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1	NATURAL RECOURCES CONCERVATION ROADS
2	NATURAL RESOURCES CONSERVATION BOARD
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7	Application No. 1701
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10	SPRINGBANK OFF-STREAM RESERVOIR PROJECT
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15	PROCEEDINGS
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17	
18	Volume 1
19	March 22, 2021
20	(Morning Session)
21	(Via videoconferencing)
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1	Natural Resources Conservatio	n Board Proceedings taken
2	virtually in Calgary and Edmo	nton, Alberta.
3		
4	Volume 1 - Morning Session	
5	March 22, 2021	
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7		
8	Peter Woloshyn Sandi Roberts	Chair Commission Member
9	Walter Ceroici Daniel Heaney	Commission Member Commission Member
10	William Kennedy	Commission Counsel
11	Fiona Vance	Commission Counsel
12	Laura Friend Michael Iwanyshyn	Commission Staff Commission Staff
13	Scott Cunningham Stephanie Fleck	Commission Staff Commission Staff
14	Carina Weisbach Sylvia Kaminski	Commission Staff Commission Staff
15	Nora Decosemo Justin Wiebe	Commission Staff MNP Technologies
16	B	
17	Ron Kruhlak, Q.C. Gavin Fitch, Q.C.	For Alberta Transportation
18	Michael Barbero	
19	Melissa Senek Sara Munkittrick	For City of Calgary
20	David Mercer	
21	Luigi Cusano, Q.C. Gino Bruni	For Calgary River Communities Action Group and Flood Free Calgary
22	I Douglas Das	
23	L. Douglas Rae Sara Louden	For Stoney Nakoda Nation
24		
25		



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1 2	Richard Secord Ifeoma Okoye	For SR1 Concerned Landowners Group	
3	Bob Williams	For Calalta Amusements Ltd. and Calalta Waterworks Ltd.	
4	Scott Wagner	For Scott Wagner	
5	Lorelee Vespa CSR(A) CRR RPR	Official Court Reporters	
6	Deanna DiPaolo, CSR(A)	·	
7			
8	(PROCEEDINGS COMMENCED AT 8:5	59 A.M.)	
9	THE CHAIR: So,	good morning, everyone, and	
10	welcome.		09:00
11	My name is Peter Wo	loshyn, and I'll be chairing	
12	the Panel for NRCB's rev	iew of SR1, and the hearing is	
13	with respect to NRCB App	lication Number 1701 filed by	
14	Alberta Transportation f	or its proposed off-stream	
15	reservoir project.		
16	Now in advance of t	he hearing today, you will note	
17	that we have held a pre-	hearing conference on	
18	December 2, 2020, and we	issued that decision report on	
19	December 10th.		
20	We also issued noti	ce of this hearing	09:00
21	December 21st, 2020, and	that notice appearing was	
22	published in various new	spapers and periodicals in	
23	Alberta.		
24	We also held a pre-	hearing to decide on the	
25	Stoney Nakoda Nations Ja	nuary 20th, 2021, application	



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1		for adjournment and	issued that decision on	
2		February 9th of thi	s year.	
3		So, before pro	ceeding further, I would like to	
4		introduce the NRCB	Panel and NRCB staff that are here	
5		to support the Pane	1.	
6		The Panel memb	ers are Walter Ceroici, and I think	
7		we've got folks now	up on the screen.	
8		So Walter, if	you could wave.	
9	MR.	CEROICI:	I'm not yeah, I'm not on the	
10		screen yet.		09:01
11	MR.	WIEBE:	There you go. Because when he	
12		talks, then he gets	put to the front there. So now I	
13		can pin him.		
14	THE	CHAIR:	So if you can say "hello," that	
15		would be great.		
16	MR.	WIEBE:	There we go.	
17	THE	CHAIR:	Look at that.	
18	MR.	CEROICI:	Morning, everyone.	
19	THE	CHAIR:	Thanks, Walter.	
20		And Sandi Robe	rts.	09:01
21	MS.	ROBERTS:	Good morning.	
22	THE	CHAIR:	Dan Heaney.	
23	MR.	HEANEY:	Morning, everyone.	
24	THE	CHAIR:	And, of course, myself already,	
25		Peter Woloshyn.		
				1



So the Panel does have our bios up on the Web, and I'd encourage you to have a peek at those if you haven't already done so.

I would say, though, that the Panel has expertise in engineering, resource economics, econometrics, agriculture, hydrology, hydrogeology, agronomy, and soil chemistry, and I'm just thrilled to work with the Panel on this project, including the hearing.

The Panel members will all have the same background as I have, so you can see that on screen now, to make it easier for you to identify so that if the Zoom panels get moved around, you're trying to find somebody, that will make it a bit easier to find the Panel.

And the staff have, NRCB is slightly different, but the beige background, so Bill and Fiona will have that. And we'll keep that on, those backgrounds, throughout the duration of the hearing.

So now our counsel staff are Bill Kennedy, so Bill, if you could give a wave, there you are, which many of you will be familiar. So Bill has been with the Board since 1991, and I believe has not missed an NRCB Act hearing with the Board. We're just thrilled to have him, obviously.

And Ms. Vance.



09:02

1	MS.	VANCE:	Good morning.	
2	THE	CHAIR:	Good morning.	
3		Laur	a Friend, who you've been corresponding with,	
4		is our ma	nager of Board reviews and your key contact if	
5		you do ha	ve any issues, and we'll get to those numbers	
6		in a minu	te.	
7		And,	Laura, I don't know if you have got your	
8		camera or	or not being in charge here.	
9	MS.	FRIEND:	I'm right here.	
10	THE	CHAIR:	Ah, there you go. Good. Perfect.	09:03
11		So,	Laura Friend.	
12		And	we do have a number of environmental technical	
13		specialis	ts that work with the Board that provide the	
14		Panel sup	port with the <i>NRCB Act</i> projects.	
15		We h	ave Mike Iwanyshyn.	
16	MR.	IWANYSHYN	: Good morning.	
17	THE	CHAIR:	And Scott Cunningham.	
18	MR.	CUNNINGHA	1: Morning.	
19	THE	CHAIR:	Stephanie Fleck.	
20	MS.	FLECK:	Morning.	09:03
21	THE	CHAIR:	And Carina Weisbach.	
22	MS.	WEISBACH:	Good morning.	
23	THE	CHAIR:	And we also have a number of	
24		support s	taff from the NRCB that will be working in the	
25		backgrour	d to do our virtual on-screen management.	



1		Ī
1	This morning we have Sylvia Kaminski, and this	
2	afternoon, we'll have Nora Decosemo. So those folks	
3	will be doing document management, getting stuff up on	
4	the screens for us as quickly as we can throughout the	
5	coming weeks.	
6	And, finally, our court reporters, Lorelee Vespa	
7	and Deanna DiPaolo.	
8	And who do we have on this morning?	
9	THE COURT REPORTER: It's Lorelee Vespa.	
10	THE CHAIR: Lorelee, thank you.	09:04
11	And, Lorelee, if there's any issue with you being	
12	able to hear and get your reporting done, I guess we'll	
13	just expect you to, and hope that you, unmute and just	
14	speak up, and we'll see if we can get that rectified on	
15	the fly.	
16	And, Justin, Mr. Wiebe, has been arranging us this	
17	morning, so I'd like to take the opportunity to thank	
18	our Zoom host, MNP, who also provide NRCB's IT	
19	services. They'll be overseeing all the technical	
20	matters related to the virtual hearing. And Justin	09:05
21	will be with us throughout the duration of the hearing	
22	to manage the Zoom technical aspects of the hearing.	
23	So if you haven't already, grab a pen. If you do	
24	run into issues during the hearing, you can phone	
25	Justin at (780) 424-6398, and hit extension 345. And	



his email is justin, J-U-S-T-I-N, wiebe, W-I-E-B-E, @mnp.ca.

Now, I would like to take this opportunity to acknowledge the traditional territories of which the project and so many of you are located in around the Calgary area.

We recognize that the City of Calgary and the Springbank area are the traditional territories of the Treaty 7 Peoples, including the Siksika, Piikani, Kainai, Nations of the Blackfoot Confederacy. We also have the Tsuut'ina Nation and the Iyarhe Nakoda, including the Chiniki, Bearspaw, and Wesley First Nations.

The City of Calgary is also home to the Métis Nation of Alberta Region III, situated on lands adjacent to where the Bow River meets the Elbow River for which the Blackfoot name is Moh'kinstsis; and the Nakoda, Wichispa Oyade; and in Tsuut'ina, Guts'ists'i.

So we're grateful for the traditional Knowledge Keepers and Elders who are still with us today and those who have gone before us, and we make this acknowledgement as an act of reconciliation and gratitude to those whose territory we reside on or are visiting.

So this is now the third virtual hearing that the

09:06



NRCB has conducted and, with the assistance of MNP, we're hopeful that the proceeding will come off without a glitch.

However, it's entirely possible that technology gets in our way a little bit, and it might be on our end, or it may be on your end, and we might have the odd interruption. But we ask that we're patient, that we get through the coming days, especially the early days as we get everything ironed out, and we'll stay focused on the work that we have today.

09:07

A list of registered participants, or participants that will register later, has been posted on the website.

And, as well, the NRCB has provided a YouTube link on its website for members of the public to observe these proceedings.

Members of the media are asked to direct any questions about the NRCB, or this review process, to Janet Harvey, our NRCB communications specialist, and she can be reached at janet.harvey, H-A-R-V-E-Y, @nrcb.ca, or you can reach Janet by way of phone at (780) 720-2317.

09:08

Now, I'd just like to make a quick note about Panel conduct during the hearing. Conducting hearings using virtual technology has its challenges, for sure,



and one of those challenges is organizing the screens, keyboards, notebooks, your web camera and microphones, and Panel members are using multiple screens, and they'll be taking notes throughout the proceedings.

So, at times, it may appear that one of us is not being attentive, but please know that this is not the case. When reviewing documents or taking some notes, we may need to be looking at another screen or perhaps down taking some notes, but it doesn't mean that we're not paying attention to everything that's being said.

09:09

I've known these Panel members for many years, and I can assure you that they're well-prepared, eager to hear from each one of you, and we look forward to getting that going as soon as possible, obviously this afternoon and this morning.

Now, if you or your clients are trying to find the YouTube link or related documents for the session, we will have document management up on screen, but there is two ways to look at the proceedings and documents: One is through YouTube if you want to watch the proceedings, and you go to our NRCB home web page and there's a green box with "Springbank Off-Stream Reservoir Project Public Hearing." You click on that and that will take you to a spot where you can choose either "YouTube" or "Documents."



And if you press on "YouTube," clearly, it will take you to a YouTube link, but if you want to have a look at -- or get into exhibits or documents, those too are accessed on that page on a document link to our SR1 exhibit list. They're listed chronologically. You can sort them any way you like. You've probably been up there already, but it is a pretty efficient system. So if you need something that we're not displaying at the time, you can easily access them on the website.

Now, each document related to the proceeding has been assigned an exhibit number, and it's been posted on the website along with our current exhibit list.

Any new exhibits entered today, and into the future, will be numbered sequentially and we would ask parties to provide a short description at the time the request is made to have a new exhibit numbered -- or entered, sorry -- and then email that document to Laura Friend.

I also ask that parties, when requesting a document to be shown up on shared screen, if you can give the exhibit number so our folks doing the document management will be using exhibit numbers and the PDF page number of the document. That will allow them to get the document up quickly and get it to the spot in the document that you want us to pay attention to.

And provided presentation aid documents such as

09:10



PowerPoint presentations, same thing, provide the exhibit number and document name that you provided and we'll get that up as well. I know that we've got some videos and some PowerPoints throughout the session. Those may take a couple more minutes to load, but we have tested them and they seem to work fine.

So Panel members and myself and Mr. Kennedy and Ms. Vance will keep our video on during the length of the hearing with the backgrounds that we've been showing today.

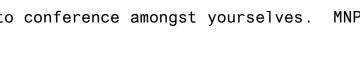
09:11

09:12

The hearing is being transcribed, and the transcripts will be posted later in the day, it depends on the length of the day that we have, I suppose, but they will be posted, as far as I understand, at the end of the day, or before at least midnight. And I think, after we get rolling, we'll have an idea of how quickly they can get those up for you to refer to if you need them for the following day.

Laura Friend will inform you of any issues and, if necessary, I'll temporarily suspend the hearing just so we can provide the participant a chance to restore connections and that sort of thing. I've given you those numbers if you do have any issues already.

And I do recognize that there may instances where parties may wish to conference amongst yourselves. MNP





has set up secure Zoom breakout rooms for you, and I think Ms. Friend has already contacted most parties to see if you wanted those set up. If so, if they're already set up and you've learned how to use them, please contact Ms. Friend for instructions on how to access and use those private and secure Zoom links.

First technical glitch is here. Sorry about that.

The Board's pre-hearing report indicated that we expected the hearing would last ten days, but we did ask that you reserve the entire week of April 5th in the event that more time is required.

09:13

We canvassed all parties, and we granted requests by all parties for the time that they requested for both direct and cross-examination time. But in order to accommodate the parties' time requests, it appears that we may need to sit beyond the ten days and go into that week of April 5th. But I would say that given that the Panel has granted all time requests made by parties, we would expect that parties respect the time allotment that was requested and was approved.

09:13

Now, in an effort to get the hearing completed by April 9th, Friday, April 9th, we will begin future hearings days at 8:30. So, this morning, we started at 9; I think we had a recurring Zoom meeting invite for 9:00. That will be re-sent to you, if it hasn't



already been sent, it will be re-sent for 8:30. That will give us another half an hour. But we would still -- per day, but we would still need you to begin signing in 45 minutes ahead. It worked really well this morning, so we'll do that again. So if you can get signed in, you can have your video and microphone off, but at least it gives Mr. Wiebe time to get everybody up and running on the Zoom.

For the most part, we're hoping that we'll adjourn at 5 p.m. every day, but we may need to sit longer on some days if required or depending on where we're finishing off for that day. And if parties are willing and able, if it just gets through it, subject needs another half an hour as an example, we'll just carry on and complete at 5:30, but right now, we're scheduled for 8:30 to 5.

Now, we all need some breaks. We're going to be stuck in front of these monitors and in a chair all day, but that's a hearing. But we do need some breaks, and we will do that throughout the day. We'll try to make them coincide with some natural breaks in the testimony.

Whenever possible, I'll try to have an hour for lunch, and I'll try to have that break around noon.

But, again, that will depend a little bit in terms of

09:14



where we are in the proceeding.

We do expect that you'll return from breaks at the designated time. We won't have a roll call. So when we break, we'll have a start time, and we will commence the hearing at that start time. And when we do break, please leave your virtual hearing connection up and running. You can -- or please remember to mute, and you can turn or have your video off, but keep your connection live during breaks.

And a quick note on submissions, all Panel members have read and are familiar with the documents that the parties have submitted. Given this, there's no need for you to re-read into the record the materials that you've already submitted. In order to make the best use of your time, we suggest that parties use that presentation time to highlight and clarify the important points that are relevant to your written submissions.

We had a couple of changes in participation at the hearing. Under the NRCB Act, as you know, the Board must give parties it believes to be directly affected by the project an opportunity to request funding and participate fully in the hearing.

In our December 10th pre-hearing conference decision, the Panel determined which parties were

09:15



1	gr	anted standing. Now, four of those parties have	
2	si	nce withdrawn from the review: These are Ermineskin	
3	Cr	ee Nation, the Blood Tribe and Kainai, Kyle Keith,	
4	an	d James Cran.	
5		In our February 9th decision, the Panel later had	
6	gr	anted standing to Stoney Nakoda Nations, and the	
7	Во	ard has also accepted several written submissions	
8	fr	om parties that were found not to be directly	
9	af	fected.	
10		So I'd like to formally now register participants.	17
11	So	when I call your name, if you could turn on your	
12	mi	crophone and your camera, indicate your presence and	
13	an	yone in the room that you require to be registered at	
14	th	is time, and we can refer to the order of proceedings	
15	fo	r that.	
16		So I'll start with Alberta Transportation.	
17		Mr. Kruhlak.	
18	MR. SE	CORD: Ron, there's no audio.	
19	THE CH	AIR: Yeah, I was looking	
20	MR. FI	TCH: Mr. Chair, it's Gavin Fitch. Can 09:	18
21	yo	u hear me?	
22	THE CH	AIR: Yes.	
23	MR. FI	TCH: Okay. So that's interesting.	
24	Wa	nt to try again, Ron?	
25		Well, I'll do the introductions, then, for	



1	Alberta Transportation.	
2	Mr. Chair, my name is Gavin Fitch with the	
3	McLennan Ross law firm. With my partner Ron Kruhlak	
4	and our other partner Michael Barbero, we will be	
5	representing Alberta Transportation in this proceeding.	
6	Thank you.	
7	THE CHAIR: Thank you. And court reporter,	
8	can you hear everybody clearly?	
9	THE COURT REPORTER: Yes. Thank you.	
10	THE CHAIR: Okay, perfect.	09:19
11	Thank you, Mr. Fitch.	
12	City of Calgary, Ms. Senek?	
13	MS. SENEK: Yes, good morning, Mr. Chair and	
14	Board. It's Melissa Senek, counsel for the City of	
15	Calgary. My colleagues David Mercer and	
16	Sara Munkittrick are also here with me today, and our	
17	witness Frank Frigo as well.	
18	THE CHAIR: Thank you.	
19	And just a quick note and I can hear everybody	
20	clearly and I was going to mention this, but,	09:19
21	obviously, we are I mentioned we're creating	
22	transcripts, we've got the court reporter online, so if	
23	you can speak pretty loudly and clearly and not too	
24	quickly, it's really helpful for the court reporter,	
25	obviously.	



1		So the Calgary River Communities Action Group and	
2		Flood Free Calgary. Mr. Cusano.	
3	MR.	CUSANO: Yes. Good morning, sir, and Board	
4		members. My name is Lou Cusano and, from time to time,	
5		I'll be joined by my colleague Mr. Gino Bruni. We are	
6		with the Torys Law Firm and are counsel to the Calgary	
7		River Communities Action Group and Flood Free Calgary.	
8	THE	CHAIR: Thank you.	
9	MR.	CUSANO: Thank you, sir.	
10	THE	CHAIR: Stoney Nakoda Nations. Mr. Rae.	09:20
11	MR.	RAE: Thank you, Mr. Chairman. It's	
12		Douglas Rae, and I'll be joined throughout the hearing	
13		by my colleague Ms. Sara Louden.	
14		We do represent the Stoney Nakoda Nations, but, in	
15		particular, we represent the Bearspaw First Nation, the	
16		Chiniki First Nation, the Wesley First Nation and, in	
17		addition, their wholly-owned company, Woste Igic Nabi	
18		Ltd., which is an affected landowner.	
19	THE	CHAIR: Thank you.	
20		SR1 Concerned Landowners Group. Mr. Secord.	09:20
21	MR.	SECORD: Good morning, Mr. Chair.	
22		Richard Secord here with the Ackroyd LLP Law Firm, and	
23		with me is my partner Ifeoma Okoye, I-F-E-O-M-A	
24		0-K-0-Y-E, and together we will be representing the	
25		SCLG.	



And can you hear me okay, Mr. Chair and Ms. Vespa? 1 2 THE CHAIR: Yes, very well. 3 MR. SECORD: Thank you. 4 THE CHAIR: Ms. Vespa, you as well? You can hear Mr. Secord? 5 THE COURT REPORTER: 6 Yes, thank you. 7 THE CHAIR: Calalta Amusements Ltd. Mr. Williams. 8 MS. FRIEND: 9 He joined by telephone. This is Laura, Peter. He joined by telephone and I did have 10 09:22 11 confirmation that he was on. THE CHAIR: 12 I see two numbers. I see Bob there, so that would be Mr. Williams, Bob Williams. 13 14 Mr. Williams, can you hear us? One telephone 15 number looks live and the other one looks like it's 16 muted, so I'm not sure. 17 Ms. Friend, Could you give Mr. Williams a call, 18 please? 19 MS. FRIEND: Sure. 20 THE CHAIR: Wait one second for that. We do 09:22 21 have an acting Board member that, because of connection 22 speeds, does dial in, and it took us a while to get all 23 of that working, so we may have a bit of an issue just 24 on --25 MS. FRIEND: Peter?



1	THE	CHAIR: Yes.	
2	MS.	FRIEND: I spoke to Bob. He can hear us	
3		fine, but he can't get himself unmuted, but he is	
4		hearing us. So we can sort him out after. You can	
5		carry on.	
6	THE	CHAIR: Okay. So we can register him.	
7		He's heard and I think he's acknowledged.	
8		So Ms. Vespa, we could register Mr. Williams.	
9		I see yes, I see it's trying to connect an	
10		audio there, so if he can hear us, that's great.	09:23
11		And maybe, Ms. Friend, if you could just ask	
12		Mr. Williams to text you if it becomes an issue or he	
13		can't hear the proceedings.	
14	MS.	FRIEND: Will do.	
15	THE	CHAIR: Thank you very much.	
16		Okay. Before we get started, I would like to	
17		query whether there's any preliminary matters	
18		Oh, hello?	
19	MS.	FRIEND: Scott Wagner isn't registered.	
20	THE	CHAIR: Sorry, Mr. Wagner, I apologize.	09:24
21	MR.	WAGNER: Last, but not forgotten.	
22	THE	CHAIR: My apologies. And thank you very	
23		much.	
24		Ms. Vespa, did you get Mr. Wagner on register?	
25		Thank you.	



1	So sorry about that.	
2	Thanks, Ms. Friend, for alerting me to that.	
3	So, prelim matters, I do note that we had a few	
4	documents filed by Mr. Secord. I think it was over the	
5	weekend perhaps, after the filing deadline.	
6	I'm not sure if there's any I don't think	
7	there's any issue with those, but I would like to raise	
8	that with participants.	
9	And, Mr. Secord, those documents, did you want to	
10	speak to those first?	09:25
11	MR. SECORD: The joys of working with multiple	
12	screens, Mr. Chair.	
13	THE CHAIR: It's happened to me already this	
14	morning.	
15	MR. SECORD: And my cursor sometimes doesn't	
16	behave itself or obey or do what I want it to do.	
17	So, yes, I marked I think four documents; I	
18	believe two of them related to were cited in Alberta	
19	Transportation's response submissions.	
20	I've had a few conversations with Mr. Kruhlak over	09:26
21	the weekend. I don't think there are any issues with	
22	those two because they were essentially being relied on	
23	by Alberta Transportation.	
24	And then there were two other documents, one from	
25	the oh, yes, one was from the City of Calgary	



1	website, a one-and-a-half-page document, which I don't	
2	think is particularly controversial.	
3	And then the other one was a directive from the	
4		
	Alberta government, so legislation.	
5	So I don't know if I've got that right. There's	
6	been it's been a busy weekend, so maybe if there is	
7	an issue, maybe AT could let me know and	
8	THE CHAIR: Any objections by any parties?	
9	Mr. Kruhlak?	
10	MR. KRUHLAK: No, sir. Can you hear me now?	09:26
11	THE CHAIR: Yes, perfectly. Thank you.	
12	No other objections?	
13	Okay. Hearing none, those will be entered	
14	well, they already were entered. We've had an	
15	incredibly efficient weekend or not, Ms. Friend and	
16	others, getting documents up, so they are posted. They	
17	have exhibit numbers, and we'll leave them as is.	
18	Any other preliminary matters parties would like	
19	to raise at this point?	
20	Hearing none.	09:27
21	MR. SECORD: Just one quick question, one	
22	issue; I don't think it's much of an issue. But I	
23	wasn't planning on cross-examining the City of Calgary	
24	today, and my plan was to cross-examine the City of	
25	Calgary in the Topic Block 3 panel, and I suppose there	



```
1
           may be some questions that could relate to Topic
 2
           Block 1, but I was thinking I would ask them all -- all
 3
           my questions in that one slot in Topic Block 3.
                And I'm just wondering from the City of Calgary's
 4
 5
           perspective whether they would have any issue with
 6
           that?
 7
      MS. SENEK:
                                 Hello, sorry, we were just
           checking with our witness.
 8
                That shouldn't be an issue, no. The City would be
9
           our -- witness would be prepared to speak to any topic
10
                                                                       09:28
11
           during -- that we're presenting on during Topic
12
           Block 3, yes.
      MR. SECORD:
13
                                Thank you.
      THE CHAIR:
14
                                 Okay. So granted, Mr. Secord.
15
           Perfect.
16
                Other matters?
17
      MR. WILLIAMS:
                                 Can you hear Bob Williams?
18
      THE CHAIR:
                                 Yes, we can.
                                               Is that you,
19
           Mr. Williams?
20
      MR. WILLIAMS:
                                0kay.
                                        So I'm on now.
                                                        So if you
                                                                       09:28
21
           want to mute me again. I didn't hit Star 6 last time.
      THE CHAIR:
22
                                        So, Mr. Wiebe, I'll leave
                                 Okay.
23
           that up to you to figure out. I don't think I can do
24
           that from my end.
25
      MR. WIEBE:
                                 I can mute him from here.
```



THE CHAIR: Okay. Thanks, Mr. Williams.
Okay. Hearing no other prelim matters being
raised, we can move into direct evidence from
Alberta Transportation. Mr. Kruhlak, the floor is
yours.
MR. KRUHLAK: Thank you, Mr. Chairman. Good
morning, Panel members.
It's been a long journey, and we're pleased to
finally be here this morning to appear before you on
this matter and for me with a new headset.
I wanted to just advise the Panel just by way of
some background, our witness Panel is largely gathered
in person with some members part of that panel
virtually. I can advise the Panel that we are the
lawyers, Mr. Fitch and Mr. Barbero and I, are in a
separate location from that Panel so we're not in the
same location for purposes of cross-examination. And
of course, if they use the breakout rooms, we will not
be joining them during cross-examination.
Those panel members may appear with masks because
they're following directives from Alberta Health.
They'll be removing their mask to speak to the Board.
My intention this morning very quickly is simply
to run through a very brief introduction of each panel

09:29

09:30



member and then have Mr. Hebert, our panel chair,

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ALBERTA TRANSPORTATION TOPIC #1 PANEL Examined by Mr. Kruhlak

present an opening statement. So it's probably 1 2 appropriate at this time that the panel be sworn. 3 THE CHAIR: Ms. Vespa. 4 M. HEBERT, M. SVENSON, W. SPELLER, D. BRESCIA, M. WOOD, D. 5 6 SOL, J. MENNINGER, Y. CARIGNAN, M. SMITH, M. PERRET 7 (For Alberta Transportation), sworn THE CHAIR: Mr. Kruhlak, perhaps I think 8 9 Mr. Hebert was up first. Mr. Smith will be very difficult to hear. Perhaps in the meantime, if you 10 09:34 11 could check the volume on his settings for his mic, but 12 he's extremely difficult to hear. 13 So just in the meantime I just flag that. 14 MR. KRUHLAK: We'll have that attended to. 15 THE CHAIR: Thank you. 16 MR. KRUHLAK EXAMINES THE PANEL: 17 Q. Just for the panel's background, you'll note that we 18 have five of our panel members are common witnesses to 19 each of the topic days. So we will not be introducing 20 them to the same degree at all as necessary for the 09:34 21 balance of the hearing after today. We will have each 22 topic day, there will be some supplemental witnesses, 23 or some of the same witnesses may be appearing. 24 So all of their CVs have been collected in 25 Exhibit 336. So Mr. Hebert, I'm going to start with



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1		you. Can you confirm to the Panel that your particular	
2		CV that is at page 65 is accurate?	
3	Α.	MR. HEBERT: Yes, it is.	
4	Q.	And, sir, I understand you work with	
5		Alberta Transportation as the executive director	
6		responsible for the Springbank Off-Stream Reservoir	
7		Project?	
8	Α.	MR. HEBERT: I do.	
9	Q.	Could you please briefly share your education,	
10		background, and experience with the Board.	09:35
11	Α.	MR. HEBERT: Yes, Mr. Chairman, as far as	
12		education. I have a bachelor of arts in political	
13		studies from Augustana University College, which was	
14		obtained in 2005, and a master's of business	
15		administration from the Ivey Business School at	
16		Western University obtained in 2017.	
17		As far as experience, I have 16 years' experience	
18		in different public administration roles in Alberta,	
19		more recently as an executive director in the	
20		government of Alberta for the last four years in roles	09:36
21		dealing with policy and strategy coordination, health	
22		workforce planning, and transportation policy.	
23		My experience includes work in intergovernmental	
24		relations, agency oversight, and the oversight of	
25		funding for the province's primary care networks.	



Examined by Mr. Kruhlak

- Q. Could you also explain to the Panel what your role was
 on this application?
- A. MR. HEBERT: Yes. Mr. Chairman, I'm
 accountable for the delivery of the application and

5 associated filings.

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In the time I've been on the project since 2019, I've provided strategic direction on the project to support the development of responses and reviewed all documentation prior to filing.

10 Q. Thank you. Mr. Svenson, I'd like to turn to you. If
11 you could also confirm that the CV filed in Exhibit 336
12 and yours at page 58 is accurate?

13 A. MR. SVENSON: Yes, it is.

- Q. And your position with Alberta Transportation is awater management environmental specialist?
- 16 A. MR. SVENSON: That is correct.
- 17 Q. Could I ask you to also share your education and 18 experience with the Board?
- A. MR. SVENSON: Yeah. I have a bachelor of science degree in environmental science from the University of Lethbridge in 2008 and a diploma in watershed management from Lethbridge College in 2004.

I've been working with the -- in the environmental field for the past 15 years, 12 of which have been -- I've managed multidisciplinary environmental impact



09:36

Examined by Mr. Kruhlak

1		assessments on water management projects for Alberta	
2		Transportation. And I was Alberta Transportation's EIA	
3		lead for the federal environmental assessment of the	
4		Little Bow reservoir rehabilitation project.	
5	Q.	Mr. Svenson, what was your role on this application?	
6	Α.	MR. SVENSON: I've provided oversight for	
7		Alberta Transportation in managing the environmental	
8		team, preparing the EIA, and reviewed the environmental	
9		documents that were drafted and prepared for SR1.	
10		I've also assisted in managing the consultant	09:38
11		teams and participated in the Indigenous and	
12		stakeholder consultation engagement programs.	
13	Q.	Thank you. Mr. Speller, I'd ask that you confirm that	
14		your CV which is at page 88 of the exhibit is accurate.	
15	Α.	MR. SPELLER: Yes, it is.	
16	Q.	And your position with Golder, you're a principal, and	
17		senior regulatory and impact assessment specialist and	
18		project director; is that correct?	
19	Α.	MR. SPELLER: Yes, that's correct.	
20	Q.	And could you describe your experience and education to	09:38
21		the Board, please.	
22	Α.	MR. SPELLER: Yes, I received a bachelor of	
23		environmental engineering degree in 1996, and a	
24		master's environmental engineering degree in 1998	



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sorry, I've just got a popup saying "start my video,"

Examined by Mr. Kruhlak

1 my apologies -- both from the University of Guelph. 2 I'm a registered professional engineer in Alberta 3 and a registered project management professional. 4 I have 22 years of environmental consulting 5 experience with Golder. For the past 15 years, my 6 focus has been leading federal, provincial 7 environmental impact assessments and regulatory permitting projects in Canada. 8 9 I have led or participated in over 30 federal and/or provincial environmental impact assessments in 10 09:39 Canada. 11 12 Ω. And what was your role in this application? 13 Α. MR. SPELLER: I started working on this 14 application at the end of 2017 providing strategic 15 advice and technical review on regulatory filings, 16 including the EIA and SIRs. 17 In 2019, I took on the role of regulatory lead for 18 the project, helping plan and implement activities to 19 obtain regulatory approvals. 20 In this role, I'm the lead contact with federal 09:39 21 and provincial regulatory authorities and continue to provide strategic advice and technical review of 22 23 regulatory filings. 24 Thank you. Q. 25 Mr. Brescia, I'd ask that you confirm that your CV



ALBERTA TRANSPORTATION TOPIC #1 PANEL Examined by Mr. Kruhlak

1	at	page	20	of	the	exhibit	is	accurate.

- 2 A. MR. BRESCIA: Yes, I can confirm that.
- Q. And you are employed with Stantec Consulting as a regulatory environmental specialist?
- 5 A. MR. BRESCIA: Yes, that's correct.

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- Q. And could you share with the Board your experience and education, please?
- A. MR. BRESCIA: I have a bachelor of science and biology from the University of Victoria and a master of science and forestry from the University of British Columbia, and I'm a professional biologist.

I've been leading and working on multidisciplinary environmental impact assessments for more than 20 years. This includes environmental impact assessments, regulatory applications, environmental monitoring programs, and follow-up programs for major projects.

I've experience with all phases of the project development from preliminary planning to reclamation and closure and through follow-up monitoring.

- Q. And what was your role on this application?
- A. MR. BRESCIA: My role was to oversee and direct
 the development of the EIA and response to supplemental
 information requests. I provide technical direction
 and review to the different valued component sections
 of the EIA, and I have authored or provided technical

09:40



ALBERTA TRANSPORTATION TOPIC #1 PANEL Examined by Mr. Kruhlak

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1		review of the majority of the SIR responses.	
2	Q.	Thank you.	
3		Mr. Wood, I understand your CV is at page 62 of	
4		the Exhibit. Can you confirm that that is accurate?	
5	Α.	MR. WOOD: Yes, I can confirm that it is	
6		accurate.	
7	Q.	And you're employed also with Stantec as a senior	
8		associate and a role of chief natural systems design	
9		engineer; is that correct?	
10	Α.	MR. WOOD: That is correct.	09:41
11	Q.	And could you describe your education and experience,	
12		please?	
13	Α.	MR. WOOD: Yes. I have two bachelor's	
14		degrees, one in civil engineering, one in environmental	
15		science. Both are from Western University, and both	
16		are from 2004.	
17		I have over 17 years of experience in the water	
18		resources industry, the last 15 of which have been	
19		providing hydrotechnical and river engineering	
20		consulting services in western Canada.	09:42
21		I am registered to practice engineering in the	
22		province of Alberta, and my areas of practice are in	
23		hydrologic hydraulic modeling, geomorphic assessment,	
24		and the design of river-related infrastructure. This	



includes things like water intakes, water control

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ALBERTA TRANSPORTATION TOPIC #1 PANEL Examined by Mr. Kruhlak

structures and flood barriers, bank harboring, 1 bioengineering, as well as fishways and fish habitat 2 3 restoration. 4 I have led many multidisciplinary assessment and design projects for river and environments, and most of 5 the projects I've delivered involved environmental 6 7 assessment and the securing of provincial and federal regulatory approval. 8 9 Q. Thanks, Mr. Wood. I'm going to ask if you can describe your role in the application, but for the benefit of 10 09:42 11 the court reporter, I might just ask if you could slow 12 it down just slightly. 13 Α. MR. WOOD: Yes, I can. I have been a member of Stantec's SR1 project's team since 2014. My primary 14 15 responsibility was to support the project's delivery. 16 Duties included technical support to the regulatory 17 applications, responding to stakeholder and regulatory 18 requests for information, technical support to land 19 acquisitions, and delivering presentations to 20 landowners and other stakeholders on the project. 09:43 21 I also prepared the design of the fish passage 22 mitigations, the diversion structures erosion 23 mitigations, and the erosion mitigations in the Unnamed 24 Creek downstream of the low-level outlet works. 25 I have met many of the impacted landowners, as



Examined by Mr. Kruhlak

well as several other landowners within the local 1 2 assessment area through attending open houses, 3 landowner meetings, land access negotiations, or to 4 discuss the impacts to their individual lands. 5 were kind enough to escort me around their properties. 6 Q. Thanks, Mr. Wood. 7 Mr. Sol, your CV appears at page 30 of the Could you confirm that is accurate? 8 exhibit. MR. SOL: 9 Α. Yes. And you work with IBI Group as an associate manager 10 Q. 09:43 11 planning: correct? 12 MR. SOL: Correct. Α. 13 Q. Could you describe your education and experience, 14 please? 15 MR. SOL: Yes. I have a BA in communication Α. culture from the University of Calgary, 2004. I have 16 17 an MA in communication for development from Mount Royal 18 University in 2007, and I have a master's of planning 19 in urban development from Ryerson University in 2011. 20 I'm a registered planner in -- with Alberta and 09:44 21 the Canadian institutes, and I've had a wide range of 22 experience in land use planning, market research, and 23 public participation, but I've been specifically 24 working in the field of flood risk assessment and 25 mitigation planning for approximately seven years now.



Examined by Mr. Kruhlak

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1	Q.	Thank you. And what was your role on this application?	
2	A .	MR. SOL: I lead a flood assessment team	
	Α.		
3		that developed Alberta's provincial flood damage	
4		assessment framework in 2014, and subsequently, we've	
5		conducted about 24 flood risk assessments throughout	
6		the province.	
7		Calgary was the initial pilot study in 2014, and	
8		the damage estimate from that time was used for the	
9		first comparison of benefit/costs for Elbow River	
10		mitigation.	09:44
11		We were then retained by the City of Calgary to	
12		conduct an assessment of mitigation options and	
13		produced revised damaged estimates based on updated	
14		flood mapping.	
15		The results of that study were then used for the	
16		benefit-cost assessment of for this submission.	
17	Q.	Thank you.	
18		Next I'd like to turn to Mr. Menninger.	
19		Mr. Menninger, your CV appears at page 45 of	
20		Exhibit 336. Could you confirm that's accurate?	09:45
21	Α.	MR. MENNINGER: Yes, it's accurate.	
22	Q.	And sir, you're a senior principal with Stantec and	
23		work as a project manager and civil engineer; is that	
24		correct that?	
	_		



A. MR. MENNINGER: That's correct.

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Examined by Mr. Kruhlak

- Q. And could you describe your education and experience,
 please.
- A. MR. MENNINGER: Sure. I completed a bachelor of civil and environmental engineering at the University of Dayton in 2004.

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I'm a professional engineer registered in the state of Ohio in the US and with a licence to practice in Alberta.

I've worked on multidisciplinary water resources projects for the past 17 years, including the assessment and design of dams and large flood control projects.

My experience includes water resources planning, hydrologic and hydraulic modelling, stream restoration, site design and layout, river course and canal stabilization, and damming levy design.

- Q. And Mr. Menninger, what was your role on this application?
- A. MR. MENNINGER: Sure. So I'm serving as the
 design lead for the project and was the lead author of
 the Preliminary Design Report. I'm responsible for
 coordinating the multidiscipline design team, including
 the hydrotechnical, civil, geotechnical, and structural
 engineering for the project.
- In addition, I worked with the EIA team to support

09:46



Examined by Mr. Kruhlak

1		the project description and dam safety components of	
2		the application and provided responses to the	
3		supplemental information requests related to the	
4		design, operations, and emergency management for the	
5		project.	
6	Q.	Thank you.	
7	Α.	MR. MENNINGER: You're welcome.	
8	Q.	Ms. Carignan, your CV appears at page 99 of	
9		Exhibit 336. Can you confirm to the Board that that is	
10		accurate?	09:47
11	Α.	MS. CARIGNAN: Yes, that's correct.	
12	Q.	And you work with Alberta Transportation as director of	
13		water management; is that correct?	
14	Α.	MS. CARIGNAN: Yes, that is.	
15	Q.	Could I ask you as well to describe your education and	
16		experience, please?	
17	Α.	MS. CARIGNAN: Yeah. I completed a bachelor of	
18		science in civil engineering and a master of	
19		engineering and water resources engineering both at the	
20		University of Alberta.	09:47
21		I'm a professional engineer registered with APEGA,	
22		and I have more than 20 years of water management	
23		engineering experience, including design and	
24		construction in the fields of water resources and	
25		bridge planning.	



1		As well, I have experience with regulatory	
2		oversight the under the Fisheries Act, assessing	
3		impacts to fish and fish habitat, and working with	
4		project proponents to mitigate project impacts.	
5		In addition to working on SR1 and part of the	
6		Alberta Transportation team providing support to	
7		Alberta Environment and Parks in its assessment of the	
8		Bow River Reservoir options to provide flood protection	
9		to the City of Calgary.	
10	Q.	Ms. Carignan, what was your role on this application?	09:48
11	Α.	MS. CARIGNAN: On this application, I've provided	
12		oversight and coordination on behalf of Alberta	
13		Transportation for the engineering design, as well as	
14		construction contracting strategies.	
15	Q.	Thank you.	
16		Next I'd like to ask Mr. Smith, Mr. Smith, your CV	
17		appears at page 53 of Exhibit 336. Can you confirm	
18		that it is accurate?	
19	Α.	MR. SMITH: Yes, it is.	
20	Q.	And I understand, sir, that you work with Hemmera, and	09:48
21		you're the National Vice President of Environmental	
22		Planning and Ecology?	
23	Α.	MR. SMITH: Yes, that's correct. Hemmera	
24		provided support to Alberta Transportation and led the	
25		environmental impact screening that was undertaken for	



ALBERTA TRANSPORTATION TOPIC #1 PANEL

Examined by Mr. Kruhlak

- 1 the McLean Creek project.
- 2 Q. And what is your education and experience, sir?
- 3 A. MR. SMITH: I have a bachelor's degree in
- 4 biology from the University of Victoria in 1987 and a
- 5 master's degree in science from SFU in 1992.
- In my role with Hemmera, I'm a senior
- 7 environmental impact assessment specialist and have
- 8 done that for about 25 years, and I have a
- 9 specialization in projects in the water management,
- 10 energy, and infrastructure sector.
- 11 Q. And what was your role on the application, Mr. Smith?
- 12 A. MR. SMITH: As noted earlier, we kind of --
- 13 Hemmera led the EIS that was undertaken from the
- 14 McLean Creek project, and then I've been involved in
- the review of SIRs, development of responses to
- questions and comments on the EIS that was undertaken.
- 17 Q. Thank you.
- And lastly, Ms. Perret, can you confirm that your
- 19 CV that is at page 70 of Exhibit 336 is accurate?
- 20 A. MS. PERRET: Yes, it's accurate.
- 21 Q. And you work with Stantec as the engagement lead in
- their Edmonton office?
- 23 A. MS. PERRET: That is correct.
- Q. Can you describe your experience and education, please?
- 25 A. MS. PERRET: I have a master of arts in

09:49



1	economics from Queen's University and a bachelor of	
2	arts in economics from the University of Alberta.	
3	I have 29 years of experience in community	
4	engagement and regulatory issues in industry and	
5	consulting.	
6	I have been responsible for the development and	
7	execution of engagement and Indigenous consultation	
8	strategies plans, processes, evaluations, tools and	
9	frameworks.	
10	Q. And what was your role on this application?	9:50
11	A. MS. PERRET: I'm the engagement lead and have	
12	focused on communication material which includes	
13	overseeing responses to stakeholder and landowner	
14	questions, development of newsletters and project	
15	updates.	
16	Q. Thank you.	
17	MR. KRUHLAK: Mr. Chairman, that is the brief	
18	introduction of the witness panel. As I've indicated	
19	in references, their full CVs are attached in	
20	Exhibit 336.	9:51
21	At this time I'd like to call upon Mr. Hebert to	
22	provide an opening statement to the Board with respect	
23	to the application.	
24	THE CHAIR: Mr. Kruhlak, just before	
25	Ms. Vespa, did you get Mr. Smith's dialogue? Were	



ALBERTA TRANSPORTATION TOPIC #1 PANEL

Examined by Mr. Kruhlak

1	you able to capture that?	
2	COURT REPORTER: I was able to capture it, but we	
3	still need his audio improved if he's going to speak	
4	anymore because it's very difficult to hear him.	
5	THE CHAIR: Yes. And maybe the mic needs to	
6	be right in front of his mouth. Give that a try. He's	
7	not first up. I just wanted to alert you to that.	
8	Thank you, Mr. Kruhlak and Mr. Hebert.	
9	A. MR. HEBERT: Mr. Chairman, can you hear me?	
10	THE CHAIR: Yes.	09:51
11	A. MR. HEBERT: Thank you. Good morning,	
12	Mr. Chairman, members of this Board, Board staff,	
13	members of other parties attending this hearing, and	
14	members of the public joining today on YouTube.	
15	As Mr. Kruhlak indicated, my name is	
16	Matthew Hebert and I am the executive director of the	
17	Springbank Off-Stream Reservoir Project and an employee	
18	of Alberta Transportation.	
19	I am the lead policy witness for Transportation	
20	and will share with the proponent's witness panels in	09:52
21	each topic session.	
22	I have personally been involved in this project	
23	for the last two years, since the spring of 2019.	
24	During that time, I have met with numerous	
25	stakeholders, responded to various regulators, and have	



ALBERTA TRANSPORTATION TOPIC #1 PANEL Examined by Mr. Kruhlak

overseen our consulting team to be able to present this application to you for your review.

Mr. Chairman and members of the Board, the reason we are before you today with this project is in direct response to the massive flooding in 2013 in southern Alberta in the City of Calgary which resulted in significant economic and personal costs for the province and its citizens.

You will have heard that there were five fatalities in that flood event and over \$5 million in damages.

In Calgary, the flooding of the Bow and Elbow Rivers resulted in some 88,000 people being displaced, 14,500 homes damaged, 3,000 other buildings flooded, and 4,000 businesses damaged.

Other communities, including Bragg Creek,
Redwood Meadows, Canmore, and Banff were also heavily
impacted. Over half of High River was inundated and
numerous other communities and First Nations felt its
effects. It was a terrible event that will always be
remembered by those who lived through it.

The government recognized that it had to take timely action to prevent that catastrophic event from reoccurring. As history has shown, that a flood of some magnitude is expected on the Elbow River every

09:53



eight to ten years.

It was an imperative of the Government of Alberta to mitigate the reoccurrence of the long-term personal and economic effects by pursuing flood mitigation on this river and in other communities.

As a result, the government immediately started a review process to identify possible flood mitigation options for Calgary and southern Alberta. This included a process to identify a location of another reservoir on the Bow River and the construction of berms for the Bragg Creek community.

To address the flood mitigation needs on the Elbow River, the government of Alberta initiated what became a series of technical reviews of various options and assessments of the pros and cons of each.

Out of those reviews, the Springbank project, or SR1, was selected as the preferred option, having regard to numerous criteria. While the selection was primarily made on technical, environmental, and economic grounds, consultation with key stakeholders was carried out during the process.

As is the case with decisions of this magnitude, the selection of SR1 resulted in concerns being expressed by some stakeholders; in particular, local landowners and residents of the Springbank area. A

09:54



ALBERTA TRANSPORTATION TOPIC #1 PANEL Examined by Mr. Kruhlak

number of them told us we picked the wrong project and asked us to reconsider other options like an in-stream dam on the Elbow River and McLean Creek. Because of this, the decision to select SR1 was reviewed and subsequently reaffirmed by two successful provincial governments, most recently in 2019 by the current government.

The government determined that Alberta

Transportation would be the proponent of the project to seek the necessary regulatory approvals, as well as oversee construction. Alberta Transportation has extensive experience overseeing the construction of major infrastructure projects across the province.

After construction is complete, Alberta

Environment and Parks, or "AEP," would then assume the operation of the project. AEP operates many other dams and similar infrastructure around Alberta.

Alberta Transportation acknowledges that it may have initially underestimated the extent of the regulatory process that a public safety project of this nature might be subject to both federally and provincially. This caused it to have to resubmit some of its regulatory materials. Nevertheless and despite the urgent need for the project, Alberta Transportation has been diligent in completing the various steps of



09:56

the regulatory process.

In 2019, the department commissioned an independent review by a regulatory expert,
Mr. Martin Ignasiak, who identified certain improvements that could be implemented in the approach Transportation was undertaking to advance a project of this nature. I note for the record that Mr. Ignasiak's report has been filed by the SCLG as part of Exhibit 275.

Alberta Transportation released Mr. Ignasiak's report to the public and adopted his recommendations in bringing additional specialized resources to respond to the SR1 application and enhance its consultation with stakeholders and Indigenous communities.

As a result, Transportation believes its application responds to both the requirements of the regulatory process and the concerns and expectations of stakeholders and Indigenous groups.

At this stage, I am pleased to see that the Impact Assessment Agency of Canada's draft decision indicates that taking into account the implementation of key mitigation and follow-up program measures, the project is not likely to cause significant adverse environmental effects as defined under the Canadian Environmental Assessment Act 2012.



09:57

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Further, the director of assessment of Alberta Environment and Parks has also deemed the application complete.

We appreciate that the Board understands

Transportation considered several alternatives to SR1, and those project alternatives have been discussed at some length in materials previously filed as part of the environmental assessment process.

Despite the passage of time and re-examination of various issues, Transportation remains confident that the Springbank Off-Stream Reservoir Project is the best suited to provide timely, reliable, and effective flood mitigation on the Elbow River to southern Alberta, the City of Calgary, and other downstream communities.

We reiterate the position that Alberta

Transportation presented at the pre-hearing conference which is that Alberta Transportation is only advancing the Springbank Off-Stream Reservoir Project, and accordingly, it is the only reviewable project before this Board.

Further, Transportation remains strongly of the view that SR1 is the right project to deliver flood mitigation on the Elbow River for the following reasons: It is an off-stream dam and less sensitive than an in-stream dam to impacts from sediment or

09:59



ALBERTA TRANSPORTATION TOPIC #1 PANEL Examined by Mr. Kruhlak

debris. It will capture more floodwaters due to its location further downstream; it is closer to operational response teams and access roads; it has less environmental impact, less impact on the Elbow River; it is less vulnerable to damage during extreme weather, including catastrophic failure during construction; has less impact on social and recreational values; has less impact on tourism and commercial values; has a positive economic impact; and perhaps most importantly, is years closer to being built than any alternative project.

10:00

The current budget for SR1 for the government of Alberta's capital plan is \$432 million. Alberta Transportation believes this represents a sound investment and important public works infrastructure that will more than pay for itself the first time a flood magnitude of 2013 occurs.

10:01

Alberta Transportation is aware that some interveners believe that the cost of SR1 has escalated to a point that it no longer has an advantage over the MC1 option. Mr. Chairman, Alberta Transportation does not agree. The current cost estimate for SR1 is for a project which has advanced to the detailed design and engineering stage. It has undergone significant, extensive stakeholder engagement.



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By contrast, the cost estimates for the MC1 option were for a project which did not advance beyond the conceptual stage. Therefore, comparing estimates between current SR1 costs to historical MC1 costs is comparing apples to oranges.

Alberta Transportation is closely monitoring SR1's cost estimates to ensure it can deliver this flood mitigation project in a timely and effective manner. Final costs will be based on final design, the competitive construction tender, completion of land acquisition, and conditions set by regulators.

Unfortunately, with major projects of this nature, there are impacts, and Alberta Transportation has attempted to recognize them, consult with impacted parties, work to address, and where possible, mitigate those impacts. I have personally spoken with numerous landowners in the project area and, whenever requested, have met with them to better understand their concerns.

In addition, this past fall, the project team presented and responded to questions from the community at two information sessions. In some circumstances where impacts on stakeholders could not be addressed through project design or operational mitigations such as local landowners whose lands are acquired for the project, Alberta Transportation has offered to

AMICUS
REPORTING GROUP

10:02

compensate impacted parties.

To date, we have successfully acquired approximately 25 percent of the lands in the project area through voluntary purchases. I can also advise the Board that we are in the process of finalizing acquisitions from an additional three SR1 landowners.

When finalized, these acquisitions will increase to approximately 43 percent the amount of land secured by transportation for the project.

When this hearing is over, Alberta Transportation will continue negotiating with the remainder of SR1 landowners with the hope of acquiring voluntarily the balance of lands required for the project.

As stated in the land acquisition program prepared for SR1, AT Transportation will not resort to expropriation until after this Board has approved the project, should it do so.

With regard to local landowners whose lands are not required for the project, Alberta Transportation recognizes and respects their concerns, and I can assure this Board that we take them seriously.

As you will hear in the coming days,

Transportation has proposed numerous mitigation
measures to address these concerns and, where
appropriate, will endeavor to enhance those

10:04



mitigations.

Transportation remains open and available to discuss outstanding concerns with these adjacent landowners.

Alberta Transportation takes very seriously its obligation to consult with, and where necessary, accommodate First Nations and Indigenous communities.

I have personally attended some 32 meetings with Indigenous communities who are or may be impacted by the project and attempted to not only ensure we understand those concerns, but accommodate them as may be reasonably possible. I believe it is those efforts which have resulted in the recent withdrawal from the hearing of two First Nations. We will continue to work with Indigenous communities going forward to ensure that their issues are addressed should this project proceed.

Transportation has carefully reviewed the intervention by the Stoney Nakoda Nations. It believes that many of the concerns raised by the Stoney Nakoda Nations have been addressed by Alberta Transportation through the regulatory process, including in the environmental impact assessment, supplemental information requests, and the development of initiatives such as the updated draft guiding



10:05

ALBERTA TRANSPORTATION TOPIC #1 PANEL Examined by Mr. Kruhlak

principles and direction for future land use, the proposed First Nations land use advisory committee, and the project's Indigenous participation program.

Further, Alberta Transportation is committed to continue to work with the Stoney Nakoda Nations to ensure it can continue to participate, not only in the monitoring and identification of areas of cultural significance, but also be a participant in the construction of the project.

Transportation has also closely examined the concerns raised by the Springbank Concerned Landowners Group, both prior to the scheduling of this hearing, and their detailed concerns as set out in their submission.

It is my belief that the application, together with responses to information requests and the additional information in Alberta Transportation's response submission filed with this Board on March 12, 2021 responds to those concerns.

We have also carefully reviewed the recommendations made by the independent experts retained by the SCLG. In some cases, this caused us to reevaluate our information and look at adopting certain of the recommendations made to approve the project.

I remain confident that the issues raised by the

10:07



ALBERTA TRANSPORTATION TOPIC #1 PANEL

Examined by Mr. Kruhlak

1		SCLG have been recognized and addressed in the design	
2		of this project or, in other cases, the potential	
3		impacts of the project by the construction or its	
4		operation highly recognized, it will be monitored	
5		and mitigated.	
6	THE	CHAIR: Sorry to interrupt. Just the last	
7		minute or so, you've been cutting in and out on my	
8		it may be my end. I just want to confirm, is anybody	
9		else noticing this or is it Edmonton office only?	
10	MS.	VANCE: I am, Peter. So it could be just	10:08
11		Edmonton office.	
12	THE	CHAIR: May be Edmonton. I did catch it.	
13		I	
14	Α.	MR. HEBERT: Would you like me to repeat	
15		something, Mr. Chair?	
16	THE	CHAIR: No, I think we're good. I think I	
17		interrupted you before I really missed anything, but it	
18		was just sort of freezing. We've got a solution we	
19		think to plug in network ours I think Fiona and I	
20		will do that now. So please continue. Thank you.	10:08
21	Α.	MR. HEBERT: Thank you, Mr. Chairman.	
22		Our engagement with the local community will not	
23		stop because of this hearing, or after the approval of	
24		the project if it is granted by this Board.	
25		Transportation recognizes that it will continue to	



ALBERTA TRANSPORTATION TOPIC #1 PANEL Examined by Mr. Kruhlak

have an ongoing obligation to engage with the members of the local community and Indigenous groups. In this regard, Transportation has committed to appointing a community liaison officer to specifically address any issues which may arise during construction of the project and its operations.

Further, we have made numerous commitments to monitoring and mitigation with respect to impacts associated with the operation of the project.

In response to this submission filed by Calalta,
Alberta Transportation has reached out directly to
representatives of this organization. It has confirmed
our willingness to address where possible mitigate
their concerns.

In particular, Alberta Transportation is prepared to install an air monitoring station at Calaway Park during construction and share the monitoring information with Calalta.

In the event exceedences are recorded that are related to the project -- excuse me, Alberta Transportation will ensure that steps are taken to address those exceedences so as to mitigate any possible impacts to not only Calalta but all residents in the area.

Alberta Transportation is also prepared to monitor

10:09



ALBERTA TRANSPORTATION TOPIC #1 PANEL Examined by Mr. Kruhlak

and investigate any concerns that Calalta Waterworks may have with respect to identifiable impacts to its water intake system as a direct result of the release of waters from the reservoir once the project is constructed and operating.

With regard to Calalta's stated concern about the impact of the project on its water franchise area and, as indicated in our reply submission, we are prepared to review this item with Calalta but submit this is a commercial matter that does not fall within the Board's public interest jurisdiction.

Transportation acknowledges the submissions filed by both the City of Calgary and the Calgary River Communities Action Group and Flood Free Calgary, which highlight the magnitude of the devastating impacts of the 2013 flood and the need for the timely approval of the project.

Mr. Chairman, I think it is important to not lose sight of the fact that this is not a typical development project which might come before this Board or other boards such as the Alberta Energy Regulator or the Alberta Utilities Commission. Alberta Transportation is not advancing a project for private gain that may also have incidental benefits. The sole purpose of SR1 is to deliver the important public

10:11



ALBERTA TRANSPORTATION TOPIC #1 PANEL Examined by Mr. Kruhlak

benefit of flood mitigation. It was estimated that SR1 will result in flood damage avoidance benefits for design flood on the Elbow River of almost \$1.5 billion.

Further, SR1 will not result in new impacts that would be experienced continuously 24 hours a day seven days a week in the project area. After -- or sorry, rather, after construction is complete, there will be limited but mitigated impacts during flood operations. The impacts associated with this project are temporary and would occur periodically, with some likely only occurring every 100 years.

10:12

I reiterate that without SR1, there would be even greater impacts from unmitigated flooding on local and downstream residents and businesses with the accompanying public and private expense and personal and social effects.

Mr. Chairman and members of the Board, Alberta Transportation believes the Springbank Off-Stream Reservoir Project is a vitally important piece of public works infrastructure that will provide significant flood mitigation for the City of Calgary and communities downstream of the project.

10:13

We believe we understand the environmental and social effects of the project, and that the project has been designed appropriately to mitigate adverse



effects. Alberta Transportation, therefore, reiterates 1 2 our request that the Board find the project to be in 3 the public interest and issue an approval. 4 While we strongly believe the project is in the 5 public interest and addresses many of the concerns that 6 have been raised by stakeholders, Alberta 7 Transportation looks forward over the next couple of weeks to discussing with interveners and the Board 8 9 other possible mitigations that could improve the project and answering any questions that the Board and 10 10:13 11 other hearing participants may have about SR1. 12 Thank you, Mr. Chairman. Mr. Chairman, that would conclude 13 MR. KRUHLAK: 14 the direct evidence of Alberta Transportation on this 15 topic. THE CHAIR: 16 Okay. Thank you. So will you --17 and is this all of Topic 1? 18 MR. KRUHLAK: Correct. That is Alberta 19 Transportation's evidence on Topic 1. 20 THE CHAIR: Okay. Thank you. So I think what 10:14 21 we could do is start on cross, and perhaps in about 15, 20 minutes, or at least get a couple gone, we maybe 22 23 just before or completed, before Stoney Nakoda, I would 24 just like to check with parties that are not adverse in 25 interest, their intent to cross. City of Calgary?



1	MS.	SENEK:	The City of Calgary does not	
2		intend to cross.		
3	THE	CHAIR:	And CRCAG?	
4	MR.	CUSANO:	No, thank you, sir.	
5	THE	CHAIR:	Okay. And I believe Mr. Rae,	
6		you're requesting ab	out an hour; is that right?	
7	MR.	RAE:	Yes, sir.	
8	THE	CHAIR;	0kay.	
9	MR.	RAE:	Mr. Chairman, before we get into	
10		that, perhaps I coul	d ask a question of Mr. Kruhlak in	10:15
11		terms of the panel t	hat he's presented.	
12		I'd like to con	firm that the evidence that will be	
13		presented by the pan	el will be the evidence of Alberta	
14		Transportation and n	ot simply the evidence of the	
15		individual experts o	n the panel. Is that a correct	
16		understanding?		
17	MR.	KRUHLAK:	Yes. I think, Mr. Rae, I can say	
18		that all of the evid	ence tendered by either Alberta	
19		Transportation or it	s witnesses is the evidence of	
20		Alberta Transportati	on in support of the application.	10:16
21	MR.	RAE:	So there will be no need to	
22		distinguish between	evidence given by an expert. All	
23		of that evidence wil	l be the evidence of Alberta	
24		Transportation.		
25	MR.	KRUHLAK:	That's correct.	



1	MR.	RAE: And, in addition, can I assume	
2		that all the evidence will also be the evidence of the	
3		government of Alberta as a whole?	
4	MR.	KRUHLAK: I don't know, Mr. Rae. I'm	
5		speaking on behalf of Alberta Transportation who is the	
6		proponent of this project. If there's something	
7		specific, we could consider that.	
8	MR.	RAE: Well, I ask, of course, because	
9		while Alberta Transportation is the proponent, Alberta	
10		Environment is slated to be the operator, and I'd like	10:16
11		assurances that any conditions from this Board or any	
12		commitments by Alberta Transportation will, in fact, be	
13		binding on the government of Alberta as a whole.	
14	MR.	KRUHLAK: I think, if you choose to want to	
15		advance that question, I think we can address it during	
16		the course of your cross-examination.	
17	MR.	RAE: Mr. Chairman, if I might.	
18		Mr. Kruhlak, you're saying each time we get into a	
19		particular commitment or a possible condition, you're	
20		saying we have to find out whether the rest of the	10:17
21		government of Alberta is in agreement with Alberta	
22		Transportation in that regard?	
23	MR.	KRUHLAK: Mr. Rae, Alberta Transportation's	
24		commitments will be the commitments for the project	
25		regardless of whether who is the ultimate operator.	



1		Those conditions, if the Board deems them appropriate,	
2		could be attached to any approval they may issue.	
3	MR.	RAE: Thank you, Mr. Chair.	
4	THE	CHAIR: Okay. Thank you.	
5		So Mr. Rae, we could if you're going to be	
6		about a half an hour, we could proceed with your cross	
7		then and then have a short break after you're	
8		completed. You're reasonably confident it's about half	
9		an hour; is that correct?	
10	MR.	RAE: I'll try to get within a half an	10:18
11		hour, sir. It will depend, of course, on some of the	
12		answers we get.	
13	MR.	KENNEDY: Sorry, Mr. Chair. I think the	
14		Stoney Nakoda time requested for cross-examination of	
15		Alberta Transportation was	
16	THE	CHAIR: It's an hour. It's an hour, I'm	
17		sorry. That's my mistake. I'm just looking at my	
18		sheet. I looked at the wrong column. My mistake. So	
19		thank you, Mr. Kennedy.	
20		Let's take a five-minute break now, and then we'll	10:18
21		come back and then we can complete your entire cross,	
22		Mr. Rae.	
23		So if everybody can leave their video, or your	
24		connections on, please, but you can mute and we'll be	
25		back at 25 past.	



l 			
1	MR.	RAE: Mr. Chair, before we break,	
2		perhaps I can advise the staff, or reiterate for the	
3		staff, the exhibit numbers that I will be touching upon	
4		in my cross-examination?	
5	THE	CHAIR: That would be great to give them	
6		that heads-up. Awesome. Thank you.	
7	MR.	RAE: The exhibits I will be referring	
8		to are Exhibits 11, 12, 15, 18, 20, 139, 35 [verbatim],	
9		234, 325, and 139.	
10		And, Mr. Chairman, while I listed those exhibits,	10:19
11		some of them I will just be referring to and there may	
12		not be the need to actually call them up.	
13	THE	CHAIR: Okay. You can just alert them to	
14		that. And I'm just looking at my watch. 10:30 to	
15		reconvene, please.	
16	(AD.	JOURNMENT)	
17	THE	CHAIR: Mr. Rae.	
18	MR.	RAE CROSS-EXAMINES THE PANEL:	
19	MR.	RAE: Yes, sir.	
20	THE	CHAIR: Perfect. I think it's 10:30 so	10:29
21		the floor is yours.	
22	MR.	RAE: Thank you, Mr. Chair.	
23	Q.	Panel members, as we said in the introductions, my name	
24		is Douglas Rae, and I'll be accompanied during this	
25		hearing by my colleague Ms. Sara Louden.	



ALBERTA TRANSPORTATION TOPIC #1 PANEL Cross-examined by Mr. Rae

As we also stated during the introductions, we represent the Stoney Nakoda Nations. Stoney Nakoda Nations have three constituent parts: The Bearspaw, Chiniki, and Wesley First Nations. If I refer to Bearspaw, Chiniki, or Wesley, I will be referring to those specific First Nations. Although there are three First Nations, they're collectively known as the Stoney Indian band by the government of Canada. That is their nomenclature under the *Indian Act*. They have seven reserves in the province of Alberta, including three reserves which are in relatively close proximity to -- proximity to the proposed Springbank dry dam project; those reserves being Stoney Indian Reserves 142, 143 and 144.

Our clients take the position that they have rights and interests both on those reserve lands and as well Treaty and Aboriginal rights in off-reserve areas, including in the approximate area to the proposed project.

I also mentioned that we also represent a wholly-owned company called Woste Igic Nabi Ltd., which is a property owner relatively close to the west of the project area. If I refer to that company, I will be calling it Woste Igic Nabi.

I've advised the staff of the exhibits that we



10:30

h			a
1		intend to question on, and as your legal counsel	
-			
2		Mr. Kruhlak pointed out, I will pose the questions to	
3		or through Mr. Hebert and he can direct who in	
4		particular may answer, and that is perfectly	
5		satisfactory to me.	
6		The first questions I'd like to ask stem from	
7		Exhibit 11.	
8		Exhibit 11 is a document prepared by Stantec	
9		Consulting Ltd. in August 2015, and it's in relation to	
10		the Springbank Off-Stream Reservoir Project and it's	10:31
11		titled "Probable Maximum Flood Analysis."	
12		Mr. Hebert, could you advise how this report,	
13		Exhibit 11, was used by Alberta Transportation in its	
14		planning for the Springbank project?	
15	Α.	MR. HEBERT: Mr. Chairman, I'd invite Matt Wood	
16		to provide that response on behalf of Alberta	
17		Transportation.	
18	MR.	RAE: Sorry, Mr. Chairman, I didn't	
19		quite hear that.	
20	THE	CHAIR: Mr. Wood will respond.	10:32
21	Α.	MR. WOOD: Yes, thank you, Mr. Chairman.	
22		What you're looking at is the probable maximum flood	
23		report. The estimates contained within this report are	
24		used to determine largely what we call the "in-flow	
25		design flood" or the "dam safety flood" for the SR1	



- 1 reservoir.
- Q. Now, at page, I believe it's roughly 39, PDF page 39 of
- 3 Exhibit 11, which is the one on the screen now, the
- 4 bottom of that page, it has the locations where, I
- 5 believe, it's labeled, "Snow Water Equivalents Were
- 6 Measured." Table 21. Do you see that table?
- 7 A. MR. WOOD: Yes, I do.
- 8 Q. Now, I noticed the locations there: Lost Creek South,
- 9 Sunshine Village, Three-Isle Lake, Little Elbow Summit,
- 10 and Mount Odlum. I believe most, if not all, of those
- 11 locations are, in fact, in the Bow River drainage, are
- they not? They're not, in fact, in the Elbow River
- drainage; is that correct?
- 14 A. MR. WOOD: Little Elbow Summit would be in
- the Elbow River drainage. I believe the others are all
- 16 within the Bow River drainage. And I might remind that
- 17 the Elbow River itself does sit within the Bow River
- drainage. It is a tributary to the Bow River.
- 19 Q. But is it fair to say of those other four locations,
- the snow melt would drain into the Bow River, not the
- 21 Elbow River?
- 22 A. MR. WOOD: Subject to check, I believe that
- is correct.
- 24 Q. Thank you. My next question is in relation to
- Exhibit 12.



10:33

			_
1		Exhibit 12, again, is a document prepared by	
2		Stantec Consulting Ltd. in December of 2015. And it is	
3		labelled "Springbank Off-Stream Reservoir Project	
4		Hydrology Flood Frequency Analysis."	
5		Mr. Hebert, or perhaps Mr. Wood, can you explain	
6		how Alberta Transportation used this document in its	
7		preparations for the Springbank project?	
8	Α.	MR. WOOD: Yes.	
9	Α.	MR. HEBERT: Mr. Wood will respond.	
10	Α.	MR. WOOD: Thank you, Mr. Hebert.	10:35
11		Yes, what we're looking at here is a flood	
12		frequency analysis. The analysis was done to	
13		contextualize flood frequency on the Elbow River,	
14		estimates of things like 100-year discharge, 200-year	
15		discharge.	
16		In the report you'll also see a section that	
17		frames up the 2013 flood and estimates it as being just	
18		over a 200-year event.	
19	Q.	Now, this report again deals with both the Bow and the	
20		Elbow watersheds; is that correct?	10:35
21	Α.	MR. WOOD: This report deals specifically	
22		with the Elbow River watershed.	
23	Q.	If you turn to, I believe it's page 6 of this exhibit,	
24		in the introduction, you will see in the second	
25		paragraph there, that it refers to "previous flood	



1		frequency studies."	
2		Is it correct that those previous studies were	
3		only for the Bow River watershed and not the Elbow	
4		watershed?	
5	Α.	MR. WOOD: I believe those studies include	
6		information about the Bow River, but if you'll see	
7		later on in the document where that information is	
8		utilized, it is specific to the Elbow River.	
9	Q.	But the previous flood frequency studies done in 2014,	
10		2010, were strictly for the Bow River watershed, were	10:36
11		they not?	
12	Α.	MR. WOOD: Mr. Chairman, I don't believe they	
13		were. Scrolling down, if you look at Table 1, it	
14		quotes estimates from those reports for the	
15		Elbow River.	
16	Q.	But, again, on that same page, higher up on the page,	
17		the second paragraph under Section 2.1, it states that:	
18		(as read)	
19		"Estimates of historical flood peaks are	
20		available for the Bow River but not for	10:37
21		the Elbow River."	
22		Do you see that quote?	
23	Α.	MR. WOOD: Yes, I do see that. I believe	
24		that the reference is to the events listed above 1879,	
25		1897, and 1902.	



- 1 Q. But those reports were utilized to extrapolate or 2 interpolate flood frequency data for the Bow River 3 subsequent to that time; is that correct? 4 Α. MR. WOOD: Would you mind rephrasing your 5 question, Mr. Chairman? What I'm asking is the historical data was restricted 6 Q. 7 to the Bow River, is that correct, up until 2013? MR. WOOD: The historic data is those years 8 Α. 9 indicated there where there is, to my understanding, knowledge, anecdotal information, about events that 10 10:38 11 happened on the Bow River. 12 The Elbow River's hydrometric record begins in 13 1908, shortly after that 1902 event, and there is no 14 anecdotal information available prior to 1908 for 15 floods on the Elbow River, and specifically for those events there that were experienced on the Bow. 16 17 Q. So you're referring to the reference in that paragraph 18 where AMEC performed flood frequency analysis of the 19 Elbow River using the combined record for 1908 to 2013; 20 is that correct? 10:39 21 Α. MR. WOOD: It says using the Bow River using the 1911 to 2013 record. 22 23 Q. What about the Elbow? 24 MR. WOOD: It says AMEC then performed flood Α.
 - AMICUS REPORTING GROUP

frequency analysis for the Elbow River near Glenmore

25

ALBERTA TRANSPORTATION TOPIC #1 PANEL

Cross-examined by Mr. Rae

- 1 Reservoir using the combined record for 1908 to 2013.
- 2 Q. And the combined record of what? Of Bow River or
- 3 Elbow River data or both?
- 4 A. MR. WOOD: Subject to check, I believe what
- 5 they're referring to is a combination of recorded
- 6 events or hydrometric data on the Elbow River. Often,
- 7 hydrologists will synthesize a larger data set based on
- 8 fragments from different stations.
- 9 The history of hydrometric stations on the
- 10 Elbow River is one where they have been operational for
- 11 various periods and there's data records of different
- 12 vintages covering different locations.
- 13 Q. Could you turn, then, to Exhibit 15, and in particular
- 14 Appendix C. Appendix C to Exhibit 15 is a Document
- under the letterhead of AMEC, and it's entitled hydro
- 16 logic assessment memoranda and dated June 2014.
- 17 Mr. Hebert or Mr. Wood do you have that document
- or are familiar with that document?
- 19 A. MR. HEBERT: One moment, Mr. Chairman.
- 20 A. MR. WOOD: Yes, Mr. Chairman, I'm familiar
- with it, and I also have it open for my reference here.
- 22 Q. Can you advise how Alberta Transportation utilized the
- data in this memoranda in its preparations for the
- 24 project?
- 25 A. MR. WOOD: Mr. Chairman, the document is



10:39

			•
1		comprehensive and covers a lot of topics in addition to	
2		the hydrology.	
3		If the question is specific to the hydrologic	
4		estimates, those were used as shown in the previous	
5		exhibit for comparative purposes, given the analysis	
6		Stantec has done, the AMEC results that are in this	
7		document were compared and discussed in that first	
8		memorandum.	
9	Q.	Appendix C, though, does refer to a hydrological	
10		assessment of what is labelled the "BG1 dam"; is that	10:41
11		correct?	
12	Α.	MR. WOOD: I'm not familiar with that section	
13		of that report, Mr. Chairman.	
14	Q.	Mr. Hebert, is anybody else on your panel familiar with	
15		this report?	
16	Α.	MR. HEBERT: Just one moment, Mr. Chairman.	
17	MS.	FRIEND: This is Laura. If I can just	
18		interject and make sure you tell us the page number for	
19		screen sharing, we'd appreciate that. Thank you.	
20	MR.	RAE: My apologies. I believe it's on	10:42
21		or about page 172 of Appendix C to Exhibit 15.	
22	Α.	MR. HEBERT: So, Mr. Chairman, if I may, I	
23		believe this is a reference to conceptual project that	
24		was located on the Bow River. I'm afraid,	
25		Mr. Chairman, there's no one on the witness panel that	
ii			l



would be able to respond to questions 1 regarding -- regarding that project in particular. 2 THE CHAIR: 3 Ms. Vespa, that was Mr. Hebert 4 responding. Mr. Rae. 5 MR. RAE: 6 Mr. Hebert, you advised that no 7 one on the panel is able to speak to this particular exhibit. Can you advise, though, on what basis it's 8 9 part of the evidence put before this -- this Board in regard to the Springbank project? 10 10:43 11 Α. MR. HEBERT: Mr. Chairman, the AMEC report was 12 a comprehensive review of available or potential flood 13 mitigation options through the Bow River Basin. 14 references a number of different rivers and a number of 15 different potential projects on those rivers. 16 included here, as it does reference the Springbank 17 Off-Stream Reservoir Project. 18 Regretfully, there's no individuals on the panel 19 that would be able to respond to questions about 20 conceptual projects that were contemplated for other 10:44 21 rivers. 22 Q. Is it fair to say that the Springbank project, at least 23 at this stage of the planning process, was part of a 24 series of projects for the Bow and Elbow River Basins? 25 MR. HEBERT: Mr. Chairman, that would be a fair Α.



mitigation measure for the Elbow River. Q. And the BG1 dam project, though, can you advise I appreciate you said it was on the Bow River, but I see references to the Ghost River as well. Can you advise us more particularly where the BG1 conceptual plan was located? A. MR. HEBERT: Mr. Chairman, consulting with Appendix C, specifically, PDF page 173, the BG1 conceptual project, if I'm interpreting the map correctly, appears to be near Waiparous, Alberta, near Stoney Reserve 142B just to the west, and just to the north of Stoney 142, 143, 144. It's within the Bow River system. Q. The next exhibit I would like to turn to is Exhibit 18. Exhibit 18 is a document prepared by Alberta Transportation in March 2018, and it is labelled "Springbank Off-Stream Reservoir Project Environmental Impact Assessment." Mr. Hebert, are you familiar with Exhibit 18? A. MR. HEBERT: Yes, I am. Q. Can you advise me how this fit into Alberta Transportation's planning process for the Springbank project? A. MR. HEBERT: Mr. Chairman, this would be				
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Q. Can you advise me how this fit into Alberta Transportation's planning process for the Springbank project?	20		familiar with Exhibit 18?	
Alberta Transportation's planning process for the Springbank project?	21	Α.	MR. HEBERT: Yes, I am.	
24 Springbank project?	22	Q.	Can you advise me how this fit into	
	23		Alberta Transportation's planning process for the	
25 A. MR. HEBERT: Mr. Chairman, this would be	24		Springbank project?	
	25	Α.	MR. HEBERT: Mr. Chairman, this would be	



1		this would essentially constitute the environmental	
2		impact assessment which is the de facto application for	
3		the project.	
4	Q.	And, Mr. Hebert, I'll be also talking about Exhibit 20.	
5		Can you tell me how those two exhibits relate to each	
6		other.	
7	Α.	MR. HEBERT: Mr. Chairman, I believe the EIS	
8		summary is a covering document to the broader	
9		environmental impact study of which Exhibit 20 forms	
10		part of.	10:4
11	Q.	Now, for Exhibit 18, if you could turn to the project	
12		overview Section 3.6 and my apologies, this	
13		document, I don't have the PDF number. I was unable to	
14		unlock the PDF document. Oh, I see the staff have	
15		found the section, in any event.	
16		Now, under the first paragraph in Section 3.6, the	
17		statement is made: (as read)	
18		"A study by IBI group estimates that up	
19		to \$1.5 billion is at risk due to	
20		flooding of the Elbow River during a	10:4
21		future flood of the same magnitude	
22		without flood protection."	
23		Now, is that number broken out of the combined estimates	
24		of flood risks for flooding by both the Elbow and the	
25		Bow River? Or is that number strictly in reference to	



1		flooding risk from the Elbow River?	
2	Α.	MR. HEBERT: Mr. Speller will respond.	
3	Α.	MR. SPELLER: So, Mr. Chairman, the 1.5 billion	
4		number is for the Elbow River only, and it's broken out	
5		from combined damages that IBI calculated for both the	
6		Bow and the Elbow, but 1.5 is Elbow only.	
7	Q.	And we will perhaps get into this a little later on,	
8		but can you in general terms tell us how the numbers	
9		were broken out between the Elbow River flood risk and	
10		the Bow River flood risk given that the City of	10:49
11		Calgary's at the conjunction of those two rivers?	
12	Α.	MR. SPELLER: I'd ask Mr. Sol to describe the	
13		process for which they deviated or divided the damages	
14		between Elbow and Bow.	
15	Α.	MR. SOL: Yes. Thank you, Wayne.	
16		The damage model that we utilized has it's an	
17		object-based model, which means that damages are	
18		calculated for each asset's buildings and okay	
19		sorry it's an object-based model, so damages are	
20		estimated for each individual building. So we were	10:50
21		able to delineate whether a building that contributed	
22		damage was partly Elbow or the Bow River system.	
23		There are areas near the confluence where there is	
24		a flood risk from either river and, in that case, this	
25		isn't double counting.	



10:51

1	Q.	And what are those areas where there is a flood risk
2		from either river?
3	Α.	MR. SOL: Those would be areas near the
4		confluence where water from the Bow River and Elbow
5		could flood.
6		So, parts of downtown, and then nearer to the
7		confluence.
8	Q.	Would that include the community of Inglewood?
9	Α.	MR. SOL: That would be considered the
10		Bow River, I believe.
11	Q.	And Stampede Park?
12	Α.	MR. SOL: Elbow River.
13	Q.	Okay. The next Exhibit I'd like to pursue is
14		Exhibit 20 that I referred to earlier.
15		And, again, Exhibit 20 is entitled, "The
16		Springbank Off-Stream Reservoir Project Environmental
17		Impact Assessment."
18		And you'll see in Section 2.2 a variation in the
19		wording from what was in Section 3.6 of the previous
20		Exhibit 18.
21		Mr. Hebert, can you advise us why the wording was
22		changed from Exhibit 18 to Exhibit 20, or more
23		specifically, why the wording in Section 3.6 of
24		Exhibit 18 was changed for the wording in Section 2.2
25		of Exhibit 20?
I		



10:53

1	Α.	MR. HEBERT: One moment, Mr. Chairman.
2		Mr. Chairman, we're just comparing the two
3		documents. Is there a way to point out the difference
4		between the two statements?
5	Q.	Mr. Chairman, yes, I can point out that the reference
6		to the Elbow River flood of 2013 was deleted in
7		Section 2.2 of Exhibit 20. And, more specifically, the
8		sentence that I just previously quoted in regard to the
9		\$1.5 billion at risk due to flooding of the
10		Elbow River, that reference has been removed from
11		Exhibit 20.
12	Α.	MR. HEBERT: Mr. Chairman, I don't believe
13		there's a difference between the the intent of the
14		two statements.
15	Q.	Mr. Hebert, is it still the evidence of
16		Alberta Transportation, the reference to the
17		\$1.5 billion at risk number, that is still
18		Alberta Transportation's position in regard to these
19		risk analysis of flooding from both the Elbow and the
20		Bow Rivers?
21	Α.	MR. HEBERT: Mr. Chairman, that remains our
22		evidence.
23	Q.	Is it your evidence, though, that it was removed from
24		Exhibit 20 because that statement was not relevant?
25	Α.	MR. SPELLER: Mr. Chairman, I don't know if this



ALBERTA TRANSPORTATION TOPIC #1 PANEL

Cross-examined by Mr. Rae

- is helpful, but in Section 2.1 of Exhibit 20, the need
- for the project, the 1.5 billion is referenced there.
- We're still having a bit of trouble
- 4 differentiating between the two, so I don't know if
- 5 that's helpful.
- 6 THE CHAIR: Ms. Vespa, you caught that was
- 7 Mr. Speller? Thank you.
- 8 Q. MR. RAE: Thank you for that. I note,
- 9 though, the other Section 3.6 of Exhibit 18 with the
- 10 specific volumetric numbers, that has been removed from
- 11 the equivalent section in Exhibit 20.
- 12 A. MR. HEBERT: I would note that, but I would
- submit that that does not fundamentally change our
- 14 evidence.
- 15 Q. So, even though it's not in Exhibit 20, Alberta
- 16 Transportation still considers those estimated numbers
- in Exhibit 18 to be correct?
- 18 A. MR. HEBERT: Subject to check, yes.
- 19 Q. Would you be willing to undertake to confirm that
- 20 statement?
- 21 A. MR. SPELLER: Mr. Chairman, it's Wayne Speller.
- 22 If it's helpful, maybe a bit of background on these two
- documents.
- So Exhibit 18 is the EIS summary which is -- is --
- when we're doing EIAs is our attempt to try to distill



10:54

1 all those different volumes down into one document. Exhibit 20 is the project description, the 2 3 beginning of those multiple volumes, telling the story 4 about the project and its assessment. My experience has been, if there's differences 5 6 between a summary and the volumes of the EIA itself, 7 typically, that's an editorial choice of how to best try to summarize all of those volumes in a -- in a more 8 9 succinct package. My understanding is there is no differences 10 10:56 11 between that EIS summary or these volumes other than 12 editorial choices as to where to start presenting the 13 information and try not to repeat information more than 14 once if possible. 15 Thank you. The next exhibit I'd like to turn to, and Q. 16 my apologies if I omitted referring to this earlier, is 17 Exhibit 139, Appendix 33, and that is the "Benefit Cost 18 Analysis of Flood Mitigation Projects for the City of 19 Calgary - Springbank Off-Stream Flood Storage" prepared 20 for the Government of Alberta in February 2015. 10:57 21 Mr. Hebert, is your panel familiar with that 22 exhibit? 23 Α. MR. HEBERT: Yes, it is. 24 Can I proceed without the exhibit being displayed for Q. 25 the benefit of everybody right now?



ALBERTA TRANSPORTATION TOPIC #1 PANEL

Cross-examined by Mr. Rae

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1	Α.	MR. HEBERT: We have our reference,	
2		Mr. Chairman.	
3	Q.	My apologies. If it's my fault that I omitted	
4		referring to this exhibit when I provided the staff	
5		with the list of our proposed exhibits.	
6		Mr. Hebert, can you tell me once again, how did	
7		this report fit into Alberta Transportation's plans for	
8		the Springbank project?	
9	Α.	MR. HEBERT: Mr. Chairman, the benefit cost	
10		analysis for the Springbank project was used as part of	10:58
11		the overall decision for the project. So that's one	
12		component of the assessment made to proceed with the	
13		Springbank Off-Stream project.	
14		And Mr. Speller can augment my response.	
15	Α.	MR. SPELLER: And, Mr. Chairman, specifically	
16		for this Appendix, the February 18, 2015, benefit cost	
17		analysis and sometimes we may call it a "BCA" as an	
18		acronym, we'll try not to but it slips in this was	
19		included in this Appendix 3-3 in responding to a	

So the 2017 benefit cost analysis that Mr. Hebert was talking about referenced a number of different past BCAs. These appendices, including this one that's in front of us, Appendix 3-3, was one of those references, and we were asked to include them as complete documents

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supplemental information request.

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10:59

1		in responding to this request.
2	Q.	Thank you for that information. I'm going to ask a
3		couple of questions on Exhibit 139.
4		Mr. Hebert, if you would like to point out to me
5		if in you and your panel's responses if I'm
6		referring to an outdated or an overtaken document,
7		specifically Exhibit 139, please feel free to do so.
8		I'd ask you to turn to the summary conclusions on
9		Exhibit 139, which is more or less at page 27 of the
10		exhibit. Section 6.6 entitled, "Summary and
11		Conclusions."
12	Α.	MR. HEBERT: Yes, Mr. Chairman. I've found the
13		page.
13 14	Q.	<pre>page. Now, in this summary and, particularly, I guess it's</pre>
	Q.	
14	Q.	Now, in this summary and, particularly, I guess it's
14 15 16	Q.	Now, in this summary and, particularly, I guess it's labelled 6.3 of the summary, there are two scenarios,
14 15 16	Q.	Now, in this summary and, particularly, I guess it's labelled 6.3 of the summary, there are two scenarios, "High Damage Scenario" and "Low Damage Scenario," and
14 15 16 17	Q.	Now, in this summary and, particularly, I guess it's labelled 6.3 of the summary, there are two scenarios, "High Damage Scenario" and "Low Damage Scenario," and it goes on to elaborate on the scenarios that were
14 15 16 17 18	Q.	Now, in this summary and, particularly, I guess it's labelled 6.3 of the summary, there are two scenarios, "High Damage Scenario" and "Low Damage Scenario," and it goes on to elaborate on the scenarios that were examined.
14 15 16 17 18 19	Q.	Now, in this summary and, particularly, I guess it's labelled 6.3 of the summary, there are two scenarios, "High Damage Scenario" and "Low Damage Scenario," and it goes on to elaborate on the scenarios that were examined. As part of this cost benefit analysis, did
14 15 16 17 18 19 20	Q.	Now, in this summary and, particularly, I guess it's labelled 6.3 of the summary, there are two scenarios, "High Damage Scenario" and "Low Damage Scenario," and it goes on to elaborate on the scenarios that were examined. As part of this cost benefit analysis, did Alberta Transportation do a do-nothing scenario? In
14 15 16 17 18 19 20 21	Q.	Now, in this summary and, particularly, I guess it's labelled 6.3 of the summary, there are two scenarios, "High Damage Scenario" and "Low Damage Scenario," and it goes on to elaborate on the scenarios that were examined. As part of this cost benefit analysis, did Alberta Transportation do a do-nothing scenario? In other words, a cost benefit analysis if no Springbank
14 15 16 17 18 19 20 21 22	Q.	Now, in this summary and, particularly, I guess it's labelled 6.3 of the summary, there are two scenarios, "High Damage Scenario" and "Low Damage Scenario," and it goes on to elaborate on the scenarios that were examined. As part of this cost benefit analysis, did Alberta Transportation do a do-nothing scenario? In other words, a cost benefit analysis if no Springbank dam was constructed?



1	Α.	MR. HEBERT:	Mr. Chairman, in the context of
2		this report,	there was no do-nothing scenario prepared.

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Q. Mr. Hebert, is that a function of the science of cost benefit analysis not being set up to examine do-nothing scenarios?

In other words, those cost benefit analyses, are those an art form more than a science? Why would a person or a party, a project proponent, not look at a do-nothing scenario in terms of analyzing the costs and benefits of what he proposes to do?

11:02

- 11 A. MR. HEBERT: Mr. Chairman, I'd invite Mr. Sol 12 to provide a response to the question.
- 13 A. MR. SOL: Yes. The do-nothing scenario
 14 would essentially be the unmitigated baseline to which
 15 the benefits were estimated from.

So it's inherent in the work produced. The do-nothing is what we call the baseline damage estimate. And then when the damage model is run with mitigation, it's the difference between those two which provides the benefit of a mitigated scenario.

- So the do-nothing is inherent in the study.
- Q. But are there not value components in a do-nothing scenario that would be lost under any of the development scenarios --
- 25 A. MR. SOL: We should -- yeah, to clarify the



1 context of this benefit of cost, because a benefit cost analysis can mean a lot of different things, in this 2 3 case, it is the financial impact of flooding on the 4 City of Calgary compared with the costs of the project. 5 So I think what you're alluding to is a do-nothing scenario might have other advantages in terms of, you 6 7 know, alternate expenditures, opportunity cost, and the like, but this was specifically constrained to a 8 9 financial impact of flooding. Q. And in saying that, are you saying that the analysis 10 11:03 11 made no attempt to value intangible non-financial value 12 components? MR. SOL: 13 In this particular study, yes. Α. If you turn to, I believe it's page 47 of this exhibit, 14 Q. 15 which is in appendix -- I think it's in Appendix A, and I'm looking in particular at a -- sorry -- it's 16 17 Appendix E. It's the first page in Appendix E of the 18 exhibit, "City of Calgary Flood Damage Estimates." 19 And there's a table entitled, "Total Damages, Bow and 20 Elbow Rivers." Yes, that's the one, "With the Sewer 11:04 21 Backup." 22 Q. Now, again this is from both the Bow and Elbow Rivers. 23 Were damages arising from just Elbow River flooding 24 segregated out? 25 MR. SOL: Yes, that's correct, for the Α.



ALBERTA TRANSPORTATION TOPIC #1 PANEL

Cross-examined by Mr. Rae

- benefit cost.
- 2 Q. Where would I find those?
- 3 A. MR. SOL: I don't believe they're explicitly
- 4 reported in that particular report that you're
- 5 referencing.
- 6 Q. But they are available?
- 7 A. MR. SOL: Just for context here, this study
- 8 that we're currently looking at was superseded, and the
- 9 specific damages for the -- the reused, the benefit was
- 10 calculated on an annualized basis. So it is provided
- in that report, but there isn't a table with the
- 12 specific Elbow damages.
- 13 Q. You said it was "superseded." Can you refer me to the
- 14 exhibit that superseded this one?
- 15 A. MR. HEBERT: Mr. Chairman, we'll just take a
- 16 moment. Thank you.
- 17 A. MR. SOL: Thank you for your patience.
- So to clarify in the document that we're currently
- 19 looking at Exhibit E3 does specify Elbow River damages.
- 20 By event, if that's what you were looking for.
- And in the subsequent study, the intangibles on
- flooded households, we attempted to capture, set a
- value for that, but not in this particular report.
- Q. So you did attempt to capture certain intangible
- values?



11:05

1	Α.	MD COL. Voc In the 2017 homeful cost	
1	Α.	MR. SOL: Yes. In the 2017 benefit cost,	
2		which the values were extracted from a City of Calgary	
3		study.	
4	Q.	And will you agree that your attempt to capture certain	
5		values, by definition, could not attempt to capture all	
6		intangible values?	
7	Α.	MR. SOL: Certainly not.	
8	Q.	Now, on these exhibits that we're going through here,	
9		E1, and you referred me to Exhibit E3, I appreciate	
10		that, and later on, on about page 54, there's	
11		Exhibit E8 in that same set of attachments.	
12		And Exhibit E8 refers to "Alternative Damage	
13		Scenario." Can you explain the difference between the	
14		alternative damage scenario in Exhibit E8 and the total	
15		damage scenario in E1?	
16	Α.	MR. SOL: Yes. At the time, there was a	
17		publication released that attempted to quantify the	
18		lost lost productivity, and there was a a Special	
19		Labour Force Survey that surveyed hours lost.	
20		And so there was an estimate out there, using	
21		those methodology, that had a very high business	
22		interruption loss, and we provided two scenarios	
23		because, anecdotally, a lot of business hours were made	
24		up after the flood.	
25		So that's the reason for those two scenarios is to	



1 account for the uncertainty of the report by others 2 regarding business losses. 3 Q. Exhibit E9 later on in that overall exhibit, again, is 4 "Alternative Damage Scenario - Total Damages, Elbow River, With Sewer Backup." 5 And in that table, for the 100-year flood, the 6 7 total damages, I believe, are 538,369,000. Have I read that correctly, first of all? 8 9 Α. MR. SOL: Yes. Is it Alberta Transportation's position that that 10 Q. 11:10 11 number is the amount of damages that the proposed SR1 12 project will preclude? MR. SOL: 13 Α. As stated earlier, this No. 14 report was based on outdated data sources, including 15 the flood mapping. And I don't need to know it right now, but would you be 16 Q. 17 able to provide me the updated number that would go in 18 that column from which I just gave you that figure? 19 MR. SOL: Α. Yes, we could. It would be -- it 20 would be related to the previously referenced 11:11 21 1.5 billion. So -- but that was talking about a 200-year flood. So if you were looking at a 100-year 22 23 flood, we would have, without mitigation it would be 24 1.1 billion for the 100. 25 So the number went from 538 million to 1.1 billion? Q.



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1	Α.	MR. SOL: Yes.	
2	Q.	The next exhibit I'd like to refer to is an exhibit	
3		from the City of Calgary, it's Exhibit 234, which in	
4		turn, I believe the City of Calgary has labelled	
5		"Exhibit S" to its submission.	
6		And this document is dated July 2015, and it's for	
7		the "Bow River and the Elbow River," and it's labelled,	
8		"Hydraulic Model and Flood Inundation Mapping Update,"	
9		and it was prepared for both City of Calgary and	
10		Alberta Environment.	11:12
11		Mr. Hebert, have I described this correctly?	
12	Α.	MR. HEBERT: Mr. Chairman, I'm going based on	
13		what's on the front cover, and that appears to be	
14		correct.	
15	Q.	And I ask that, Mr. Hebert, because, as I say, it's	
16		part of Calgary's evidence, and correct me, but it's	
17		not been included as part of Alberta Transportation's	
18		evidence; is that correct?	
19	Α.	MR. HEBERT: Just one moment, Mr. Speaker or	
20		Mr. Chairman.	11:13
21		Mr. Chairman, Mr. Sol will respond.	
22	Α.	MR. SOL: Thank you. As I previously	
23		mentioned, the 2017 benefit cost submission was based	
24		on the City of Calgary study which itself was based on	
25		this report.	



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1	Q.	Thank you. If you could turn to, I believe it's PDF	
2		page 4, just part of the summary thank you of	
3		this exhibit.	
4		About two-thirds of the way down the page, you'll	
5		see a reference to: (as read)	
6		"The existing flood control structure at	
7		Inglewood is not sufficient to protect	
8		the area against the 100-year flood. Do	
9		you see that reference?	
10	Α.	MR. SOL: Yes, I do.	11:1
11	Q.	The SR1 project, then, without additional flood control	
12		upstream on the Bow River, will it protect Inglewood,	
13		the community of Inglewood, from the 100-year flood?	
14	Α.	MR. HEBERT: Mr. Chairman, Mr. Wood will	
15		respond.	
16	Α.	MR. WOOD: Mr. Chairman, I don't believe I	
17		can answer the question specifically, but I can say	
18		that SR1 will have the ability to remove up to	
19		600 cubic metres per second of flow, flood flow, from	
20		the Elbow River. The community of Inglewood is located	11:1
21		immediately downstream of the confluence of the Bow and	
22		Elbow Rivers; and, therefore, that community will	
23		receive a direct benefit in flood risk reduction from	
24		SR1.	
25	Q.	In 2013, was the community of Inglewood flooded by	



1		flood waters from Elbow or from the Bow or from both?	
2	Α.	MR. WOOD: Mr. Chairman, I can confirm that	
3		it was flooded by both. I was there during the event.	
4	Q.	So it's fair to say that SR1 would not flood proof	
5		Inglewood against the 100-year flood?	
6	Α.	MR. WOOD: Mr. Chairman, like I said, I don't	
7		have the specific answers. We have not looked into the	
8		exact amount of flood risk reduction at the community	
9		of Inglewood. But like I said, it does remove	
10		600 cubic metres per second from the Elbow. That's a	11:16
11		direct translation to 600 cubic metres per second from	
12		the Bow in certain circumstances.	
13	Q.	So from the community of Inglewood's perspective, SR1	
14		would be a partial solution; is that correct?	
15	Α.	MR. WOOD: I don't have the specific analysis	
16		to say exactly how much reduction in flood risk it	
17		would provide to Inglewood.	
18	Q.	The next sentence in that summary we're looking at	
19		states, I quote: (as read)	
20		"The existing earth berm, existing	11:16
21		concrete retaining wall and proposed	
22		flood wall at Stampede Park would be	
23		overtopped during the 100-year flood."	
24		Do you see that reference?	
25	Α.	MR. WOOD: Yes, I do.	



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1	Q.	Are the proposed new structures at Stampede Park being	
2		constructed to flood proof them, and their vital	
3		utilities, against the 100-year flood?	
4	Α.	MR. WOOD: I'm not familiar with those	
5		proposed structures. I'm not too sure if they were	
6		even built. I remind the Panel that this is a 2015	
7		report.	
8	Q.	But what is your current information?	
9	Α.	MR. WOOD: Current information	
10	Α.	MR. HEBERT: Mr sorry, go ahead.	11:17
11	Α.	MR. WOOD: Just for clarity, Mr. Chairman,	
12		please maybe repeat the question. Current information	
13		with respect to what?	
14	Q.	The proposed new structures at Stampede Park, of which	
15		there's quite a few, are they being constructed to	
16		flood proof those structures against the 100-year	
17		flood?	
18	Α.	MR. WOOD: Mr. Chairman, I believe that may	
19		be a question for the City of Calgary to answer as it's	
20		within their jurisdiction.	11:17
21	Q.	I certainly agree it's appropriate for the City of	
22		Calgary, but is it Alberta Transportation's position	
23		that you don't know the answer to the question?	
24	Α.	MR. HEBERT: One moment, Mr. Chairman.	
25		Mr. Chairman, as Mr. Wood mentioned, the projects	
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1		that are being referred to in any sort of	
2		specifications or mitigations associated, would fall	
3		under the jurisdiction of the City of Calgary or	
4		associated entities or other organizations. So Alberta	
5		Transportation would not have that information.	
6	Q.	In attempting to conduct your cost benefit analyses,	
7		and I appreciate the inherent imposition in doing that,	
8		would it be relevant if those structures I'm referring	
9		to were in fact flood proofed, would that be relevant	
10		in determining the cost benefit analysis and,	11:19
11		particularly, the estimated damage costs to structures	
12		themselves in Stampede Park?	
13	Α.	MR. SOL: It's David Sol here. The damage	
14		modelling that we undertook considered existing	
15		mitigation as to not double count anything, and when	
16		modeled with Springbank Reservoir, there was no damages	
17		at the Stampede.	
18	Q.	Sorry, that last part of your sentence, could you	
19		repeat that?	
20	Α.	MR. SOL: Our damage model considers	11:19
21		existing and proposed that part, going ahead,	
22		planned mitigation, and so when modelled with a	
23		baseline, without Springbank, those are included; and	
24		when modelled with the Springbank Reservoir in	
25		operation, there were no damages.	



ALBERTA TRANSPORTATION TOPIC #1 PANEL

Cross-examined by Mr. Rae

- 1 Q. But when modelled without Springbank, you didn't take
- into consideration damages to Stampede Park structures?
- 3 A. MR. SOL: With the mitigation in place, yes.
- 4 Q. No, my question, though, was, without the mitigation in
- 5 place, did your cost benefit analysis include the
- 6 damages to Stampede Park structures?
- 7 A. MR. SOL: The damage model included the
- 8 mitigation that is in place at the Stampede so as not
- 9 to double count it as benefits for the Springbank dam.
- 10 Q. Sorry, the mitigation that is already in place, you're
- 11 referring to?
- 12 A. MR. SOL: Yes.
- 13 Q. That would include flood proofing of individual
- 14 buildings?
- 15 A. MR. SOL: Not to the individual buildings,
- if you're talking about a homeowner putting flood
- 17 control on their own property, no.
- 18 Q. I'm specifically referring to Stampede Park and the
- 19 proposed new structures, the myriad of structures
- 20 there. I'm just asking how that was incorporated into
- your model.
- 22 A. MR. SOL: They were included in the
- 23 baseline.
- 24 Q. So help me out a little bit. If a building is --
- forgive my use of the layman's term -- if a building



11:20

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1		was flood proofed, then would it not be estimated	
2		damages to that be neutral in terms of any cost benefit	
3		analysis? There would be either no costs or no	
4		benefits in analyzing the Springbank dam?	
5	Α.	MR. SOL: Yes, that would be correct.	
6	Q.	Now, the second last paragraph on that same page refers	
7		to a number of communities, and the latter ones refers	
8		to the communities along the Elbow River. Namely,	
9		Riverdale/Elbow Park, Rideau Park, Roxboro, Mission	
10		District, Erlton area, Victoria, and Stampede.	11:22
11		Is it fair to say that those listed communities	
12		are the communities that the Springbank project is	
13		designed to protect?	
14	Α.	MR. WOOD: Mr. Chairman, I can answer that.	
15		Those communities are provided a reduction in	
16		flood risk by SR1, as well as all downstream	
17		communities.	
18		So all communities and properties located	
19		downstream of the diversion structure.	
20	Q.	What other communities are there besides those ones	11:22
21		listed?	
22	Α.	MR. WOOD: There's several within Rocky View	
23		County, private properties located downstream of the	
24		diversion structure; there's also some recreational	
25		facilities down there; there's infrastructure owned by	



utilities, as well as infrastructure owned by pipeline companies; there's the communities -- there's Glenmore Reservoir itself, the Glenmore Dam, and downstream is these listed communities here.

And like I mentioned with respect to Inglewood, by removing 600 cubic metres of flood water off of the Elbow, you inherently remove that water off of the Bow during an event. And so the benefits of the project extend down the Bow River and, technically, as far downstream as Saskatchewan border on the South Saskatchewan, albeit much less benefit down there.

11:23

11:24

- Q. Was any attempt made to segregate the protection for those communities I listed in relation to the production of all the other communities and areas that you just listed in terms of on a relative basis?
- A. MR. WOOD: Can you please rephrase the question or repeat the question?
- Q. Was any attempt made by Alberta Transportation to segregate the benefits to those listed communities in relation the benefits from SR1 for all the other communities and areas that you just listed?

What proportion of the benefits accrues to those communities in relation to all other communities and areas benefiting from the Springbank project?

A. MR. SOL: It's David Sol here.



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1		If I understand the question correctly, an answer	
2		would be that all of the benefits that we used were	
3		from those communities listed. So I would say between	
4		the Glenmore Reservoir and the confluence.	
5	Q.	And are those the communities that will constitute the	
6		majority of the beneficial the beneficiaries of the	
7		Springbank dam?	
8	Α.	MR. SOL: It is my understanding yes, that's	
9		the most densely developed area.	
10	Q.	If you had to quantify it, would those benefits	11:2
11		represent 75 percent of the total benefits or 65	
12		or I'm sorry, go ahead.	
13	Α.	MR. SOL: Apologies. No, we made no attempt	
14		to quantify in that regard.	
15	Q.	My next questions relate to Exhibit 325 and,	
16		Mr. Chairman, this will be the last exhibit I'll be	
17		asking questions on. Exhibit 325 is the reply	
18		submissions of Alberta Transportation. Thank you.	
19		And if you could first turn to, I believe it	
20		looks it's page 5, paragraph 2. There we go. Thank	11:2
21		you: (as read)	
22		"The Ermineskin Cree Nation and the	
23		Kainai First Nation have withdrawn their	
24		objections to the project."	
25		Are you able to provide us any changes to Alberta	



1		Transportation's plans arising from that withdrawal of	
2		their intervention?	
3	Α.	MR. HEBERT: Mr. Chairman, in what regard?	
4	Q.	Well, I'm just asking whether any of the evidence that	
5		has been submitted to the NRCB for this hearing, any of	
6		it would need to be updated in terms of resulting from	
7		the withdrawal of those interventions?	
8	Α.	MR. HEBERT: Mr. Chairman, I don't believe so.	
9	Q.	If you could turn to page my apologies again, my PDF	
10		page numbering is out probably page 6. It would be	11:27
11		paragraph 5 of the reply.	
12		Sorry, it's paragraph 6. In paragraph of 6, if I	
13		might quote: (as read)	
14		"Alberta Transportation notes that SR1	
15		designed to afford protection greater	
16		than for a 1 to 200-year flood. It	
17		would be a larger project with a bigger	
18		footprint, more impacts and greater	
19		cost. Alberta Transportation believes	
20		that the SR1 as designed strikes an	11:28
21		appropriate balance between affording	
22		flood protection to downstream	
23		communities and minimizing impacts on	
24		the local community."	
25		What is the basis for the balance that	



Alberta Transportation has attempted to strike? 1 2 MR. HEBERT: Α. So, Mr. Chairman, at its core, 3 it's to ensure that protection is provided for a 4 designed flood, which has been flood of record event in That is the standard when it comes to the 5 6 development of flood mitigation projects. 7 We do recognize that, you know, should there be a demand to build something larger, that it would 8 9 inevitably had larger impacts on the community, would have had a greater cost from a construction 10 11:29 11 perspective, from a land perspective. So I believe the 12 balance relates to the ability to meet the intended 13 need of the project. 14 Q. But the selection of the 1 to 100-year flood, I mean, 15 you could have selected a project that satisfied -- or 16 that applied to the 1 to 150-year flood or would apply 17 to 1 -- to the 80-year flood. The selection of the 18 protection you afforded, at what stage does it become 19 arbitrary? 20 MR. HEBERT: Mr. Chairman, as I stated in my Α. 11:29 21 response, there's a standard at which flood mitigation 22 projects are built to the event of record. That was 23 the choice made in the development of this project. 24 Where does that standard originate? Q. 25 MR. WOOD: I can assist with that, Α.



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1		Mr. Chairman. That standard is enshrined in the	
2		province's flood hazard mapping framework. They use a	
3		design flood standard of 100-year, and in select cases,	
4		the flood of record if it's been exceeded.	
5		And so, by extension, if the hazard mapping	
6		identifies these areas under the 100 years for	
7		development, then flood mitigations typically aim to	
8		address that design standard to help reduce that risk,	
9		and match the provincial standard of 100-year.	
10	Q.	So that provincial standard was developed by the	11:30
11		province of Alberta is what you're saying; is that	
12		correct?	
13	Α.	MR. WOOD: Developed by the province several	
14		decades ago, yes.	
15	Q.	And Alberta Transportation made no attempt to diverge	
16		from that standard?	
17	Α.	MR. HEBERT: No, Mr. Chairman. The necessity	
18		to ensure that downstream communities are protected	
19		from the flood of record was the choice was the	
20		choice made and it's that's the choice that we're	11:31
21		proceeding with.	
22	Q.	And when the province of Alberta adopted that standard,	
23		you say it was quite some time ago, has it been	
24		revisited since?	
25	Α.	MR. HEBERT: Mr. Chairman, I'm not aware if	
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1		it's been revisited.	
2	THE	CHAIR: Excuse me, Ms. Vespa, there's been	
3		a little bit of switching of people providing answers.	
4		Are you able to keep track? Have you been able to	
5		track? Thank you.	
6	THE	COURT REPORTER: Mr. Chair, I'm getting used to	
7		their voices. Thank you.	
8	THE	CHAIR: Thanks. Mr. Rae, continue.	
9	Q.	MR. RAE: Thank you, Mr. Chairman. Perhaps	
10		you could repeat the answer to that last question.	11:32
11		Has it been revisited since?	
12	Α.	MR. HEBERT: Mr. Chairman, I've conferred with	
13		members of the panel, and we're not aware that it's	
14		been revised since.	
15	Q.	And has that standard been also developed by the	
16		Government of Canada, given its jurisdiction over most	
17		rivers?	
18	Α.	MR. WOOD: I can answer that, Mr. Chairman.	
19		The Government of Canada also uses a 100-year	
20		flood standard in their hazard mapping framework.	11:32
21	Q.	So the current concept for the Springbank structures	
22		are the product of the application of that standard; is	
23		that correct?	
24	Α.	MR. WOOD: Mr. Chairman, if I could, I'd like	
25		to articulate, what we were discussing is that Alberta	



1 and Canada have 100-year flood standards. 2 designed to the flood of record, which exceeds that 3 100-year standard. It has been estimated at the 2013 4 flood as being roughly a 200-year event. 5 Q. If you could turn to page 3 of this exhibit, more specifically paragraph 9. My apologies again if my PDF 6 7 numbering is out. Now, the first sentence -- or the second sentence 8 9 in paragraph 9 states: (as read) "Other components include a potential 10 11:34 11 new flood control structure on the Bow River." 12 13 Is there only one additional flood control structure 14 proposed or being investigated for the Bow River? 15 MR. HEBERT: Α. Mark Svenson will respond. 16 Α. MR. SVENSON: Hello, Mr. Chair. 17 Currently, on the Bow River, the province is 18 investigating three potential options. 19 Q. So that statement in paragraph 9 is slightly incorrect, 20 then; is that correct? 11:34 21 Α. MR. HEBERT: No, Mr. Chairman. The Alberta 22 Environment and Parks is investigating three options, 23 with the intent of selecting one of those three options 24 to pursue. 25 Just so clear, Alberta Environment is intending to Q.



select one, and only one, of the three options? A. MR. HEBERT: Ms. Carignan can supplement the response. A. MS. CARIGNAN: Yes, Mr. Chairman. Currently, they're investigating three alternatives, and they will select one to proceed with. Q. Now, later on in that paragraph 9, the second last sentence, it states that Alberta Transportation has selected only the SR1 project for review. It states that: (as read) "These other components, including any Bow River will be reviewed and assess in other processes." Can you advise what process will be used to assess the proposed Bow River dam? A. MR. SVENSON: Mr. Chair, this is Mark Svenson, I can answer that. So the process by which the a project on the
3 response. 4 A. MS. CARIGNAN: Yes, Mr. Chairman. Currently, 5 they're investigating three alternatives, and they will 6 select one to proceed with. 7 Q. Now, later on in that paragraph 9, the second last 8 sentence, it states that Alberta Transportation has 9 selected only the SR1 project for review. 10 It states that: (as read) 11 "These other components, including any 12 Bow River will be reviewed and assess in 13 other processes." 14 Can you advise what process will be used to assess the 15 proposed Bow River dam? 16 A. MR. SVENSON: Mr. Chair, this is Mark Svenson, I 17 can answer that.
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16 A. MR. SVENSON: Mr. Chair, this is Mark Svenson, I 17 can answer that.
17 can answer that.
18 So the process by which the a project on the
19 Bow River would go forward would be subject to the
20 environmental legislation that it triggers, which will 11:36
21 include the provincial EIA process, but that remains it
22 at this time.
Q. So it's a little ironic that, as part of the flood
control in the City of Calgary, there's a future



11:37

11:37

upstream of the City of Calgary, and given that answer 1 2 about environmental processes, is it Alberta's position 3 that the environmental assessment will be the only 4 assessment in regard to any future upstream Bow River 5 dam? MR. KRUHLAK: 6 Mr. Chairman, I'd just like to 7 interject. I appreciate Mr. Rae's concerns with respect to the Bow River, but I'm not aware of any 8 9 actual application. As he's been told, there are various options, and I'm not sure how helpful it is to 10 11 address this, to be pursuing this at this time. MR. RAE: 12 Mr. Chairman, if I might respond. 13 The relevance of those other options is that I think 14 the evidence before the Board, already in written form, 15 and which will be forthcoming in the coming days, I think the evidence will show that the Springbank 16 17 project is not a standalone project, and that the 18 purported benefits of the Springbank dam will only be 19 realized if there is also an upstream dam on the 20 Bow River. So the relevance to the public interest 21 that this Board must determine is quite apparent. 22 There is no public interest, the Stoney Nakoda 23 Nations are submitting, in building a project that will 24 not by itself result in any meaningful protection or 25 benefits to the public interest, and even, I dare say,



1		to the citizens of Calgary. There's no benefit to the	
2		public as a whole if the SR1 dam is not part of the	
3		bigger project.	
4		Nevertheless, Mr. Chairman, I appreciate that the	
5		scoping for this project and the application before you	
6		is strictly for the SR1 project.	
7	THE	CHAIR: Thank you.	
8		Mr. Rae, we're just 20 minutes to noon. Did you	
9		have a few more questions yet for Alberta	
10		Transportation on topic area 1?	11:39
11	MR.	RAE: I have a few to go yet, sir.	
12	THE	CHAIR: Okay. I mean, if possible, you	
13		could wrap up by noon, if you think that works, then we	
14		could break at noon for lunch, and then proceed from	
15		there. But is 20 minutes likely going to suffice?	
16	MR.	RAE: Well, given the flow of my	
17		questions, unintended, it should suffice. I should be	
18		able to finish by noon.	
19	THE	CHAIR: Okay. Great. Thank you.	
20	Q.	MR. RAE: If the witness panel could then	11:39
21		turn to paragraph 11 of the reply to the exhibit.	
22		Now, paragraph 11 lists the reasons why SR1 was	
23		selected over the McLean Creek option.	
24		There's no mention of the Stoney Nakoda in that	
25		summary. Is that a deliberate omission?	



1	Α.	MR. HEBERT: Mr. Chairman, that is not.	
2	Q.	Is it your evidence that SR1 was selected over MC1 for	
3		those reasons, and that an additional reason would be	
4		that it benefits the Stoney Nakoda more?	
5	Α.	MR. HEBERT: Mr. Chairman, could you clarify	
6		the question?	
7	Q.	Well, I pointed out there's no listing of the	
8		Stoney Nakoda and the reasons for Alberta	
9		Transportation selecting the Springbank option.	
10		Is it your evidence, Mr. Hebert, that an	11:4
11		additional reason would be that the Springbank option	
12		is of benefit to the Stoney Nakoda over the	
13		McLean Creek option?	
14	Α.	MR. HEBERT: If I understand the question, if I	
15		take into account the geography the geographic	
16		location of the Stoney Nakoda Reserves, the	
17		Stoney Nakoda are not located along the Elbow River.	
18		So I would say it's neither, effectively, from a	
19		flood control perspective, it would be a neutral	
20		consideration.	11:4
21	Q.	If you could scroll down further to paragraph 14 of	
22		this exhibit. And, in that paragraph, Alberta	
23		Transportation introduces the concept of drought	
24		management.	
25		Is the proposed SR1 project relevant to drought	



ALBERTA TRANSPORTATION TOPIC #1 PANEL

Cross-examined by Mr. Rae

11:42

11:42

1		management?
2	Α.	MR. HEBERT: Mr. Chairman, it is intended to be
3		a flood mitigation project. The consideration for
4		drought management, as referred to in paragraph 14,
5		relates to the potential project on the Bow River, or
6		other water reservoir projects within the basin.
7	Q.	So is it Alberta Transportation's understanding that
8		the City of Calgary is advocating the SR1 project, not
9		simply for flood control, but also for drought
10		management?
11	Α.	MR. HEBERT: Mr. Chairman, my understanding of
12		the City of Calgary's advocacy for the SR1 project is
13		that it's intended to be a flood mitigation project.
14		The document referenced here, the City advocates
15		for water storage on the as a consideration in the
16		future potential Bow River project.
17	Q.	But not a consideration for the SR1 project?
18	Α.	MR. HEBERT: Mr. Chairman, there is an element
19		to how SR1 of the Glenmore Reservoir interact in terms
20		of water management perspective, and Mr. Wood can
21		supplement my response.
22	Α.	MR. WOOD: Thank you, Mr. Chairman.
23		Yes, while SR1 does not provide a direct storage
24		component for water, it does greatly improve water



security on the Elbow River.

25

11:43

1 Currently, the City of Calgary, with the way that 2 Glenmore is operated in the spring, it is operated for 3 a certain degree of flood control that, in many ways, 4 can jeopardize water security later in the year. 5 Generally, if you draw down the reservoir in preparation of flood season, and that water doesn't 6 7 arrive, then that could result in deficits in the future. 8 9 So, by removing the flood risk off the Elbow River, or reducing the flood risk off the 10 11 Elbow River, Glenmore is able to return to operations 12 as solely a water supply facility within that allocated 13 storage, and that allows it to help mitigate its risk 14 in an annual basis. 15 Q. My reasons for the question are that Alberta Transportation has proposed a project for flood 16 control, and it's relatively clear the beneficiaries of 17 18 that flood control, purportedly, is the City of Calgary 19 and certain communities in it, and yet at the same 20 time, we find that City of Calgary has additional 11:44 21 motives for the flood control project which relate to 22 drought management. 23 My question is, is that, did Alberta 24 Transportation consider drought management in proposing



the SR1 project in the context of the overall Bow River

25

1 Basin water control proposals?

A. MR. HEBERT: Sorry, Mr. Chairman. The project that's been advanced in the application is intended to be a flood mitigation project. At a very early preliminary point, when a range of options were being considered on all projects, it was referred to as having the option, but, ultimately, as the project progressed in its fairly early stages, the notion that it would be exclusive to flood control structure was what ultimately was decided upon and ultimately how the project advanced through the regulatory process.

11:45

- Q. So when Alberta Transportation proposes, formally proposes, a flood control structure on the Bow River, will drought management be part of the public purpose for that dam in addition to flood control?
- A. MR. HEBERT: Mr. Chairman, as it relates to the Bow option, that is, the Bow options that are being reviewed by AEP, drought management and water supply are considerations for those projects.
 - Q. Is it Alberta Transportation's position, though, that drought management should not be an issue that this Board should take into consideration in rendering its decision?
- A. MR. HEBERT: Mr. Chairman, we've advanced an application for a flood mitigation project, taking into



1		consideration the needs for flood mitigation on the	
2		Elbow River, and as well as the constraints in	
3		providing other features on this particular river.	
4	Q.	Could you turn to paragraph 27 of this exhibit, please.	
5		Now, in paragraph 27, in it, Alberta Transportation	
6		submits that the SR1 project is, I quote, "A sound	
7		investment of public resources." And has this	
8		assessment been quantified?	
9	Α.	MR. HEBERT: Mr. Chairman, it's quantified by	
10		the costs that would be avoided in the event of a	11:47
11		future flood event, particularly, the costs that are	
12		estimated for a 2013 level event.	
13	Q.	And later on in that paragraph reference is made to the	
14		estimated costs of the 2013 flood, as Mr. Hebert just	
15		alluded to, and the footnote is to the City of	
16		Calgary's submission at Exhibit 230.	
17		And my question is, the City of Calgary	
18		submissions, are those simply the flood costs for only	
19		those along the Elbow River below the Glenmore Dam?	
20	Α.	MR. HEBERT: Yes oh, sorry, sir.	11:48
21	Q.	Sorry. No, my apologies, Mr. Hebert. If I might	
22		preface my remarks, it appears that Alberta is taking	
23		the position that it's a sound investment because of	
24		the evidence that the City of Calgary has put forward,	
25		so that's why I'm asking whether the City of Calgary	
			II



			ĺ
1		numbers in regard to benefits to the downstream	
2		communities are the basis for that sound investment	
3		statement.	
4	Α.	MR. HEBERT: Yes, it is, Mr. Chairman.	
5	Q.	And yet the City of Calgary is also talking about	
6		drought management, which you did not include that in	
7		your assessment of the SR1 project; is that correct?	
8	Α.	MR. HEBERT: Yes, that is correct.	
9	Q.	If you could turn to paragraph 49 sorry,	
10		paragraph 48. Goes on two pages.	11:4
11		And the statement is made there that "The benefits	
12		of the SR1 project will be distributed more widely."	
13		What's the basis for saying that the benefits are	
14		distributed more widely?	
15		Is it based on the number of people? The number of	
16		residents? Or as the evidence earlier showed, the	
17		financial analysis of the cost benefit?	
18		What's the basis that Alberta Transportation	
19		submits that the benefits have been distributed more	
20		widely than they would be otherwise.	11:4
21	Α.	MR. HEBERT: So, Mr. Chairman, that statement	
22		would be inclusive of the personal, social, economic	
23		effects of a flood on the Elbow River to downstream	
24		communities, including Calgary and communities that	
25		have been referenced in our testimony this morning. It	
			íl –



1		is meant to be an inclusive statement of the varying	
2		benefits.	
3	Q.	But, surely, not all factors are widely distributed?	
4		For instance, in terms of the amount of land taken by	
5		the Springbank dam project, when it's in operation in	
6		terms of the diversion, the raw amount of land would	
7		exceed the amount of land in the Elbow and other	
8		communities downstream of the Glenmore Dam.	
9		So certain criteria there are less widely	
10		distributed by this benefit. Is that not a fair	11:50
11		statement?	
12	Α.	MR. HEBERT: Mr. Chairman, could you clarify	
13		the question? I'm not sure I quite understand at the	
14		moment.	
15	Q.	I'm simply suggesting that, when the assertion is made	
16		that the benefits are more widely distributed, it	
17		depends on what benefits you're talking about. In	
18		terms of the raw land taken, this project will take up	
19		more land than it is, quote unquote, "protecting." Is	
20		that not correct?	11:5
21	Α.	MR. HEBERT: Mr. Chairman, I don't have the	
22		exact land mass that would be protected within the City	
23		of Calgary, but based on our based on our	
24		assessment, as we've referred to this morning, we've	
25		quantified the economic and other impacts that would be	



1 faced in the event of a flood.

Q. Could you turn to paragraph 67 of this reply exhibit?

You'll see from paragraph 67 that reference is made to payments to the Tsuut'ina Nation and Redwood.

Given those expenditures, did Alberta Transportation similarly consider paying the -- similarly contributing to the Stoney Nakoda Nations' funds in regard to the Bow River issues which will ultimately be raised by the combination of the SR1 project and the Bow River dams?

A. MR. HEBERT: So, Mr. Chairman, as we've discussed this morning, Alberta Environment and Parks, as the department responsible for identifying and screening potential flood mitigation projects, is responsible for the engagement with groups at this time. The question posed regarding any sort of costs or impacts related to that consideration is within their scope of responsibility.

As I referred to in my remarks this morning, and as is reflected in our submission, Alberta

Transportation welcomes and encourages continued discussion with the Stoney Nakoda Nations as it relates to the SR1 project.

Q. The basis for my question is that, as a result of the 2013 flood, many communities, including the Stoney Nakoda, incurred damages from that flooding, and 11:52



Α.

ALBERTA TRANSPORTATION TOPIC #1 PANEL Cross-examined by Mr. Rae

the Stoney Nakoda people are very appreciative of the assistance from the province of Alberta in regard to assisting with the damages from that flood, and as well from further investigations into flood control on the reserve.

Yet, at the same time, it's clear that the

Yet, at the same time, it's clear that the province of Alberta is seriously considering flooding large portions of the Stoney Indian Reserve on the Bow River, and my question is why has Alberta Transportation not similarly funded the Stoney Nakoda people to examine the impacts of that flooding?

It's quite ironic that we're talking about expenditures and management of flood protection, while the reality is from the Stoney Nakoda point of view, is that there's no money forthcoming from the impending flooding of its reserve.

So my question simply is, did Alberta Transportation consider that funding?

MR. HEBERT: Well, Mr. Chairman, as I said earlier, there is a exercise underway led by the Department of Environment and Parks as it relates to the screening and selection of a flood reservoir on the Bow River, certainly, as it relates to SR1; and, again, I note for the Panel that the Elbow River traverses through -- through areas that aren't inclusive of the



11:53

1		Stoney Nakoda Nations' lands.	
2		Nevertheless, as part of our ongoing consultation	
3		with the Stoney Nakoda Nation, we would welcome the	
4		opportunity to discuss any concerns they have with the	
5		SR1 project further.	
6	Q.	But not in regard to the proposed Bow River dam. Is	
7		that your evidence?	
8	Α.	MR. HEBERT: Well, Mr. Chairman, I'd	
9		reemphasize that the selection of the Bow reservoir is	
10		at a initial stage, it's at a conceptual stage, three	11:5
11		options have been identified. Alberta Environment and	
12		Parks is undertaking work to screen those projects, to	
13		understand the implications of those projects, in	
14		advance of a decision on selection of a project.	
15		So that falls under the responsibility of	
16		Environment and Parks. Alberta Environment and Parks	
17		is responsible for that component of screening and	
18		selecting flood mitigation projects. So it's clear	
19		Alberta Transportation is not accountable for this	
20		portion of the work on the Bow River on the	11:5
21		Bow River project.	
22	Q.	Could you turn to paragraph 71? And under 71 in the	
23		bullet points, the third bullet point, the statement is	
24		made that: (as read)	
25		"Alberta Transportation states that it	



1		is not possible for every downstream	
2		property owner to be protected to an	
3		equal extent."	
4		What efforts did Alberta Transportation make in that	
5		regard to ascertain who could be protected and who could	
6		not? Was, for example, was a matrix created to	
7		ascertain who would be benefited and who would not?	
8		What was the process that was used that led to Alberta	
9		Transportation making that statement?	
10	Α.	MR. HEBERT: So, Mr. Chairman, I would take the	11:56
11		Panel back to the 2013 event, which the communities	
12		along the Elbow River that were significantly, severely	
13		impacted. That included Bragg Creek, it included	
14		Redwood Meadows, it included the City of Calgary.	
15		And from that moment onwards, the province and	
16		other parties have worked aggressively and diligently	
17		to ensure that those communities receive the mitigation	
18		required to protect from a 2013 level event.	
19		The nature of that statement is referring	
20		specifically to other areas that were referred to in	11:57
21		the Springbank landowners' submission. The second part	
22		of that statement reflects the fact that SR1 does	
23		reduce flood levels along portions of the river	
24		downstream of the project, which we would view as as	
25		a as a benefit of SR1 being on the landscape.	



1			1					
1	Q.	Thank you. Could you turn to paragraph 218. 218. At						
2		paragraph 218 in the sorry, too far. There we go.						
3		In the first sentence, Alberta Transportation						
4		recognizes and acknowledges that the project is located						
5		on the traditional territory of the Treaty 7 First						
6		Nations, including the Stoney Nakoda.						
7		Does Alberta Transportation recognize that the						
8		Stoney Nakoda have both Treaty and Aboriginal rights in						
9		the traditional area?						
10	Α.	MR. HEBERT: Mr. Chairman, as is referred to	11:58					
11		later in our submission, the position is that we						
12		recognize that First Nations have Treaty rights. Our						
13		legal position pertaining to Aboriginal rights just						
14		bear with me one moment is outlined in paragraph 226						
15		in the same exhibit.						
16	Q.	Thank you. That's a good lead-in, and my next question						
17		is related to paragraph 223.						
18		And paragraph 223 talks about the Stoney Nakoda's						
19		assertion to rights to water.						
20		Is Alberta Transportation aware that TransAlta	11:59					
21		Utilities pays the Stoney Nakoda for water rentals on						
22		the Bow River?						
23	Α.	MR. HEBERT: I believe I'm aware of that, sir.						
24		I don't know the specific details, but I'm vaguely						
25		aware of that.						



- Q. Then on what basis is Alberta disputing that the
 Stoney Nakoda have rights of some sort to water on the
- 3 Bow River?
- A. MR. HEBERT: Mr. Chairman, I'm not in a position to comment on matters that the Government of Alberta is undertaking active litigation.
- Q. Well, sir, I wasn't asking for a comment. I asked a question. What's the basis for the statement in paragraph 223?
- 10 A. MR. HEBERT: Oh. Well, Mr. Chairman, Alberta's
 11 position is outlined in paragraph 233 [verbatim],
 12 starting at the point where Alberta disputes this
 13 position and states the government's position as it
 14 relates to water rights being vested in the Crown. It
 15 carries -- it carries on.

The second part was the reference to the litigation that is presently underway.

Q. But regardless of the litigation, you stated that you are aware that TransAlta Utilities physically pays the Stoney Nakoda water rentals on the Bow River. That is your evidence, is it not?

- 22 A. MR. HEBERT: I'm more vague on this,
- Mr. Chairman.

18

19

20

21

- 24 MR. RAE: Thank you. If you could turn then
- to -- gentlemen, my apologies, Mr. Hebert and his

12:00



1		witness panel have been so efficient in answering my					
2	questions, they've precluded some of my final ones.						
3	I'm just checking my notes.						
4	4 If you could turn to paragraph 258,						
5		subparagraph (g). Thank you.					
6		Paragraph (g), and particularly the response,					
7		states that Alberta Transportation considers that it is					
8		not appropriate to install the wildlife overpasses that					
9		the Stoney Nakoda have requested.					
10		Why is it not appropriate?	12:02				
11	Α.	MR. HEBERT: Mr. Chairman, I'd invite					
12		Mr. Brescia to provide that response.					
13	Α.	MR. BRESCIA: Mr. Chairman, we've done an					
14		evaluation of that request in terms of the usefulness					
15	of a wildlife overpass at the location near the						
16	l6 project .						
17		What I should point out is that there isn't one					
18		there currently at that location, and part of the					
19							
20	What the project will do, however is, as part of 12:0						
21		the diversion channel, will create a wildlife underpass					
22		which will serve to facilitate wildlife movement across					
23		Highway 22, and that will serve to facilitate that					
24		movement.					
25		The overpass requires a significantly larger					



amount of space, particularly given that Highway 22 is 1 2 considered part of the high load corridor for the 3 province, which would mean that the space between the 4 road and the overpass would have to be 9 metres, making a substantial structure, and most of that 5 6 recommendation is outlined in our responses to the CF conformity IRs, particularly IR 2-15. I don't believe 7 it has an exhibit number. 8 9 Q. Is it fair to say that the proposed wildlife overpass would mean incurring of additional costs for the SR1 10 12:04 11 project? 12 MR. HEBERT: Mr. Chairman. we've not Α. 13 contemplated a wildlife overpass in our plans based on 14 the response provided by Mr. Brescia. The 15 consideration and development of such a structure would 16 likely be an additional cost to the project. 17 Q. So if the cost of a wildlife overpass were included. 18 that would impact the cost benefit analysis that you've 19 carried out? 20 MR. HEBERT: Such a structure was not Α. 12:05 21 contemplated, although as we've referenced elsewhere, 22 the benefit cost analysis, our point-in-time analyses 23 were conducted at the decision-making stage, at the 24 application stage of the project. 25 So they were not included, and I hesitate to



1		speculate on the impact of such a structure seeing that	
2		it's not being considered.	
3	Q.	Is it fair to say, too, that other items such as the	
4		cost of the public of wildlife collisions also were not	
5		a direct input into your cost benefit analysis?	
6	Α.	MR. HEBERT: Mr. Chairman, I'm conferring with	
7		the panel, and they were not, but as Mr. Brescia	
8		referenced, the project has what we believe as to be an	
9		appropriate offset related to wildlife underpass.	
10	Q.	That's precisely my question. On what basis is the	1
11		determination made that it's appropriate?	
12		I appreciate these are not absolute values, I'm	
13		just suggesting that the costs of wildlife collisions	
14		and the costs of a wildlife overpass would also result	
15		in additional costs to the project. Is that not	
16		correct?	
17	Α.	MR. HEBERT: Well, Mr. Chairman, as Mr. Brescia	
18		mentioned, we have to bear in mind practicality of the	
19		wildlife overpass in this instance.	
20		Based on our analysis, such a structure would not	1
21		be practical in consideration of the use of	
22		Highway 21 [verbatim] as a as a wildlife corridor.	
23		In terms of the notion the plans related to the	
24		wildlife underpass, the rationale is provided within	
25		the document that Mr. Brescia referenced.	



12:06

1	Q.	Is "practicality" a euphemism for cost in the way you					
2		framed that answer?					
3	Α.	MR. HEBERT: No. As Mr. Brescia referenced,					
4		there are some technical considerations to the wildlife					
5		overpass that, in this circumstance, would make such a					
6		structure challenging to to pursue.					
7	Q.	Thank you. Mr. Chairman, I have one last question. If					
8		you could turn, witness panel, if you could turn to					
9		paragraph 289.					
10		In paragraph 289 is summing up the reply of	12:07				
11		Alberta Transportation, the last two sentences state, I					
12		quote: (as read)					
13	"SR1 does not protect against all						
14		possible future flood events. No					
15		single project could without having					
16		significant impacts and costs."					
17		What are the other projects that this statement is					
18		referring to?					
19	Α.	MR. HEBERT: Mr. Brescia or Mr. Speller will					
20		respond.	12:08				
21	Α.	MR. SPELLER: Mr. Chairman, this paragraph is in					
22		response to a filing by Calgary River Valleys. In this					
23		specific response, they were speaking about the concept					
24		of accumulative effects assessment related to all flood					
25		mitigation projects on the Bow, on the Elbow I don't					



ALBERTA TRANSPORTATION TOPIC #1 PANEL Cross-examined by Mr. Rae

have it in front of me, but subject to check, it was a lot of the South Saskatchewan River Basin and talking about those effects and those different flood mitigation projects.

So, in response to the question, the different projects discussed are the suite of flood mitigation projects that are the responsibility of either the province or the different municipalities that are currently being considered in the region.

Q. Has Alberta Transportation advised the City of Calgary, similarly, that no single project, including a project on the Bow River, would not also have significant impacts on costs?

In other words, if this is the position on SR1, has Alberta Transportation made that clear to the City of Calgary in regard to the Bow River?

A. MR. HEBERT: Well, Mr. Chairman, I think it be acknowledged, without putting words in the mouth of the City of Calgary, that each project, whether it's SR1 or future Bow project or other types of mitigations are put in place, both within the specific context of the objective to be met.

But in the case of the projects being -- that have been pursued in advance since the flood of 2013 also work within a context together of providing, you know,

12:09



12:11

1		appropriate levels of flood mitigation.				
2	Q.	But the City of Calgary, as part of this hearing, has				
3		expressly gone on the record that it is an advocate of				
4		upstream storage on the Bow River.				
5		I'm simply asking, has Alberta Transportation made				
6		it known to the City of Calgary that a single structure				
7		upstream on the Bow River, similar to the SR1 project,				
8		will not solve all of the City of Calgary's problems?				
9	Α.	MR. HEBERT: Mr. Chairman, as I just responded,				
10		we've acknowledged that each project exists within its				
11		particular context of the objective it's trying to				
12		meet, and in the case of the Bow River Basin, both SR1				
13		and any potential project on the Bow River combined				
14		would provide the mitigation necessary for Calgary and				
15		other communities that may benefit from those projects.				
16	Q.	Mr. Chairman, thank you. Those are all my questions.				
17	THE	CHAIR: Thank you, Mr. Rae, and thank you				
18		to Alberta Transportation and panel.				
19		Obviously, we're into the noon hour, so I think				
20		this is an appropriate time for a break for lunch.				
21		Let's take one hour				
22	MR.	SECORD: I was thinking, Mr. Chair, why				
23		don't we come back at 1?				
24	THE	CHAIR: Sorry?				
25	MR.	SECORD: I was wondering whether we might				



C	come back at 1:00. Take 48 minutes for lunch?	
THE CH	HAIR: Oh, okay. I think your mic is	up
0	or something, Mr. Secord, that's why I'm having	
t	rouble. Is everybody prepared to get back at 1?	
4	5 minutes?	
MR. KR	RUHLAK: I think we could do that.	
	Mr. Chairman, I do I have one housekeeping matt	er.
I.	t's Mr. Kruhlak. I didn't get confirmation whether	,
t	he witness panel has access to the breakout rooms a	ınd
I	don't know if that's the case, but I was just goin	g
t	o ask if Board staff could clarify?	
MR. WI	IEBE: You do have access. I've opene	d
t	he rooms already.	
THE CH	HAIR: Did you get that?	
MR. KR	RUHLAK: Thank you.	
THE CH	HAIR: Great. So 1:00 sharp, we'll	
r	eturn from lunch. Thanks, everyone.	
	And, Mr. Wiebe, if you could throw up a timer?	Ι
tl	hink you discussed doing that if you can or a retur	'n
t	ime that would be great on the screens.	
MR. WI	IEBE: Yes, I'll throw some up there.	
(PROCE	EEDINGS ADJOURNED AT 12:15 PM)	
(11002		



1	<u>Certificate</u> of <u>Transcript</u>				
2					
3	We, the undersigned, hereby certify that the foregoing				
4	pages $\underline{1}$ to $\underline{120}$ are a complete and accurate transcript of				
5	the proceedings taken down by us in shorthand and				
6	transcribed from our shorthand notes to the best of our				
7	skill and ability.				
8	Dated at the City of Calgary, Province of Alberta, on				
9	March 22, 2021.				
10					
11					
12	Lorelee_Vespa				
13	Lorelee Vespa, CSR(A) RPR CRR				
14	Official Court Reporter				
15					
16					
17	Deanna DiPaolo, CSR(A)				
18	Official Court Reporter				
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