 13.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

area with high potential for recovery of archaeological resources. Tsuut'ina Nation explained that the rock cairns mark the places of tree burials and are concerned about the potential for their disturbance from the Project; the exact locations of these rock cairns marking burial locations were not identified. Kainai First Nation, Piikani Nation, and Siksika Nation reported that cultural and archaeological sites and artifacts have been recovered in the Project area, including in the flats north of the berm location, the bottom of the Elbow riverbed, and in a tributary creek channel off Elbow River. They explained that there is potential for additional cultural and archaeological sites and artifacts to be unearthed during construction of the berm and diversion channel, particularly from the cliff on the west side of Elbow River (PN n.d.; KCO & SCO 2017; Indigenous engagement results). Through the engagement program for the Project, Siksika Nation, and Siksika Nation shared concerns about the effects of construction and operations on Blackfoot cultural and ceremonial sites; Kainai First Nation expressed concern about the loss of tipi rings and effigies, as well as effects on former Blackfoot campsites.

Through the Indigenous engagement program for the Project and in the TUS report, Siksika Nation and Kainai First Nation identified a number of Blackfoot traditional use and cultural sites throughout the area around the planned outflow channel (KCO & SCO 2017). Siksika Nation and Kainai First Nation indicated that the outflow channel is located at a natural creek and that the creek, surrounding hilltops and flats could be affected, damaging these traditional use and cultural sites (KCO & SCO 2017). Through the engagement program for the Project, Kainai First Nation and Siksika Nation expressed concern that evidence of wintering grounds with many tipi rings will be lost during the excavation of the outfall channel. Siksika Nation also expressed concerns, through the engagement program for the Project to disturb the area of the identified wintering grounds. Siksika Nation is also concerned about the location of the outfall channel in relation to the tipi rings identified adjacent to the unnamed creek.

At a meeting with representatives from Kainai First Nation, Piikani Nation, and Siksika Nation regarding the Project, participants indicated that an archaeological site is situated at the bottom of the Elbow riverbed and is associated with ceremonies that have been practiced along the river for many years; this area may be associated with the North Trail. Through the Indigenous engagement program for the Project, Métis Nation of Alberta, Region 3 identified the potential of the Project to affect cultural heritage, as well as effects to sites and objects of historical significance, including archaeological, paleontological, architectural, and structural components. Métis Nation of Alberta, Region 3 also expressed concerns that the Project would affect potential historical homestead sites, cart trails, use areas, or burial sites.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

Through the Indigenous engagement program for the Project, Tsuut'ina Nation identified the potential for effects on Elbow River and noted that Elbow River is a communal gathering and a fishing area and medicinal plants are harvested in wetlands and riparian areas along the river. Tsuut'ina Nation also noted that the Project may result in downstream effects on Elbow River, or permanently change the flow of the river itself. Tsuut' ina Nation has identified Elbow River as an important water source (TN 2013). Through the Indigenous engagement program for the Project and in the TUS report, Kainai First Nation and Siksika Nation reported that medicinal plants are found in the PDA, including on either side of Elbow River at the proposed location of the diversion inlet and service sluiceway (KCO & SCO 2017) and on the Robinson property. Siksika Nation, also through the engagement program for the Project, expressed concerns that the excavation of the diversion channels would affect Blackfoot cultural items that might exist in the area. Through the Indigenous engagement program for the Project, Stoney Nakoda Nations explained that sand bars, some of which are present in Elbow River, hold cultural importance; Stoney Nakoda Nations also reported that there are trapping areas in the Project area. Given the importance of Elbow River, Siksika Nation, through the engagement program for the Project, expects that effects on Siksika traditional sites "will be substantial."

Through the Indigenous engagement program for the Project, Tsuut'ina Nation noted the potential for the effects of the Project to extend beyond the PDA, although the specific effects extending by the PDA were not identified. Tsuut'ina Nation also stated that the Project is expected to remove access to private land currently used to practice traditional activities. Through the Indigenous engagement program for the Project, Métis Nation British Columbia identified the potential for the Project to affect Métis land use in the Kootenay region.

14.3.4.2 Mitigation Measures

Table 14-7 presents recommendations and mitigation requests made by Indigenous groups to address changes in current use sites or areas. Also included are the chosen mitigation measures that will be implemented for the Project.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

Table 14-7	Mitigation for Change in Current Use Sites or Areas
	Miligation for change in current use sites of Areas

Recommendations, Mitigation Requests and	Mitigation Measures to be Implemented on				
Mitigation Measures	the Project				
At a meeting with representatives from Kainai	The disposition of artifacts and provision of GPS				
First Nation, Piikani Nation, and Siksika Nation	coordinates are under the jurisdiction of Alberta				
regarding the Project, participants asked that	Culture and Tourism and not Alberta Transportation.				
cultural sites located near the proposed berm	Alberta Transportation would limit disturbance, to the				
location be maintained and mitigation measures	extent possible and practical, of cultural and spiritual				
be implemented to protect the cultural features;	sites and subsurface impacts. Alberta Transportation				
this area would be stripped during construction,	would follow heritage resource protection methods				
which could expose additional cultural sites.	as mandated by the <i>Historical Resources Act</i> .				
Mitigation measures suggested include returning	Alberta Transportation will minimize disturbance to				
artifacts removed during the archaeological	cultural and spiritual sites and subsurface impacts,				
field studies to the land, making offerings where	and develop a protocol for recovery, collection,				
artifacts have been identified, flag	reporting on, and possible repatriation of artifacts				
archaeological sites, and share archaeological	found in consultation with Indigenous groups, which				
findings and GPS coordinates with Kainai First	could include flagging, fencing, or providing signage				
Nation, Piikani Nation and Siksika Nation so they	of sites to prevent disturbance during construction.				
can be surveyed by Elders. Through the	Alberta Transportation will follow heritage resource				
Indigenous engagement program for the	protection methods as mandated by ACT and verify				
Project, Tsuut'ina Nation also noted the	archaeological results with Indigenous groups.				
importance of minimizing subsurface impacts, to	At the request of Indigenous groups, Alberta				
the extent possible, to avoid potentially	Transportation will participate in ceremonies (if				
disturbing historic resources, including exposed	invited) prior to the start of construction, including				
tipi rings.	making offerings.				
Siksika Nation and Kainai First Nation recommended that the area where a spearhead was identified be surveyed and that a detailed joint study including an Archaeological and Traditional Use study be conducted in the creek valley, the surrounding flat areas, and the islands in Elbow River. This investigation would determine the physical extent and composition of the site. Ground- penetrating radar or similar techniques to identify possible burial sites on the cultural landscape is recommended (KCO & SCO 2017). At a meeting with representatives from Kainai First Nation, Piikani Nation, and Siksika Nation regarding the Project, participants recommended that historical locations identified during the archaeological field studies (a church and a cairn) be further investigated.	Alberta Transportation will participate in discussions with ACT and Indigenous groups regarding further investigation of identified sites located within the designated construction site boundary.				



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

Table 14-7 Mitigation for Change in Current Use Sites or Areas

Recommendations, Mitigation Requests and Mitigation Measures	Mitigation Measures to be Implemented on the Project				
Through the Indigenous engagement program for the Project and in the TUS report, Siksika Nation, Kainai First Nation, Piikani Nation and Tsuut'ina Nation asked that monitors be present during construction, including during excavation for the diversion inlet channel, to protect heritage sites and artifacts that may be present (KCO & SCO 2017). Stoney Nakoda Nations, through the engagement program for the Project, recommended a cultural monitoring program modeled on the example provided in Stoney Nakoda Nations Cultural Assessment for the "Enhancing grizzly bear management programs through the inclusion of cultural monitoring and traditional ecological knowledge" (SNN n.d.) Piikani Nation requested that ongoing mitigation occur after the completion of construction "to ensure no further derogation of Treaty and Aboriginal Rights are infringed upon in the designated SR-1 Project area," (PN n.d.).	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 and Tourism policies and guidelines. Alberta Transportation will participate in discussions with Indigenous groups regarding possible monitoring opportunities.				
At a meeting with representatives from Kainai First Nation, Piikani Nation, and Siksika Nation regarding the Project, participants requested that technical project information (i.e., maps, designs) be distributed to allow for informed decisions regarding the Project, as well as additional information regarding construction scheduling.	Alberta Transportation would provide Indigenous groups with project maps and design information and preliminary project scheduling.				
Through the engagement program for the Project, Tsuut'ina Nation identified the potential for tree burial sites in the study area; although the tree burials would no longer be extant, their locations would be marked by rock cairns. Tsuut'ina Nation does not want these rock cairns disturbed. If the cairns will be affected, Tsuut'ina Nation will require discussion regarding the appropriate means of dealing with the effects. Tsuut'ina Nation suggested that a ceremony to properly respect Tsuut'ina Nation people who were part of the tree burials is one possible mitigation measure. Stoney Nakoda Nations, through the engagement program for the Project, also requested a ceremony in the PDA for the Project.	Burial sites located outside of the designated construction site boundary will not be disturbed by construction. Disturbance of identified burial sites located within the designated construction site boundary will be avoided to the extent possible and practical. Alberta Transportation would 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. At the request of Indigenous groups, Alberta Transportation would participate in ceremonies (if invited) prior to the start of construction, including making offerings.				



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

Project-specific recommendations that do not pertain directly to potential effects of the Project on TLRU can be found in Volume 4, Appendix B.

14.3.4.3 Residual Effects

Current use sites and areas identified by participating Indigenous groups within the RAA include sites and areas of historical interest or use, such as remnants of structures and artefacts; medicinal plant locations; trapping areas; ceremonial sites; areas of cultural or spiritual importance; former habitation sites; and current use areas.

Tsuut'ina Nation explained that several archaeological²⁵ and cultural sites are known in the Project area; the exact locations of these sites were not provided. Stoney Nakoda Nations identified traplines²⁶ and trapping near the Project; however, exact locations had not yet been provided as of March 16, 2018. If any of these sites are located within the PDA, it is anticipated that they will be adversely affected and cannot be restored or replaced within the RAA.

Of the sites identified in the TUS reports, three are in the PDA and will be removed by construction of permanent structures. Three sites are in the LAA.

Current use sites and locations are not considered an exhaustive list. Because of the historical occupation of the land by Indigenous groups, other current use sites or areas may occur in the PDA, even if these sites have not been specifically identified by Indigenous groups.

It is also acknowledged that appropriate conditions for current use entail more than preserving traditional sites and locations and that Indigenous groups may choose not to pursue current use activities near the Project for a variety of personal, practical, aesthetic, and spiritual reasons.

Current use sites or areas located within the area of permanent structures and the reservoir will be permanently removed. Although some current use activities could be conducted elsewhere in the RAA, TLRU practices and related knowledge are often rooted in specific places that have important cultural and spiritual associations that are not readily transferrable to other locations.

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. The adverse effects of the Project will be restricted to the PDA.

²⁶ Based on available information, these are not registered traplines.



²⁵ TLRU sites and areas identified by Indigenous groups engaged on the Project may or may not align with archaeological and paleontological sites as defined by the Heritage Resources Act and identified in Section 13.

Assessment of Potential Effects on Traditional Land and Resource Use March 2018

Residual effects to current use sites or areas 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. Consequently, the effects of the Project on these current use sites and areas within the area of permanent structures and areas of temporary physical disturbance will be restricted to the PDA, continuous, long term and irreversible. Timing is not applicable because the loss of access to current use sites or areas located within the area would occur regardless of time of day or season.

14.3.5 Change in Indigenous Commercial Activities

14.3.5.1 Project Interactions and Pathways

The Project is located downstream from identified Indigenous commercial activities, including Redwood Meadows Golf and Country Club (see Volume 3B, Figure 18-3). Therefore, no interactions are anticipated to occur between the Project and Indigenous commercial activities during construction and dry operation.

14.3.6 Summary of Project Residual Environmental Effects

Table 14-8 summarizes the residual environmental effects on traditional land and resource use during construction and dry operations.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

Table 14-8Project Residual Effects on Traditional Land and Resource Use during
Construction and Dry Operations

	Residual Effects Characterization								
Residual Effect	Project Phase	Timing	Direction	Magnitude	Geographic Extent	Duration	Frequency	Reversibility	Ecological and Socio-economic
Change in availability of traditional resources for current use	C/DO	T/S/R	A	М	LAA	LT	С	I	D
Change in access to traditional resources	C/DO	N/A	А	Н	LAA	LT	С	I	D
Change in current use sites or areas outside the area of permanent structures	C/DO	N/A	A	L/M	PDA	ST	С	R	D
Change in current use sites or areas within the area of permanent structures	C/DO	N/A	A	Н	PDA	LT	С	I	D

KEY

See Table 14-2 for detailed definitions

Project Phase

C: Construction DO: Dry Operations

Timing Consideration

- T: Time of day S: Seasonality
- R: Regulatory

Direction:

- P: Positive
- A: Adverse
- N: Neutral

Magnitude:

N: Negligible L: Low M: Moderate H: High

Geographic Extent:

PDA: Project Development Area LAA: Local Assessment Area RAA: Regional Assessment Area

Duration:

ST: Short-term LT: Long-term

N/A: Not applicable

Frequency:

S: Single event IR: Irregular event R: Regular event C: Continuous

Reversibility:

R: Reversible I: Irreversible

Ecological/Socio-Economic Context: U: Undisturbed D: Disturbed



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

14.4 DETERMINATION OF SIGNIFICANCE

The definition of significant adverse effects on TLRU is provided in 14.1.6. The determination of significance for assessment of residual environmental effects on TLRU provided here considers information on current use of lands and resources for traditional purposes obtained from Project specific TUS, the Indigenous engagement program for the Project, a review of relevant publicly available literature, consideration of significance determinations for related biophysical and socio-economic VC assessments, the ecological and socio-economic context of the Project area, past project experience and professional judgment.

Localized effects within the PDA may result in loss of particular TLRU sites that may occur within the area of permanent structures and areas of temporary physical disturbance. Effects to these sites was conservatively considered to be high magnitude even though information on the location, frequency and nature of use of these sites is unavailable.

This assessment recognizes that some landowners in the PDA have granted access to Indigenous groups, however, the significance determination takes into account a number of other factors, including that the Project is predominately situated on private land that has been used for ranching and agriculture since the late 1800s and, therefore, the ability to conduct TLRU activities is already substantially constrained compared to unoccupied Crown land.

In addition. 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. As a result, overall effects on TLRU are not significant.

14.5 ABORIGINAL AND TREATY RIGHTS

As discussed in Section 14.1.3.1, for the purposes of this assessment, 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. Mitigation measures to address potential Project effects on current use are discussed in Sections 14.3.2.3, 14.3.3.2, and 14.3.4.2. In addition, residual effects for the potential Project effects on current use are discussed in Sections 14.3.2.3, 14.3.3.3 and 14.3.4.3 and summarized in Table 14-8. Given that the residual effects for the Project on TLRU are predicted to be not significant (see Section 14.4), no effects on potential or established Aboriginal or Treaty rights are expected to occur as a result of the Project.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

14.6 PREDICTION CONFIDENCE

Prediction confidence in the assessment of effects on TLRU is moderate. This prediction confidence assignment reflects the available project-specific TLRU and traditional ecological knowledge information provided through the Indigenous engagement program, including TUS reports, understanding of applicable mitigation measures, and reliance on assessments of other VCs of relevance to TLRU. Project-specific TUS reports are the best source of information on which to base an assessment of project effects on TLRU. As of March 16, 2018, two TUS reports, comprising the traditional knowledge of three potentially affected Indigenous groups, had been incorporated into the assessment of residual effects on TLRU (see Section 14.1.2). Given the qualitative and subjective nature of assessing TLRU, the views of Indigenous groups may differ from the findings of this assessment.

Relevant 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 will notify Alberta Environment and Parks and the CEA Agency upon receipt of any new TUS reports submitted by Indigenous groups during the regulatory process and of any considerations made in response to these reports.

14.7 EFFECTS ON INTANGIBLE COMPONENTS

As described in Section 14.1, intangible components relate to beliefs, perceptions, values and qualitative experience, 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 (see Section 14.1.3.3). These intangible components of TLRU are presented when an Indigenous group has identified a related concern in a TUS report or through the Indigenous engagement program for the Project. Those components described by Indigenous groups engaged on the Project are presented below.

Through the Indigenous engagement program for the Project, Kainai First Nation, Piikani Nation, Siksika Nation, and Stoney Nakoda Nations have outlined intangible components of TLRU that could be affected by the Project, namely spiritual connection to ancestors and cultural transmission.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

At a meeting with representatives from Kainai First Nation, Piikani Nation, and Siksika Nation regarding the Project, participants 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.

"Spiritual existence is very real; perhaps newcomers only see the physical existence and do not see the spirituality of our people. How can we protect cultural sites that have both a physical and spiritual importance when there is a lack of understanding of the spiritual aspect? Vision quests still take place today, our ancestors are very real in cultural sites and this is why these sites need to be protected from commercial activity. These areas need to be protected for our children. Our ancestors are lost through the destruction of cultural sites and we need to try to preserve what still exists. Existence keeps going after death. The archaeological site is not the only thing of importance but the presence and the reality that exists at the site is also important. Without an understanding of the importance of these cultural sites and the presence that exists, as well as the impacts on the practice, it is difficult to understand. It relates to understanding the meaning of existence. Cultural practice is affected every day by British common law,".

In the TUS report, Piikani Nation further stated that "the onsite visits to location of the Off-stream 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 preserving the last traces of original history undisturbed and intact." (PN n.d.). Through the Indigenous engagement program for the Project, Piikani Nation explained that should the Project proceed to construction, Piikani Nation recommends discussion with *Siksikaitsitapii* ('Keepers of our Language') prior to excavation or removal of material from sites; input from *Siksikaitsitapii* should be considered regarding the language of mitigation measures related to archaeological sites.

Through the Indigenous engagement program for the Project, Stoney Nakoda Nations stressed the importance of wildlife crossings, and their strong connection to oral history and transmission of knowledge between generations. If the Project destroys or hinders the use of existing wildlife crossings, the Project could affect the transmission of traditional knowledge. Through the Indigenous engagement program for the Project, Stoney Nakoda Nations stated the importance of implementing wildlife crossings into the project design and reported concern with the lack of wildlife crossings currently incorporated into the project design, including Highway 22 and Highway 8). The diversion channel will have sections lined with turf reinforcement mats covered with topsoil and grass to allow ungulates to cross (see Section 11).



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

Alberta Transportation recognizes the importance of cultural transmission and the spiritual connection to ancestors as components of TLRU, as explained by Kainai First Nation, Piikani Nation, Siksika Nation, and Stoney Nakoda Nations in relation to the Project. Alberta Transportation is unable to determine the weight of these intangible components for this environmental assessment, as experiential values can only be meaningfully evaluated by individuals and communities experiencing them. Similarly, any mitigation measure that could lessen effects on intangible components should be identified by those individuals and communities. These intangible components are presented as shared by Indigenous groups for consideration by the CEA Agency and NRCB in the larger context of the Project.

14.8 PROJECT EFFECTS ON TRADITIONAL LAND AND RESOURCE USE BY INDIGENOUS GROUPS

The sections below present TLRU assessment conclusions for each Indigenous group for construction and dry operations. These descriptions include consideration of effects on intangible components identified by the Indigenous group in a TUS report or through the Indigenous engagement program.

14.8.1 Kainai First Nation

Kainai First Nation undertakes current use activities including hunting, trapping, plant harvesting, spiritual and ceremonial practices and travel. Kainai First Nation²⁷ has identified specific TLRU sites and areas within the RAA: a trail, tipi rings, a medicinal and ceremonial plant locale, traditional camp sites with multiple tipi rings, fire-broken rock, a spearhead, and a possible medicine wheel.

Elbow River is important to Blackfoot traditions and culture. Medicinal plant locations were identified on the shoreline of Elbow River within the Project area and the waterway is used as a travel route. Cultural and archaeological sites important to Kainai First Nation are located within the Project area.

Kainai First Nation expressed concern about the movement of water and surrounding pollution, habitat for fish and wildlife and changes in animals' patterns of movement.

The Project is anticipated to result in a change in the availability of traditional resources for current use through alteration, reduction, or loss of habitat. Vegetation will be cleared from the PDA during construction. However, effects of the Project are not anticipated to result in the loss of traditionally used species in the LAA. Vegetation clearing associated with construction is expected to cause changes in habitat and mortality risk for birds. To manage these effects,

²⁷ Some information provided by Kainai First Nation was also provided by Siksika Nation and/or Piikani Nation. Where the information is shared between more than one Nation, it has been repeated under each Nation.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

appropriate setbacks will be applied to nests during nesting season during construction, if disturbance is unavoidable.

Habitat fragmentation would occur if wildlife, such as ungulates, choose not to cross the diversion channel. Overall, in the RAA wildlife species richness and abundance are not expected to be influenced by habitat fragmentation. Sensory disturbance during construction are not anticipated to affect movement of ungulates and grizzly bears.

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 a CRA fishery. 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.

Kainai First Nation expressed concern about limited or restricted access to areas. The Project is expected to result in restricted access to areas within the PDA and development of a permanent portage for Elbow River. Fencing of the reservoir and other infrastructure would restrict Kainai First Nation's access to traditional resources or current use areas. Kainai First Nation identified travel routes along Elbow River and the Old North-South Trail, which would be affected by Project activities. The permanent portage would affect use of Elbow River for transportation by forcing Kainai First Nation members to avoid the in-stream water intake components while traveling along in the river. The Old North-South Trail identified by Kainai First Nation is located within the PDA and use of this trail would be interrupted.

Kainai First Nation voiced concerns about artifacts that may be unearthed during excavation on the west side of Elbow River. Additional cultural and archaeological sites located in the PDA would be affected by site clearing and that these changes could result in the loss of spiritual connection to ancestors. Kainai First Nation indicated that an archaeological site is situated at the bottom of the Elbow riverbed and is associated with ceremonies that have been practiced along the river for many years. Kainai First Nation identified medicinal plant locales, which would be affected by construction of the inlet and service sluiceway and a traditional Blackfoot camp near the proposed low-level outlet. The cultural and archaeological sites and medicinal plant gathering locales in the PDA would be permanently removed.

Kainai First Nation identified that the Project could lead to a loss of connection to the ancestors. Intangible components of TLRU such as spiritual connection to ancestors can only be meaningfully evaluated by individuals and communities experiencing these values in their cultural context. As of March 16, 2018, Kainai First Nation had not suggested mitigation measures that could apply to these effects. These intangible components are presented for consideration by the CEA Agency and NRCB in the larger context of the Project.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

Alberta Transportation offered to hold a workshop with Kainai First Nation during February or March 2018 to obtain feedback on how traditional use information has been presented in the draft TLRU sections (Sections 14 of Volumes 3A and 3B). The intention was to validate the use of the traditional use information in the EIS and include any feedback received. As of March 16, 2018, discussions regarding a workshop with Kainai First Nation were ongoing.

14.8.2 Piikani Nation

Piikani Nation undertakes current use activities including hunting, trapping, plant harvesting, spiritual and ceremonial practices, travel, and habitation. Piikani Nation has identified specific TLRU sites and areas within the RAA: including Elbow River, a trail, tipi rings, a medicinal and ceremonial plant locale, traditional camp sites with multiple tipi rings, fire-broken rock, a spearhead, and a medicine wheel. Piikani Nation noted that Project's proposed flood basin is habitat for several fur-bearing animal species and numerous herbs and medicinal plants. Elbow River is important to Blackfoot traditions and culture. Medicinal plant gathering locations were identified on the shoreline of Elbow River within the Project area and the waterway is used as a Blackfoot travel route. Piikani Nation expressed concerns about upstream and downstream effects of the Project. Cultural and archaeological sites important to Piikani Nation are located within the Project area.

Piikani Nation indicated concern with the health of riparian vegetation, which require flooding and scouring for survival. Piikani Nation also expressed concern about the movement of water and surrounding pollution, habitat for fish and wildlife and changes in animals' patterns of movement. Piikani Nation expressed concern for wetlands.

The Project is anticipated to result in a change in the availability of traditional resources for current use through alteration, reduction, or loss of habitat. Vegetation will be cleared from the PDA during construction. However, effects of the Project are not anticipated to result in the loss of traditionally used species in the LAA. Vegetation clearing associated with construction is expected to cause changes in habitat and mortality risk for birds. To manage these effects, appropriate setbacks would be applied to nests if construction during nesting season is unavoidable.

Habitat fragmentation would occur if wildlife, such as ungulates, choose not to cross the diversion channel. Overall, in the RAA, wildlife species richness and abundance are not expected to be influenced by habitat fragmentation. Sensory disturbance during construction are not anticipated to affect movement of ungulates and grizzly bears.

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 a CRA fishery. During dry operations, there will be no changes to flow in Elbow River, and therefore no alterations to the quality of fish



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

habitat. Overall, the Project is not expected to limit the availability of traditional resources for current use in the RAA. Piikani Nation expressed concern about limited or restricted access to areas within the Blackfoot territory. Piikani Nation identified travel along Elbow River and the Old North trail²⁸ which would be affected by Project activities.

The Project is expected to result in restricted access to areas in the PDA and development of a permanent portage for Elbow River. Fencing of the reservoir and other infrastructure would restrict Piikani Nation's access to traditional resources or current use areas. The permanent portage may marginally affect use of Elbow River for transportation by forcing Piikani Nation members to avoid the in-stream water intake components while traveling along the river. The Old North-South Trail identified by Piikani Nation is located within PDA and use of this trail would be interrupted.

Piikani Nation indicated that an archaeological site is situated at the bottom of the Elbow riverbed and is associated with ceremonies that have been practiced along the river for many years. Additional cultural and archaeological sites located within the PDA would be affected by site clearing and Piikani Nation stated that these changes could result in the loss of spiritual connection to ancestors.

The Project is expected to result in temporary disruption to Piikani Nation's current use sites located outside the PDA (e.g., archaeological and cultural sites). Following construction, current use areas would remain largely unchanged outside the PDA. The cultural and archaeological sites within the PDA would be permanently removed.

Piikani Nation identified that the Project could lead to a loss of connection to the ancestors. Intangible components of TLRU such as spiritual connection to ancestors can only be meaningfully evaluated by individuals and communities experiencing these values in their cultural context. Piikani Nation recommends discussion with *Siksikaitsitapii* ('Keepers of our Language') regarding the wording of mitigation measures and further discussion prior to excavation or removal of material from sites. These intangible components are presented for consideration by the CEA Agency and NRCB in the larger context of the Project.

Alberta Transportation offered to hold a workshop to be held with Piikani Nation during February or March 2018 to obtain feedback on how traditional use information has been presented in the draft TLRU sections (Sections 14 of Volumes 3A and 3B). The intention was to validate the use of the traditional use information in the EIS and include any feedback received. As of March 16, 2018, discussions regarding a workshop with Piikani Nation were ongoing.



²⁸ Assumed to be old Stoney Trail (Old North-South Trail).

Assessment of Potential Effects on Traditional Land and Resource Use March 2018

14.8.3 Siksika Nation

Siksika Nation undertakes current use activities including hunting, plant harvesting, travel, habitation, as well as spiritual and ceremonial practices. Siksika Nation has identified specific TLRU sites and areas within the RAA: including Elbow River, a trail, tipi rings, a medicinal and ceremonial plant locale, traditional camp sites with multiple tipi rings, fire-broken rock, a spearhead, and a medicine wheel. Elbow River is important to Blackfoot traditions and culture. Siksika Nation expressed concern that because Elbow River is and has been a major transport corridor for community members for millennia, "the SR-1 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" (Indigenous engagement program for the Project). Medicinal plant locations were identified on the shoreline of Elbow River within the Project area and the waterway is used as a travel route. Cultural and archaeological sites important to Siksika Nation are in the Project area.

Siksika Nation expressed concern about the movement of water and surrounding pollution, habitat for fish and wildlife and changes in animals' patterns of movement.

The Project is anticipated to result a change in the availability of traditional resources for current use through alteration, reduction, or loss of habitat. Vegetation will be cleared from the PDA during construction. However, effects of the Project are not anticipated to result in the loss of traditionally used species in the LAA. Vegetation clearing associated with construction is expected to cause changes in habitat and mortality risk for birds. To manage these effects, appropriate setbacks would be applied to nests if construction during nesting season is unavoidable.

Habitat fragmentation would occur if wildlife, such as ungulates, choose not to cross the diversion channel. Overall, in the RAA, wildlife species richness and abundance are not expected to be influenced by habitat fragmentation. Sensory disturbance during construction are not anticipated to affect movement of ungulates and grizzly bears.

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 a CRA fishery. 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.

Siksika Nation expressed concern about limited or restricted access to areas within the Blackfoot territory. Siksika Nation identified that travel along Elbow River and the Old North Trail would be affected by Project activities.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

The Project is expected to result in restricted access to areas within the PDA and development of a permanent portage for Elbow River. Fencing of the reservoir and other infrastructure would restrict Siksika Nation's access to traditional resources or current use areas. The permanent portage may marginally affect use of Elbow River for transportation by forcing Siksika Nation members to avoid the in-stream water intake components while traveling along in the river. The Old North-South Trail identified by Siksika Nation is located within the PDA and use of this trail would be interrupted.

Siksika Nation voiced concerns about artifacts that may be unearthed during excavation on the west side of Elbow River. Additional cultural and archaeological sites located within the PDA would be affected by site clearing and Siksika Nation stated that these changes could result in the loss of spiritual connection to ancestors. Siksika Nation indicated that an archaeological site is situated at the bottom of the Elbow riverbed and is associated with ceremonies that have been practiced along the river for many years. Siksika Nation identified medicinal plant locales, which would be affected by construction of the inlet and service sluiceway and a traditional Blackfoot camp near the proposed low-level outlet. The cultural and archaeological sites and medicinal plant gathering locales within the PDA would be permanently removed.

Siksika Nation identified that the Project could lead to a loss of connection to the ancestors. Intangible components of TLRU such as spiritual connection to ancestors can only be meaningfully evaluated by individuals and communities experiencing these values in their cultural context. As of March 16, 2018, Siksika Nation had not suggested mitigation measures that could apply to these effects. These intangible components are presented for consideration by the CEA Agency and NRCB in the larger context of the Project.

Through the engagement program for the Project, Siksika Nation stated that the Project "is not of direct benefit to Siksika, but will clearly, negatively impact our traditional use of this delicate and culturally important area. There are other flood control measures available to Alberta that would be preferred by Siksika instead of [the Project]. The [Project] is being constructed to protect people and property in Calgary, while negatively impacting Siksika rights and interests that are protected by Section 35 of the Constitution of Canada."

Alberta Transportation and Siksika Nation held a workshop on February 26, 2018 to obtain feedback on how traditional use information has been presented in the draft TLRU sections (Sections 14 of Volumes 3A and 3B). A second workshop was scheduled for February 27, 2018 was postponed and as of March 16, 2018, discussions regarding a workshop with Siksika Nation were ongoing. In accordance with protocols established at the start of each workshop and in recognition of the proprietary nature of TLRU, written summaries of the workshop proceedings were completed by Alberta Transportation and provided to Siksika Nation for review and validation before incorporating any information into the EIS. As of March 16, 2018, the summary of the workshop had not been validated by Siksika Nation for use in updating the TLRU sections.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

14.8.4 Stoney Nakoda Nations (Bearspaw First Nation, Chiniki First Nation and Wesley First Nation)

Stoney Nakoda Nations undertakes current use activities such as trapping, hunting, fishing, plant harvesting, habitation, spiritual and ceremonial practices, and travel. Stoney Nakoda Nations has identified specific TLRU sites and areas within the RAA, potentially including a trapping area and two traplines²⁹ that were reported to be near the Project. Stoney Nakoda Nations noted that the waters that flow through the traditional lands have sustained the Stoney Nakoda Nations Nations since time immemorial, but did not identify specific sources of drinking water.

Stoney Nakoda Nations expressed concern about Project effects on:

- water and wetlands
- fish, birds and vegetation
- wildlife migration and crossings

Stoney Nakoda Nations also expressed concern that changes to the availability of resources relied upon for current use practices would in turn result in members having to travel farther to practice traditional activities.

The Project is anticipated to result in a change in the availability of traditional resources for current use through alteration, reduction, or loss of habitat. Vegetation will be cleared from the PDA during construction. However, effects of the Project are not anticipated to result in the loss of traditionally used species in the LAA. Vegetation clearing associated with construction is expected to cause changes in habitat and mortality risk for birds. To manage these effects, appropriate setbacks would be applied to nests if construction during nesting season is unavoidable.

Habitat fragmentation would occur if wildlife, such as ungulates, choose not to cross the diversion channel. Overall, in the RAA, wildlife species richness and abundance are not expected to be influenced by habitat fragmentation. Sensory disturbance during construction are not anticipated to affect movement of ungulates and grizzly bears.

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 a CRA fishery. 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. Similarly, the Project is not anticipated to affect sources of drinking water that may be used by Stoney Nakoda Nations.

²⁹ Based on available information, these are not registered traplines. The exact locations of the trapping activities and the traplines had not yet been disclosed as of January 31, 2018.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

The Project is expected to result in restricted access to areas in the PDA and the development of a permanent portage for Elbow River. Fencing of the reservoir and other infrastructure would restrict Stoney Nakoda Nations' access to traditional resources or current use areas. If Elbow River is used by Stoney Nakoda Nations for transportation, users would have to avoid the instream water intake components while traveling.

It is anticipated that traditional resources at harvesting sites within the area of permanent structures and the primary reservoir basin would be permanently removed.

Stoney Nakoda Nations identified that the Project could lead to a loss of cultural transmission. Intangible components of TLRU such as cultural transmission can only be meaningfully evaluated by individuals and communities experiencing these values in their cultural context. Stoney Nakoda Nations reported concern with the lack of wildlife crossings incorporated into the project design. As indicated in section 14.3.2.2, parts of the diversion channel and the floodplain berm would be covered with materials conducive to ungulate movement, which would help mitigate effects to resources. However, Stoney Nakoda Nations would have to determine whether this mitigation measure also addresses potential effects on cultural transmission. These intangible components are presented for consideration by the CEA Agency and NRCB in the larger context of the Project.

Through the engagement program for the Project, Stoney Nakoda Nations stated that the Project "does impact Stoney Nakoda Treaty Rights and Traditional Uses in the proposed project area. As signatories to Treaty Number 7 in 1877, the Stoney Nakoda First Nations have Aboriginal and treaty rights entitlement throughout the 50,000 square miles encompassing Treaty 7 territory, and beyond. The [Stoney Nakoda First Nations] have historic trails, campsites, hunting areas, fishing waters, ceremonial and spiritual sites, trade routes, grave sites, and gathering areas throughout our historical territory."

Alberta Transportation and Stoney Nakoda Nations held a workshop on February 12, 2018 to obtain feedback on how traditional use information has been presented in the draft TLRU sections (Sections 14 of Volumes 3A and 3B). A follow-up workshop has been scheduled to occur March 20, 2018. In accordance with protocols established at the start of each workshop and in recognition of the proprietary nature of TLRU, written summaries of the workshop proceedings were completed by Alberta Transportation and provided to Stoney Nakoda Nations for review and validation before incorporating any information into the EIS. As of March 16, 2018, the summary of the workshop had not been validated by Stoney Nakoda Nations for use in updating the TLRU sections. During the February 12, 2018 workshop, Stoney Nakoda Nations requested that the report, Stoney Nakoda Nations Cultural Assessment for the "Enhancing grizzly bear management programs through the inclusion of cultural monitoring and traditional ecological knowledge" be reviewed. Results of this review have been integrated into the EIS.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

14.8.5 Tsuut'ina Nation

Tsuut'ina Nation undertakes current use activities including hunting, trapping, plant harvesting, fishing, spiritual and ceremonial practices and travel. Tsuut'ina Nation report that the RAA has been and is currently used by Tsuut'ina Nation members, and has identified specific TLRU sites and areas within the RAA, including Elbow River, used as a fishing and gathering area, a travel route, and a historical trading route.

Tsuut'ina Nation expressed concern about Project effects on resources relied on for traditional purposes and the ability of Tsuut'ina Nation citizens to undertake traditional activities. Tsuut'ina Nation identified potential effects on Elbow River and tributaries, the Tsuut'ina Nation fishery, wildlife and biodiversity and harvested plants.

The Project is anticipated to result in a change in the availability of traditional resources for current use through alteration, reduction, or loss of habitat. Vegetation will be cleared from the PDA during construction. However, effects of the Project are not anticipated to result in the loss of traditionally used species in the LAA. Vegetation clearing associated with construction is expected to cause changes in habitat and mortality risk for birds. To manage these effects, appropriate setbacks would be applied to nests if construction during nesting season is unavoidable.

Habitat fragmentation would occur if wildlife, such as ungulates, choose not to cross the diversion channel. Overall, in the RAA, wildlife species richness and abundance are not expected to be influenced by habitat fragmentation. Sensory disturbance during construction are not anticipated to affect movement of ungulates and grizzly bears.

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 a CRA fishery. 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.

Tsuut'ina Nation identified Elbow River and groundwater in the Elbow River Alluvial Aquifer as sources of drinking water and expressed concern regarding effects of the Project on Tsuut'ina Nation's ability to use the river as a source of drinking water. Five registered water wells have been identified on the Tsuut'ina Nation reserve within the RAA. Also, it is understood that Tsuut'ina Nation hold a license to withdraw water from Elbow River, located upstream of the PDA. The effects of sediment from construction on downstream water quality in Elbow River and Glenmore Reservoir is negligible. Effects on water quality from potential herbicide use is expected to be reversible through dilution, given the very low frequency of herbicide detection in the watershed. Groundwater quantity and quality are not expected to be materially affected



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

due to the limited extent and duration of Project effects on groundwater. Therefore, it is anticipated that there will be no effects on the ability of Tsuut'ina Nation to use groundwater in the Elbow River Alluvial Aquifer or the Elbow River for drinking water; effects to functioning of the identified wells on the Tsuut'ina Nation reserve within the hydrogeology RAA are not anticipated (See Section 14.3.23).

Elbow River is used as a transportation route by Tsuut'ina Nation citizens. A historical trading route was also identified within the Project area and is conservatively assumed to be intersected by the PDA. Fencing of the reservoir and other infrastructure would restrict Tsuut'ina Nation's access to traditional resources or current use areas. The permanent portage would affect use of Elbow River for transportation by forcing Tsuut'ina Nation members to avoid the in-stream water intake components while travelling.

A portion of the historical trading route also identified by Tsuut'ina Nation would be permanently removed.

Tsuut'ina Nation expressed concern about environmental effects on Elbow River. They also identified potential project effects on physical and cultural heritage sites in their territory. Tsuut'ina Nation also identified Elbow River as a gathering area. The Project is expected to result in temporary disruption to current use sites located outside the PDA. Following construction, current use areas would remain largely unchanged outside the PDA. Elbow River and Tsuut'ina Nation's use of the river for fishing and as a gathering place would be affected because areas within the PDA would be removed. The cultural and archaeological sites within the PDA would be permanently removed.

Through the engagement program for the Project, Tsuut'ina Nation stated that the Project "is located squarely within our traditional territory, in an area where our citizens exercise their Aboriginal, Treaty and Inherent rights. As such we stand to be directly and adversely affected by the Project."

Alberta Transportation and Tsuut'ina Nation held a four-day workshop on March 1, 5, 6, and 7, 2018 to obtain feedback on how traditional use information has been presented in the draft TLRU sections (Sections 14 of Volumes 3A and 3B). Two of these days were site tours with Tsuut'ina Nation Elders. In accordance with protocols established at the start of each workshop and in recognition of the proprietary nature of TLRU, written summaries of the workshop proceedings were completed by Alberta Transportation and provided to Tsuut'ina Nation for review and validation before incorporating any information into the EIS. As of March 16, 2018, the summary of the workshop had not been validated by Tsuut'ina Nation for use in updating the TLRU sections.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

14.8.6 Ermineskin Cree Nation

Ermineskin Cree Nation undertakes current use activities such as hunting, fishing, trapping, plant harvesting, habitation, and travel.

Ermineskin Cree Nation has generally noted a decline in access to plant-harvesting locales, having to travel further to harvest, and has noted the potential for further development to affect the availability of sweetgrass. Ermineskin Cree Nation indicated that the Project is in a region of cultural and historical importance.

The Project is anticipated to result in a change to the availability of traditional resources for current use through an alteration, reduction, or loss of habitat. Vegetation will be cleared from the PDA during construction. However, effects of the Project are not anticipated to result in the loss of traditionally used species in the LAA. Vegetation clearing associated with construction is expected to cause changes in habitat and mortality risk for birds. To manage these effects, appropriate setbacks would be applied to nest if construction during nesting season is unavoidable. Habitat fragmentation would occur if wildlife, such as ungulates, choose not to cross the diversion channel. Overall in the RAA, wildlife species richness and abundance are not expected to be influenced by habitat fragmentation. Sensory disturbance during construction are not anticipated to affect movement of ungulates and grizzly bears.

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 a CRA fishery. 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.

Access to the PDA would be restricted through fencing of the infrastructure. Although no current use sites or areas were identified by Ermineskin Cree Nation within the PDA, access to traditional resources in the PDA would be restricted and any sites within the area of permanent structures would be removed. The permanent portage may marginally affect use of Elbow River, if used by Ermineskin Cree Nation for transportation because users would have to avoid the in-stream water intake components while traveling along in the river.

Alberta Transportation offered to hold a workshop to be held with Ermineskin Cree Nation during February or March 2018 to obtain feedback on how traditional use information has been presented in the draft TLRU sections (Sections 14 of Volumes 3A and 3B). The intention was to validate the use of the traditional use information in the EIS and include any feedback received. As of March 16, 2018, discussions regarding a workshop with Ermineskin Cree Nation were ongoing.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

14.8.7 Foothills Ojibway

Foothills Ojibway undertakes current use activities such as hunting, plant harvesting, habitation, as well as spiritual and ceremonial practices. As of March 16, 2018, no issues or concerns related to the Project had been identified through a review of publicly available information or the Indigenous engagement program for the Project.

Alberta Transportation offered to hold a workshop to be held with Foothills Ojibway during February or March 2018 to obtain feedback on how traditional use information has been presented in the draft TLRU sections (Sections 14 of Volumes 3A and 3B). The intention was to validate the use of the traditional use information in the EIS and include any feedback received. As of March 16, 2018, Foothills Ojibway had not responded to Alberta Transportation's offer of a workshop.

Alberta Transportation will continue to attempt engagement with Foothills Ojibway throughout the environmental assessment process.

14.8.8 Ktunaxa Nation

Through Project engagement activities, Ktunaxa Nation has informed Alberta Transportation that they were not interested in participating in the engagement activities for the Project and no assessment of potential effects on Ktunaxa Nation's TLRU has been undertaken. Consequently, there are no conclusions regarding project effects on Ktunaxa Nation TLRU.

Alberta Transportation offered to hold a workshop with Ktunaxa Nation during February or March 2018 to obtain feedback on how traditional use information has been presented in the draft TLRU sections (Sections 14 of Volumes 3A and 3B). The intention was to validate the use of the traditional use information in the EIS and include any feedback received. As of March 16, 2018, Ktunaxa Nation had not responded to Alberta Transportation's offer of a workshop.

14.8.9 Louis Bull Tribe

Louis Bull Tribe undertakes current use activities including hunting, fishing, trapping, plant gathering, as well as cultural and spiritual practices. Louis Bull Tribe noted the potential for the Project to affect wetlands, and expressed concerns about reclamation of the Project area. The Project is anticipated to result in a change in the availability of traditional resources for current use through alteration, reduction, or loss of habitat. Vegetation will be cleared from the PDA during construction. However, effects of the Project are not anticipated to result in the loss of traditionally used species in the LAA. Vegetation clearing associated with construction is expected to cause changes in habitat and mortality risk for birds. To manage these effects, appropriate setbacks would be applied to nests if construction during nesting season is unavoidable.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

Habitat fragmentation would occur if wildlife, such as ungulates, choose not to cross the diversion channel. Overall, in the RAA, wildlife species richness and abundance are not expected to be influenced by habitat fragmentation. Sensory disturbance during construction are not anticipated to affect movement of ungulates and grizzly bears.

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 a CRA fishery. 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.

At the end of construction, areas disturbed by construction that are not required for operation and maintenance would be topsoiled and seeded to meet Alberta Environment and Parks reclamation requirements.

Through the Indigenous engagement program for the Project, Louis Bull Tribe expressed concern that the Project will adversely affect Louis Bull Tribe Traditional Territory.

Alberta Transportation offered to hold a workshop to be held with Louis Bull Tribe during February or March 2018 to obtain feedback on how traditional use information has been presented in the draft TLRU sections (Sections 14 of Volumes 3A and 3B). The intention was to validate the use of the traditional use information in the EIS and include any feedback received. As of March 16, 2018, discussions regarding a workshop with Louis Bull Tribe were ongoing.

14.8.10 Montana First Nation

Montana First Nation undertakes current use activities such as hunting, fishing and plant gathering, trapping, habitation, travel, as well as spiritual and ceremonial practices. Montana First Nation has reported travelling from the mountains to the prairies to harvest plants, Montana First Nation has noted the growing difficulty in locating some traditionally used plants, and having to travel farther to engage in subsistence practices such as fishing, hunting and plant gathering.

The Project is anticipated to result in a change in the availability of traditional resources for current use through alteration, reduction, or loss of habitat. Vegetation will be cleared from the PDA during construction. However, effects of the Project are not anticipated to result in the loss of traditionally used species in the LAA. Vegetation clearing associated with construction is expected to cause changes in habitat and mortality risk for birds. To manage these effects, appropriate setbacks would be applied to nests if construction during nesting season is unavoidable.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

Habitat fragmentation would occur if wildlife, such as ungulates, choose not to cross the diversion channel. Overall, in the RAA, wildlife species richness and abundance are not expected to be influenced by habitat fragmentation. Sensory disturbance during construction are not anticipated to affect movement of ungulates and grizzly bears.

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 a CRA fishery. 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.

Access to the PDA would be restricted through fencing of the reservoir and other infrastructure. Although no current use sites or areas were identified by Montana First Nation in the PDA, access to potential traditional resources in the PDA would be restricted and any sites within the area of permanent structures would be removed. If Elbow River is used by Montana First Nation for transportation, users would have to avoid the in-stream water intake components while traveling in the river.

Alberta Transportation offered to hold a workshop to be held with Montana First Nation during February or March 2018 to obtain feedback on how traditional use information has been presented in the draft TLRU sections (Sections 14 of Volumes 3A and 3B). The intention was to validate the use of the traditional use information in the EIS and include any feedback received. As of March 16, 2018, discussions regarding a workshop with Montana First Nation were ongoing.

14.8.11 Samson Cree Nation

Samson Cree Nation undertakes current use activities such as hunting, trapping, fishing, plant harvesting, habitation, spiritual and ceremonial practices and travel.

Samson Cree Nation has observed reduction in air quality, water quality and the availability of harvested plants and animals. Members of Samson Cree Nation noted having to travel farther to engage in subsistence practices such as fishing, hunting and plant gathering. Samson Cree Nation has generally expressed concern regarding effects of development on resources relied on for traditional purposes. Samson Cree Nation reported that members used to melt snow, collect rain water and drink water from rivers, but no longer do so (EEP 2016). The Project is anticipated to result in a change in the availability of traditional resources for current use through alteration, reduction, or loss of habitat. Vegetation will be cleared from the PDA during construction. However, effects of the Project are not anticipated to result in the loss of traditionally used species in the LAA. Vegetation clearing associated with construction is expected to cause changes in habitat and mortality risk for birds. To manage these effects,



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

appropriate setbacks would be applied to nests if construction during nesting season is unavoidable.

Habitat fragmentation would occur if wildlife, such as ungulates, choose not to cross the diversion channel. Overall, in the RAA, wildlife species richness and abundance are not expected to be influenced by habitat fragmentation. Sensory disturbance during construction are not anticipated to affect movement of ungulates and grizzly bears.

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 a CRA fishery. 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.

Samson Cree Nation expressed concern about limited or restricted access to areas within lands used by Samson Cree Nation. Access to the PDA would be restricted through fencing of the reservoir and other infrastructure. Although no current use sites or areas were identified by Samson Cree Nation in the PDA, access to potential traditional resources in the PDA would be restricted and any sites within the area of permanent structures would be removed. The permanent portage may marginally affect use of Elbow River, if used by Samson Cree Nation for transportation because users would have to avoid the in-stream water intake components while traveling along in the river.

Alberta Transportation and Samson Cree Nation held a workshop on February 23, 2018 to obtain feedback on how traditional use information has been presented in the draft TLRU sections (Sections 14 of Volumes 3A and 3B). In accordance with protocols established at the start of each workshop and in recognition of the proprietary nature of TLRU, written summaries of the workshop proceedings were completed by Alberta Transportation and provided to Samson Cree Nation for review and validation before incorporating any information into the EIS. As of March 16, 2018, the summary of the workshop had not been validated by Samson Cree Nation for use in updating the TLRU sections.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

14.8.12 Métis Nation of Alberta, Region 3

Métis Nation of Alberta undertakes current use activities including hunting, trapping, fishing, and habitation. The Project lies within Métis Nation of Alberta, Region 3. Métis Nation of Alberta, Region 3 expressed concern regarding Project effects on resources relied on for traditional purposes, and has indicated that the Project could affect sites and objects of cultural or historical importance, drinking water, and land use.

The Project is anticipated to result in a change in the availability of traditional resources for current use through alteration, reduction, or loss of habitat. Vegetation will be cleared from the PDA during construction. However, effects of the Project are not anticipated to result in the loss of traditionally used species in the LAA. Vegetation clearing associated with construction is expected to cause changes in habitat and mortality risk for birds. To manage these effects, appropriate setbacks would be applied to nests if construction during nesting season is unavoidable.

Habitat fragmentation would occur if wildlife, such as ungulates, choose not to cross the diversion channel. Overall, in the RAA, wildlife species richness and abundance are not expected to be influenced by habitat fragmentation. Sensory disturbance during construction are not anticipated to affect movement of ungulates and grizzly bears.

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 a CRA fishery. 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.

Access to the PDA would be restricted through fencing of the reservoir and other infrastructure. Although no current use sites or areas were identified by Métis Nation of Alberta, Region 3 in the PDA, access to potential traditional resources in the PDA would be restricted. If Elbow River is used by Métis Nation of Alberta, Region 3 for transportation, users would have to avoid the instream water intake components while traveling in the river.

Alberta Transportation and Métis Nation of Alberta, Region 3 held a workshop on February 22, 2018 to obtain feedback on how traditional use information has been presented in the draft TLRU sections (Sections 14 of Volumes 3A and 3B). In accordance with protocols established at the start of each workshop and in recognition of the proprietary nature of TLRU, written summaries of the workshop proceedings were completed by Alberta Transportation and provided to Métis Nation of Alberta, Region 3 for review and validation before incorporating any information into the EIS. As of March 16, 2018, the summary of the workshop had not been validated by Métis Nation of Alberta, Region 3 for use in updating the TLRU sections.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

14.8.13 Métis Nation British Columbia

Métis Nation British Columbia members undertake current use activities including hunting, fishing, and plant gathering. Métis Nation British Columbia noted that the Project could affect Métis land use in the Kootenay region, and water.

The Project is anticipated to result in a change in the availability of traditional resources for current use through alteration, reduction, or loss of habitat. Vegetation will be cleared from the PDA during construction. However, effects of the Project are not anticipated to result in the loss of traditionally used species in the LAA. Vegetation clearing associated with construction is expected to cause changes in habitat and mortality risk for birds. To manage these effects, appropriate setbacks would be applied to nests if construction during nesting season is unavoidable.

Habitat fragmentation would occur if wildlife, such as ungulates, choose not to cross the diversion channel. Overall, in the RAA, wildlife species richness and abundance are not expected to be influenced by habitat fragmentation. Sensory disturbance during construction are not anticipated to affect movement of ungulates and grizzly bears.

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 a CRA fishery. 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.

Access to the PDA would be restricted through fencing of the reservoir and other infrastructure. Although no current use sites or areas were identified by Métis Nation British Columbia in the PDA, access to potential traditional resources in the PDA would be restricted and any sites within the area of permanent structures would be removed. If Elbow River is used Métis Nation British Columbia for transportation, users would have to avoid the in-stream water intake components while traveling along in the river.

Alberta Transportation offered to hold a workshop to be held with Métis Nation British Columbia during February or March 2018 to obtain feedback on how traditional use information has been presented in the draft TLRU sections (Sections 14 of Volumes 3A and 3B). The intention was to validate the use of the traditional use information in the EIS and include any feedback received. As of March 16, 2018, Métis Nation British Columbia had not responded to Alberta Transportation's offer of a workshop.



Assessment of Potential Effects on Traditional Land and Resource Use March 2018

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Attachment A Information Sources March 2018

Attachment A INFORMATION SOURCES

This attachment describes secondary sources used for the existing conditions (section 14.2), including a rationale for inclusion.

Alberta Transportation provided Volume 3A, Section 14 and Volume 3B, Section 14 to Indigenous groups engaged on the Project for review and comment. Alberta Transportation offered to hold a workshop to be held with each Indigenous group during February or March 2018 to obtain feedback on how TLRU has been presented in the draft TLRU sections (Sections 14 of Volumes 3A and 3B), as well as obtain input on proposed mitigation measures, and discuss how Project-specific concerns have been addressed in the EIS. The intention was to validate the use of the traditional use information in the EIS and include any feedback received. Workshops were held 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).

Each workshop was facilitated by CEAA Project Managers and the structure and format for each workshop was developed in consultations with individual Indigenous groups. In accordance with protocols established at the start of each workshop and in recognition of the proprietary nature of TLRU, written summaries of the workshop proceedings were completed by Alberta Transportation and provided to each Indigenous group for review and validation before incorporating any information into the EIS. As of March 16, 2018, the summaries of the workshops had not been validated by Indigenous groups for use in updating the TLRU sections. As of March 16, 2018, the summaries of the workshops had not been validated by Indigenous groups had not been validated by Indigenous groups for use in updating the TLRU sections. Relevant TLRU information, concerns, and recommendations from workshops summaries validated and approved for use on the Project by Indigenous groups after the EIA has been filed 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.

A.1 EXISTING CONDITIONS: OVERVIEW OF INDIGENOUS GROUPS

The following sources were used to provide an overview of Indigenous groups engaged on the Project:

• ECN n.d.: History & Culture

This website provides information on Ermineskin history and culture. This source was used to provide background information for Ermineskin Cree Nation.



Attachment A Information Sources March 2018

• FOFN 2012: Duty to Consult the Foothills Ojibway First Nation with respect to the Coal Valley Resources Inc. Robb Trend Project & Coalspur Mines Ltd. Vista Coal Project

This letter was prepared by Foothills Ojibway and addressed to the Alberta Energy Resources Conservation Board regarding the Coal Valley Resources Inc. Robb Trend project and Coalspur Mines Ltd. Vista Coal Mine project; the projects are located near Robb, Alberta and Hinton, Alberta, respectively. This source was used to provide background information for Foothills Ojibway.

• FOFN 2016: Written Submissions to the Expert Panel on the Review of Environmental Assessment Processes

This written evidence was submitted by Foothills Ojibway to the Expert Panel on the Review of Environmental Assessment Processes. This source was used to provide background information for Foothills Ojibway, including information on the traditional territory.

• FPLMBC n.d.: Languages: Ktunaxa

This website presents information for the First Peoples Language Map of British Columbia which was initiated by First Peoples' Heritage, Language and Culture Council in 2005 with funding from the BC Ministry of Education. This source was used to provide background information for Ktunaxa Nation.

• Historica Canada 2016: Treaty 7

This encyclopedia summarizes cultural, ethnographic, and historical information about Indigenous groups of North America. This source was used to provide background information for Kainai First Nation, Pilkani Nation, Siksika Nation, and Tsuut'ina Nation.

• INACa, INACb, INACc, INACd, INACe, INACf, INACg, INACh, INACi, INACj, INACk, INACl, INACm, INACn, INACo: *First Nation Detail*

These website pages provide information from Indigenous and Northern Affairs Canada regarding each First Nation, such as registered population and reserves, and were used to provide background information for Indigenous groups engaged for the Project.

• KFN 2017: Blood Tribe – Kainai First Nation

This is the community website of Kainai First Nation, which describes governance and territory, and provides historical context. This source was used to provide background information for Kainai First Nation, including information on the traditional territory.



Attachment A Information Sources March 2018

• KN 2017: Community Website: Ktunaxa

This is the community website of Ktunaxa Nation, which describes governance and territory, and provides historical context. This source was used to provide background information for Ktunaxa Nation, including information on the traditional territory.

• KNC 2010: An Application by British Columbia Transmission Corporation for a Certificate of Public Convenience and Necessity for the Columbia Valley Transmission Project (Project No. 3698591): Written Evidence of the Ktunaxa Nation Council

This written evidence was submitted by Ktunaxa Nation regarding the Columbia Valley Transmission project, located from Invermere to Golden, British Columbia. This source was used to provide background information for Ktunaxa Nation, including information on the traditional territory.

• MFN n.d.: Welcome to Montana First Nation. Community website

This is the community website of Montana First Nation, which describes governance and provides historical context. This source was used to provide background information for Montana First Nation.

• MNA 2017: Métis Nation of Alberta

This is the website of Métis Nation of Alberta, which describes organizational structure, culture, and provides historical context. This source was used to provide background information for Métis Nation of Alberta, Region 3.

• MNBC 2017: Métis Nation British Columbia at a glance; Message from the President

This is the website of Métis Nation British Columbia, which describes organizational structure and provides historical context. This source was used to provide background information for Métis Nation British Columbia.

• OWW 2016: Bearspaw Band gets ready for polls

This is an article from a local newspaper. This source was used to provide background information for Stoney Nakoda Nations.



Attachment A Information Sources March 2018

• PN 2015: Application to Participate

This application was filed by Piikani Nation regarding the Energy East Pipeline project. The pipeline project area is located from Hardisty, Alberta to refineries in Québec and New Brunswick and a marine terminal in New Brunswick. This source was used to provide background information for Piikani Nation, including information on the traditional territory.

• PN 2017: Piikani Nation: A proud member of the Blackfoot Confederacy

This is the community website of Piikani Nation, which describes governance and provides historical context. This source was used to provide background information for Piikani Nation.

• Ponoka News 2014: Cree nations celebrate reclamation of Maskwacis name for their territory

This is an article from a local newspaper. This source was used to provide background information for Ermineskin Cree Nation, Louis Bull Tribe, Montana First Nation, and Samson Cree Nation.

• Ponoka News 2016: Maskwacis bands declare Cree official language of the reserve

This is an article from a local newspaper. This source was used to provide background information for Ermineskin Cree Nation, Louis Bull Tribe, Montana First Nation, and Samson Cree Nation.

 MNBC 2013: Métis Traditional Use Study: TransCanada Prince Rupert Gas Transmission Project. As cited in PRGT 2014: Prince Rupert Gas Transmission Project Section 33 Aboriginal Consultation Part C – Aboriginal Consultation Application for an Environmental Assessment Certificate

This traditional use study was cited in the regulatory application for the Prince Rupert Gas Transmission project, but not publicly available. This project is located from near Hudson's Hope to Lelu Island, British Columbia. This source was used to provide background information for Métis Nation British Columbia.

• RMN 2017: Community Website: Rocky Mountain Nakoda

This website provides community and linguistic information for the Rocky Mountain Nakoda. This source was used to provide background information for Stoney Nakoda Nations.



Attachment A Information Sources March 2018

• SCN 2009: Letter from Samson Cree Nation to Enbridge Northern Gateway Pipelines. Re: Proposed Northern Gateway Pipeline

This letter was prepared by Samson Cree Nation and addressed to Enbridge Northern Gateway Pipelines, regarding the Northern Gateway project; this project is located between Hardisty, Alberta and Kitimat, British Columbia. This source was used to provide background information for Samson Cree Nation, including information on the traditional territory.

• SCN 2013: Samson Cree Nation

This is the community website of Samson Cree Nation, which describes governance and provides historical context. This source was used to provide background information for Samson Cree Nation. It also provides information regarding the community name change for Ermineskin Cree Nation, Louis Bull Tribe, Montana First Nation and Samson Cree Nation.

• SIB 2014: Amended Statement of Claim, Court File Number 0301-19586

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.

• SN 2017: Siksika Nation

This is the community website of Siksika Nation, which describes governance and provides historical context. This source was used to provide background information for Siksika Nation.

• TN 2017: Tsuut'ina Nation Official Website

This is the community website of Tsuut'ina Nation, which describes governance and the community structure. This source was used to provide background information for Tsuut'ina Nation.



Attachment A Information Sources March 2018

A.2 EXISTING CONDITIONS: CURRENT USE BY INDIGENOUS GROUPS

In addition to information from the Indigenous engagement for the Project, including Projectspecific TUS studies, information was gathered through a review of publicly available literature containing TLRU information to deepen the understanding of current use by Indigenous groups engaged on the Project. As noted in Section 14.1.7, no specific TLRU information relative to the Project area was identified through review of publicly available sources. Consequently, information from projects located a considerable distance from the Project and for other types of developments, including pipelines and mines has been referenced to assist in understanding the nature of TLRU activities and practices undertaken by potentially affected Indigenous groups. This secondary source information has been used. The following sources provided information used to describe existing conditions for the availability of traditional resources, access to traditional resources or sites, and current use sites or areas to complement Projectspecific TLRU information obtained through the Indigenous engagement program for the project, including TUS studies (where permission for use has been granted):

• AMEC 2009: Kainai First Nation Traditional Land Use and Occupancy Study Summary report for the Montana Alberta Tie Ltd. International Power Line Project

This traditional land use and occupancy study was submitted by Kainai First Nation in the context of the regulatory application for the Montana Alberta Tie Ltd. International Power Line project. The transmission line is located between northeast of Lethbridge, Alberta and Great Falls, Montana. This source was consulted to complement information from the Project-specific TUS study and the Indigenous engagement program for the Project about existing conditions for Kainai First Nation. Specifically, this source was consulted to identify general traditional use practices, specific resources used by Kainai First Nation, and environmental features related to TLRU as well as sites and areas. It was also consulted for consideration of relevant concerns raised on other development projects.

• AMEC 2010: Piikani First Nation Traditional Land Use and Occupancy Study Supplemental Environmental Impact Assessment for the Montana Alberta TIE LTD. International Power Line Project

This traditional land use and occupancy study was submitted by Piikani Nation in the context of the regulatory application for the Montana Alberta Tie Ltd. International Power Line project. The transmission line is located between northeast of Lethbridge, Alberta and Great Falls, Montana. This source was consulted to complement information from the Project-specific TUS study and the Indigenous engagement program for the Project about existing conditions for Piikani Nation. Specifically, this source was consulted to identify general traditional use practices, specific resources used by Piikani Nation, and environmental features related to TLRU as well as sites and areas.



Attachment A Information Sources March 2018

• Dempsey 2001: "Sarcee" In Handbook of North American Indians. Volume 13. Plains

This encyclopedia summarizes cultural, ethnographic, and historical information about Indigenous groups of North America. This source was consulted to complement information from the Indigenous engagement program for the Project about existing conditions for Tsuut'ina Nation. Specifically, this source was consulted to identify traditional resources used by Tsuut'ina Nation.

• ECN 2011: Ermineskin Cree Nation written evidence submitted to the Enbridge Northern Gateway Project

This written evidence was submitted by Ermineskin Cree Nation to the Enbridge Northern Gateway project Joint Review Panel. The study area is located between Bruderheim, Alberta and Kitimat, British Columbia. This source was consulted to complement information from the Indigenous engagement program for the Project about existing conditions for Ermineskin Cree Nation. Specifically, this source was consulted to identify traditional resources used by Ermineskin Cree Nation.

• EEP 2016: Energy East Project Consolidated Application Environmental and Socio-economic Assessment Volume 25, Binder 2: Mitigation Tables—Prairies Region Traditional Land and Resource Use Information and Mitigation Tables Métis Nation of Alberta Region 3.

This post-application filing was prepared for Energy East Pipelines Ltd. regarding the Energy East Pipeline project, based on a traditional land use study by Métis Nation of Alberta, Region 3 in the context of this project that is not available publicly. The project is located from Hardisty, Alberta to refineries in Québec and New Brunswick and a marine terminal in New Brunswick. This source was consulted to complement information from the Indigenous engagement program for the Project about existing conditions for Métis Nation of Alberta, Region 3. Specifically, this source was consulted to identify traditional resources used by Métis Nation of Alberta, Region 3 and environmental features related to TLRU.

• Galileo 2010: Wild and Free

This website is informed in part by Stoney Nakoda Nations knowledge holders. This source was consulted to complement information from the Indigenous engagement program for the Project about existing conditions for Stoney Nakoda Nations. Specifically, this source was consulted to describe travel by Stoney Nakoda Nations.



Attachment A Information Sources March 2018

• Hannis 2006: On the Edge of Change: Shifting Land Use in the Piikani Timber Limit, Porcupine Hills, Alberta

This is a Masters Thesis from Simon Fraser University describing land use changes in the context of the establishment of Piikani Timber Limit (IR 147B). This source was consulted to complement information from the Project-specific TUS study and the Indigenous engagement program for the Project about existing conditions for Piikani Nation. Specifically, this source was consulted to identify Piikani Nation traditional practices.

• LBT 2011: Louis Bull Tribe written evidence submitted to the Enbridge Northern Gateway Project

This written evidence was submitted by Louis Bull Tribe to the Enbridge Northern Gateway project Joint Review Panel; the project is located between Bruderheim, Alberta and Kitimat, British Columbia. This source was consulted to complement information from the Indigenous engagement program for the Project about existing conditions for Louis Bull Tribe. Specifically, this source was consulted to identify traditional resources used by Louis Bull Tribe.

• Lifeways 2008: First Nations Consultation and Traditional Use Studies

This report was prepared for Coal Valley Resources Inc. for the Coal Valley Mine Extensions project; the project is located in west-central Alberta, near Edson. This source was consulted to complement information from the Indigenous engagement program for the Project about existing conditions for Ermineskin Cree Nation and Foothills Ojibway. Specifically, this source was consulted to identify environmental features related traditional resources and traditional resources used by Ermineskin Cree Nation and Foothills Ojibway.

• Lifeways 2012: Aboriginal Consultation, Traditional Ecological Knowledge and Land Use

This report was prepared for Coalspur Mines Ltd. for the Vista Coal Mine project; the project is located near Hinton, Alberta. This source was consulted to complement information from the Indigenous engagement program for the Project about existing conditions for Ermineskin Cree Nation and Foothills Ojibway. Specifically, this source was consulted to identify traditional resources used by Ermineskin Cree Nation and Foothills Ojibway.



Attachment A Information Sources March 2018

• Lower Kootenay Band 2015 (reference not provided) as cited in Riversdale 2015: *Benga Mining Limited, Grassy Mountain Coal Project. Section H: Aboriginal Communities Consultation and Assessment*

This source was cited in the regulatory application for the Grassy Mountain Coal Project, located in Crowsnest Pass, but is not publicly available. Indigenous groups engaged for the Grassy Mountain Coal Project included Kainai First Nation, Pilkani Nation, Siksika Nation, Stoney Nakoda Nations, Tsuut'ina Nation, Samson Cree Nation, Foothills Ojibway First Nation, Ktunaxa Nation, Métis Nation of Alberta and Métis Nation British Columbia. This source was consulted to complement information from Project-specific TUS studies and the Indigenous engagement program for the Project about existing conditions for Indigenous groups engaged on the Project. Specifically, this source was consulted to provide an overview of traditional land and resource use by Indigenous groups engaged on the Project.

• MFN 2011: Montana First Nation written evidence submitted to the Enbridge Northern Gateway Project

This written evidence was submitted by Montana First Nation to the Enbridge Northern Gateway project Joint Review Panel. The project is located between Bruderheim, Alberta and Kitimat, British Columbia. This source was consulted to complement information from the Indigenous engagement program for the Project about existing conditions for Montana First Nation. Specifically, this source was consulted to identify traditional resources used by Montana First Nation.

• MLT 2011: Eastern Alberta DC Transmission Line Application Samson Cree Nation Affidavits

These affidavits were submitted by Samson Cree Nation to the Alberta Utilities Commission regarding the Eastern Alberta DC Transmission Line, located from northeast of Edmonton to southeast of Calgary, Alberta. This source was consulted to complement information from the Indigenous engagement program for the Project about existing conditions for Samson Cree Nation. Specifically, this source was consulted to identify general traditional land and resources, specific traditional resources, and relevant concerns raised on other development projects by Samson Cree Nation.



Attachment A Information Sources March 2018

 MNBC 2013: Métis Traditional Use Study: TransCanada Prince Rupert Gas Transmission Project. As cited in PRGT 2014: Prince Rupert Gas Transmission Project Section 33 Aboriginal Consultation Part C – Aboriginal Consultation Application for an Environmental Assessment Certificate

This traditional use study is cited in the regulatory application for the Prince Rupert Gas Transmission project. This project is located from near Hudson's Hope to Lelu Island, British Columbia. This source was consulted to complement information from the Indigenous engagement program for the Project about existing conditions for Métis Nation British Columbia. Specifically, this source was consulted to identify general traditional land and resource use and traditional resources used by Métis Nation British Columbia.

• Parlee 2011: Traditional Knowledge Overview for the Athabasca River Watershed

This document was prepared for the Athabasca Watershed Council using publicly-available traditional knowledge information relevant to the Athabasca River watershed area as well as input from Indigenous representatives on the council. This source was consulted to complement information from the Indigenous engagement program for the Project about existing conditions for Stoney Nakoda Nations. Specifically, this source was consulted to identify traditional resources used by Stoney Nakoda Nations.

• PN 2015: Piikani Nation Energy East Project Oral Traditional Evidence

This oral traditional evidence was presented by Piikani Nation for Energy East Pipelines Ltd. regarding the Energy East Pipeline project. The pipeline project area is located from Hardisty, Alberta to refineries in Québec and New Brunswick and a marine terminal in New Brunswick. This source was consulted to complement information from the Project-specific TUS study and the Indigenous engagement program for the Project about existing conditions for Piikani Nation. Specifically, this source was consulted to identify environmental features related to sites and areas reported by Piikani Nation.



Attachment A Information Sources March 2018

• Riversdale 2015: Benga Mining Limited. Grassy Mountain Coal Project, Section H: Aboriginal C Communities Consultation and Assessment

This is part of the regulatory application for the Grassy Mountain Coal Project, located in Crowsnest Pass. Indigenous groups engaged for the Grassy Mountain Coal Project included Kainai First Nation, Piikani Nation, Siksika Nation, Stoney Nakoda Nations, Tsuut'ina Nation, Samson Cree Nation, Foothills Ojibway First Nation, Ktunaxa Nation, Métis Nation of Alberta, and Métis Nation British Columbia. This source was consulted to complement information from Project-specific TUS studies and the Indigenous engagement program for the Project about existing conditions for Indigenous groups engaged on the Project. Specifically, this source was consulted to identify general traditional use practices, traditional resources used, travel, sites and areas, environmental features related to TLRU, and relevant concerns raised on other development project by Indigenous groups engaged on the Project.

• SCFNET 2013: Site C Clean Energy Project Volume 5 Appendix A17 Part 4 Aboriginal Summary: Métis Nation British Columbia Final Report

This final report was prepared for BC Hydro Power and Authority's Site C Clean Energy Project; the project is located along the Peace River, in northeastern British Columbia. This source was consulted to complement information from the Indigenous engagement program for the Project about existing conditions for Métis Nation British Columbia. Specifically, this source was consulted to identify relevant concerns raised by Métis Nation British Columbia on other development projects.

• SCN 2012a: Oral statement at public hearing for the Enbridge NGP, Northern Gateway Pipelines Inc. Hearing Order OH-4-2011. Joint Review Panel Hearings. Samson Cree Nation.

This oral evidence was presented by Samson Cree Nation to the Enbridge Northern Gateway project Joint Review Panel. The study area is located between Bruderheim, Alberta and Kitimat, British Columbia. This source was consulted to complement information from the Indigenous engagement program for the Project about existing conditions for Samson Cree Nation. Specifically, this source was consulted to identify general traditional use practices, traditional resources used, sites and areas, environmental features and contextual information related to TLRU, as well as relevant concerns raised on other development project by Samson Cree Nation.



Attachment A Information Sources March 2018

• SCN 2012b: Written evidence submitted to the Enbridge Northern Gateway Project, Northern Pipelines Inc. Samson Cree Nation. Hearing Order OH-4-2011. D183-2-06 (A2K2J7).

This written evidence was submitted by Samson Cree Nation to the Enbridge Northern Gateway project Joint Review Panel. The study area is located between Bruderheim, Alberta and Kitimat, British Columbia. This source was consulted to complement information from the Indigenous engagement program for the Project about existing conditions for Samson Cree Nation. Specifically, this source was consulted to identify traditional resources used by Samson Cree Nation.

• SCN 2014: National Energy Board Hearing Order OH-001-2014: Volume 3, Oral Presentations: Samson Cree Nation.

This oral evidence was presented by Samson Cree Nation to the NEB regarding the Trans Mountain Expansion project. The project is located between Strathcona County near Edmonton, Alberta and Burnaby, British Columbia. This source was consulted to complement information from the Indigenous engagement program for the Project about existing conditions for Samson Cree Nation. Specifically, this source was consulted to describe environmental features related to TLRU and provide contextual information regarding the availability of resources and access for current use, as well as relevant concerns raised on other development project by Samson Cree Nation.

• SCN 2015a: Interim Report for Samson Cree Nation's (SCN) Traditional Land Use Study for Kinder Morgan's Trans Mountain Expansion Project (TMEP)

This traditional land use study was submitted by Samson Cree Nation for the Trans Mountain Expansion project; the project is located between Strathcona County near Edmonton, Alberta and Burnaby, British Columbia. This source was consulted to complement information from the Indigenous engagement program for the Project about existing conditions for Samson Cree Nation. Specifically, this source was consulted to identify general traditional use practices, traditional resources used, sites and areas, environmental features and contextual information related to TLRU, as well as relevant concerns raised on other development project by Samson Cree Nation.



Attachment A Information Sources March 2018

• SCN 2015b: Samson Cree Nation Written Evidence for the 2017 NGTL System Expansion Project

This written evidence was submitted by Samson Cree Nation regarding the NOVA Gas Transmission Ltd 2017 NGTL System Expansion project. The project components are located north of Edmonton, Alberta. This source was consulted to complement information from the Indigenous engagement program for the Project about existing conditions for Samson Cree Nation. Specifically, this source was consulted to provide contextual information regarding the availability of traditional, as well as identify relevant concerns raised on other development project by Samson Cree Nation.

• SCN 2015c: National Energy Board Hearing Order GH-002-2015 NOVA Gas Transmission Ltd. Volume 3: Samson Cree Nation Oral Traditional Evidence.

This oral evidence was presented by Samson Cree Nation to the NEB regarding the NOVA Gas Transmission Ltd 2017 NGTL System Expansion project. The project components are located north of Edmonton, Alberta. This source was consulted to complement information from the Indigenous engagement program for the Project about existing conditions for Samson Cree Nation. Specifically, this source was consulted to identify environmental features related to TLRU and provide contextual information regarding the availability of resources and access for current use by Samson Cree Nation.

• SCN 2015d: Energy East Pipeline Ltd. Energy East Project and Asset Transfer Volume 10. Oral Traditional Evidence (NEB Exhibit No. A74690-1; NEB Filing ID A4W5W7).

This oral traditional evidence was presented by Samson Cree Nation to the National Energy Board in the context of the Energy East Pipeline project. The project is located from Hardisty, Alberta to refineries in Québec and New Brunswick and a marine terminal in New Brunswick. This source was consulted to complement information from the Indigenous engagement program for the Project about existing conditions for Samson Cree Nation. Specifically, this source was consulted to identify general TLRU, environmental features related to TLRU, provide contextual information regarding the availability of resources and access for current use, and describe relevant concerns raised on other development projects by Samson Cree Nation.



Attachment A Information Sources March 2018

• Snow 1977: These Mountains are our Sacred Places: The Story of the Stoney Indians. As cited in Parlee 2011: Traditional Knowledge Overview for the Athabasca River Watershed

This source was cited in a document was prepared for the Athabasca Watershed Council using publicly-available traditional knowledge information relevant to the Athabasca River watershed area as well as input from Indigenous representatives on the council. This source was consulted to complement information from the Indigenous engagement program for the Project about existing conditions for Stoney Nakoda Nations. Specifically, this source was consulted to identify traditional resources used by Stoney Nakoda Nations and provide contextual information on the availability of traditional resources.

• SNN n.d. Stoney Nakoda Nations Cultural Assessment for the "Enhancing grizzly bear management programs through the inclusion of cultural monitoring and traditional ecological knowledge."

This is a proposed grizzly bear management program prepared by Stoney Nakoda Nations for the Kananaskis area. This source was consulted to complement information from the Indigenous engagement program for the Project about existing conditions for Stoney Nakoda Nations.

• TCS 2013: Site C Clean Energy Project Volume 5 Appendix A17 Part 3 Aboriginal Land and Resource Use Summary: Métis Nation British Columbia Final Report

This final report was prepared for BC Hydro Power and Authority's Site C Clean Energy Project; the project is located along the Peace River, in northeastern British Columbia. This source was consulted to complement information from the Indigenous engagement program for the Project about existing conditions for Métis Nation British Columbia. Specifically, this source was consulted to identify general TLRU and traditional resources used by Métis Nation British Columbia.

• TERA 2015: Traditional Land Use Study Report for the Proposed Trans Mountain Pipeline ULC. Trans Mountain Expansion Project for the Community of: Montana First Nation

This traditional land use study was submitted by Montana First Nation for the Trans Mountain Expansion project; the project is located between Strathcona County near Edmonton, Alberta and Burnaby, British Columbia. This source was consulted to complement information from the Indigenous engagement program for the Project about existing conditions for Montana First Nation. Specifically, this source was consulted to identify general traditional use practices, traditional resources used, sites and areas, environmental features and contextual information related to TLRU, as well as relevant concerns raised on other development project by Montana First Nation.



Attachment A Information Sources March 2018

• TMP 2013: Trans Mountain Expansion Project. Volume 5D: Socio-economic Technical Reports: Traditional Land and Resource Use Technical Report

These technical reports, compiled through TLRU studies, were submitted to Trans Mountain Pipeline ULC for the Trans Mountain Expansion project; the project is located between Edmonton and Hinton, Alberta. This source was consulted to complement information from the Indigenous engagement program for the Project about existing conditions for Ermineskin Cree Nation, Montana First Nation, and Samson Cree Nation. Specifically, this source was consulted to identify general traditional use practices, traditional resources used, trails and travel, environmental features and contextual information related to TLRU, as well as relevant concerns raised on other development project by Ermineskin Cree Nation, Montana First Nation, and Samson Cree Nation.

• TN 2013: Presentation to Standing Committee on Aboriginal Affairs and Northern Development

This presentation was submitted by Tsuut'ina Nation to the Standing Committee on Aboriginal Affairs and Northern Development regarding Bill S-8: *Safe Drinking Water for First Nations Act.* This source was consulted to complement information from the Indigenous engagement program for the Project about existing conditions for Tsuut'ina Nation. Specifically, this source was consulted to identify Tsuut'ina Nation traditional resources, as well as sites and areas.

