

November 18, 2020

Natural Resources Conservation Board  
Attn: Laura Friend  
Manager, Board Reviews  
laura.friend@nrcb.ca



Dear Laura Friend,

Calalta Amusements Ltd. (Calaway Park) and Calalta Waterworks Ltd. would like to thank the Natural Resources Conservation Board (NRCB) for taking the time to review and file our concerns regarding the Springbank Off-Stream Reservoir Project.

The four concerns we want noted in your review of the Springbank Off-Stream Reservoir Project are:

**1. Air quality and dust implications:**

- a. Our concern is the air quality mitigation plan during the 2-3 years of construction and the negative effects it could have to our business, team members and guests. An additional concern is the annual post construction mitigation plan to ensure dust control.
- b. Air quality and dust was mentioned in the 'Summer 2019 Update' information (attached).
- c. We voiced our concern to Matthew Hebert, Executive Director, Springbank Reservoir Project, Alberta Transportation via email on July 9, 2019; following up with a phone meeting on August 8, 2019 including Matt Wood P.Eng., CPESC, Senior Associate, Water, Stantech, in which Matt followed up with an email on October 15, 2019.
- d. Air quality and dust implications were discussed at the September 24, 2020 SR1 Open House session at Edge School.
- e. We look forward to having more discussion and hearing how this concern will be addressed/mitigated.

**2. Sediment in water when reservoir is used:**

- a. When the captured water is put back into the Elbow River in the August time period the sediment may impact our intake wells and water plant operation. What compensation will be available to offset damages caused by this action?
- b. The sediment impact is mentioned in the NRCB Water Act File No. 387101, page 91 (attached).
- c. Sediment and water quality were mentioned in the 'Summer 2019 Update' information (attached).
- d. We voiced our concern to Matthew Hebert, Executive Director, Springbank Reservoir Project, Alberta Transportation via email on July 9, 2019; following up with a phone meeting on August 8, 2019 including Matt Wood P.Eng., CPESC, Senior Associate, Water, Stantech, in which Matt followed up with an email on October 15, 2019.
- e. Sediment and water quality implications were discussed at the September 24, 2020 SR1 Open House information session at Edge School.
- f. We look forward to having more discussion and hearing how this will be addressed/mitigated.

**3. Impact to the Elbow River:**

- a. Our concern is the long-term effect the Springbank Off-Stream Reservoir will have on the Elbow River; that the reservoir will alter or change the course of the river and water flow.

**4. Sterilization of future development in Calalta Waterworks Ltd. Exclusive Franchise Area:**

- a. There are 14 quarter sections that will be impacted by the Springbank Off-Stream Reservoir Project that is within Calalta Waterworks Ltd. Exclusive Franchise Area. (map available upon request). This represents a significant opportunity for water connection to Calalta Waterworks Ltd., which we have made a significant investment in a utility upgrade as per request of Alberta Environment in 2006.
- b. Future Land Use was mentioned in the 'Summer 2019 Update' information, stating the government would continue to engage with these groups, Calalta has not been contacted.

Thank you for taking the time to read our concerns and filing them in the public consultation as part of Application #1701 for the pre-hearing on December 2, 2020. We look forward to having more discussion on the above matters and hearing more information on how these concerns will be addressed/mitigated.

Sincerely,



Bob Williams  
General Manager

c.c Gordon Dixon; President, Calalta Amusements Ltd.; Calaway Park; Calalta Waterworks Ltd.

c.c Dena Dixon; Vice President, Calalta Amusements Ltd.; Calaway Park; Calalta Waterworks Ltd.

c.c Paul Seo; Director of Finance, Calalta Amusements Ltd.; Calaway Park; Calalta Waterworks Ltd.

/sb

**302. Volume 3C, Section 2.6.3, Page 2.7**

**Volume 3C, Section 2.5.3, Page 2.5**

**Volume 3B, Section 7.4.2, Page 7.20**

**Volume 4C, Table C-2, Page C.28 to C.39**

Alberta Transportation states *Following a flood that results in the diversion of water to the reservoir and prior to discharge from the reservoir, water samples will be collected at the low-level outlet channel. Alberta Transportation also states Suspended sediment concentration is predicted to increase during the last few days of discharge.* In addition, surface water sampling is planned as: *Suspended sediment levels will be monitored following a flood. This will include suspended sediment levels in the Elbow River following the flood but prior to release of water from the reservoir and then following release of the water.*

- a. Provide details as to what would be a representative sampling program prior to, and during, the release of a flood event from the reservoir; depending on the duration of discharge and the stated fact that sediment loading would increase near the end of discharge.
- b. Provide information on how a reservoir inflow water quality monitoring program would be beneficial for assessing contaminant and sediment loading to the reservoir.
- c. Provide details on the means for the safe collection of samples under normal and adverse weather conditions at the diversion channel, in the reservoir and at the outfall of the reservoir.
- d. Provide details on impact assessment and any proposed mitigation for the potentially prolonged release of turbid water to downstream small utility drinking water intakes such as the Westridge municipal water intake, Calaway Park water intake etc. as this may pose a burden on water treatment processes.

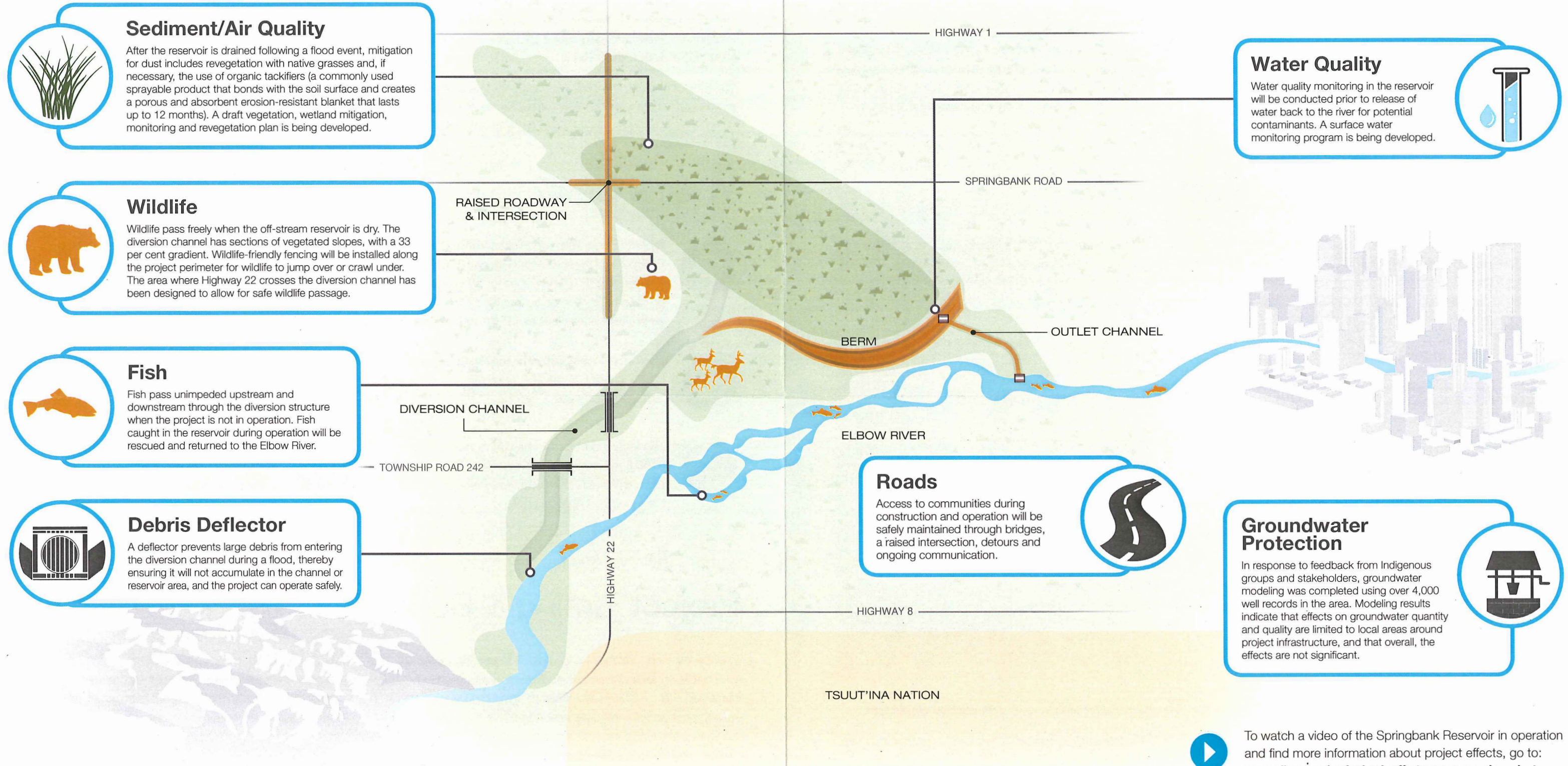
**303. Volume 4, Appendix A, Concordance Tables, Terms of Reference Section 3.5.2 [E], Page A. 26**

In the Terms of Reference for this project, it states *describe the potential and implications for Cyanobacteria/Microcystin in the reservoir to: impact treatment of water from Glenmore Reservoir for drinking water purposes; and to impact recreation of the Springbank Off-Stream Reservoir, Elbow River and Glenmore Reservoir.* The Concordance Table indicates the information is provided in Volume 3B, Sections 7.4.2 and 7.4.4 but the information is not there.

- a. Describe the potential for Cyanobacteria blooms to occur within reservoir storage times of over 40 days.
- b. If blooms were to occur, describe how this may impact water treatment of water at the Glenmore Reservoir and any other water treatment plants (plants such as Glencoe, Westridge and Calaway) downstream of the Springbank Reservoir outlet and upstream of the Glenmore Reservoir.
- c. Describe any recreation impacts in the same reach of the Elbow River.
- d. Describe any mitigation measures.



# Studying Effects and Taking Action



## Sediment/Air Quality

After the reservoir is drained following a flood event, mitigation for dust includes revegetation with native grasses and, if necessary, the use of organic tackifiers (a commonly used sprayable product that bonds with the soil surface and creates a porous and absorbent erosion-resistant blanket that lasts up to 12 months). A draft vegetation, wetland mitigation, monitoring and revegetation plan is being developed.

## Wildlife

Wildlife pass freely when the off-stream reservoir is dry. The diversion channel has sections of vegetated slopes, with a 33 per cent gradient. Wildlife-friendly fencing will be installed along the project perimeter for wildlife to jump over or crawl under. The area where Highway 22 crosses the diversion channel has been designed to allow for safe wildlife passage.

## Fish

Fish pass unimpeded upstream and downstream through the diversion structure when the project is not in operation. Fish caught in the reservoir during operation will be rescued and returned to the Elbow River.

## Debris Deflector

A deflector prevents large debris from entering the diversion channel during a flood, thereby ensuring it will not accumulate in the channel or reservoir area, and the project can operate safely.

## Water Quality

Water quality monitoring in the reservoir will be conducted prior to release of water back to the river for potential contaminants. A surface water monitoring program is being developed.

## Roads

Access to communities during construction and operation will be safely maintained through bridges, a raised intersection, detours and ongoing communication.

## Groundwater Protection

In response to feedback from Indigenous groups and stakeholders, groundwater modeling was completed using over 4,000 well records in the area. Modeling results indicate that effects on groundwater quantity and quality are limited to local areas around project infrastructure, and that overall, the effects are not significant.

Graphic provided for illustrative purposes only.

To watch a video of the Springbank Reservoir in operation and find more information about project effects, go to: [www.alberta.ca/springbank-off-stream-reservoir-project.aspx](http://www.alberta.ca/springbank-off-stream-reservoir-project.aspx)

**The Springbank Reservoir is located approximately 15 kilometres west of Calgary, a location that allows for:**

- ◆ The capture of water from a large area of the basin, offering flood risk reduction to the City of Calgary and Rocky View County properties that are downstream, along the Elbow River.
- ◆ A low-profile diversion structure that has lower impact on fish passage than conventional in-stream dams.
- ◆ Close proximity to operational response teams and access roads.
- ◆ The project to be constructed and operated with less impact on the environment than more remote locations.



# Future Land Use

We have heard from Indigenous groups and stakeholders that there is a desire to access the project lands in the future. Alberta Transportation will continue to engage with these groups regarding potential future options for the land use area.

Future land use decisions will be guided by principles, including:

- The primary use of the land will be for flood mitigation.
- Public safety is an overriding factor in land use decisions.
- Uses and activities must have minimal impact on the land. In general, Indigenous groups' traditional activities will be allowed, in keeping with approved land use plans.

# Regulatory Review: Next Steps

Alberta Transportation has responded to regulators' information requests, as described in the "What's New?" Section, to further their understanding of the project and its effects. Once AEP and the NRCB have no further questions for Alberta Transportation, AEP will determine if the EIA is complete so the project can proceed through the NRCB process. The NRCB will provide opportunities for the public to participate in the hearing process. Federally, CEAA will prepare a draft agency report, which will be made available for public comment before a final report is released.

# Talk to Us

Stakeholders and Indigenous groups have submitted their concerns to the project team, including questions related to:

- Benefits and costs
- Land use
- Indigenous consultation
- Water and hydrogeology
- Environmental Impacts

We continue to engage with Indigenous groups and stakeholders and look forward to further discussions about the Springbank Reservoir.

To learn more about these topics and sign up for email updates, visit [www.alberta.ca/springbank-off-stream-reservoir-project.aspx](http://www.alberta.ca/springbank-off-stream-reservoir-project.aspx)

There you will find up-to-date project information, including a video of how the Springbank Reservoir will work when in operation. We will continue to share information as the project advances.

**Please contact us with your questions at:**

**Phone:** 780-644-5612

**Toll free:** 310-0000 before the phone number (in Alberta)

**Email:** [springbank-project@gov.ab.ca](mailto:springbank-project@gov.ab.ca)

**Address:**

Alberta Transportation  
Major Capital Projects  
Twin Atria Building  
2<sup>nd</sup> Floor, 4999 98 Avenue NW  
Edmonton, Alberta T6B 2X3

# Springbank Off-stream Reservoir Update

Summer 2019

The Springbank Off-stream Reservoir (the Springbank Reservoir) will work in tandem with the Glenmore Reservoir in Calgary to accommodate water volumes equal to the 2013 flood on the Elbow River.

The project reduces flood risk by managing downstream river flow rates and volume. This goal will be met while protecting river processes, critical habitats and fish and wildlife.

Alberta Transportation continues to move the Springbank Reservoir forward, engage with stakeholders and Indigenous groups, and welcome further dialogue about project impacts and how they will be mitigated.

# What's New?



Alberta Environment and Parks (AEP), the Natural Resources Conservation Board (NRCB), and the Canadian Environmental Assessment Agency (CEAA) have reviewed the Springbank Reservoir's Environmental Impact Assessment (EIA) and asked for additional information as part of the regulatory process. Alberta Transportation provided this information in June 2019. The EIA and information requests and responses are available at: [www.alberta.ca/springbank-off-stream-reservoir-project.aspx](http://www.alberta.ca/springbank-off-stream-reservoir-project.aspx)



The Government of Alberta appointed lawyer Martin Ignasiak, Osler LLP, to provide advice for regulatory approvals.



The Government of Alberta has acquired roughly 20 per cent of the land required to build the Springbank Reservoir.



The federal government has announced up to \$168.5 million for the Springbank Reservoir through Infrastructure Canada's Disaster Mitigation and Adaptation Fund.



The Springbank Reservoir project team is responding to the concerns of the public and Indigenous groups. For example, we are adding a debris deflector to prevent large in-stream debris, such as trees, from entering the diversion channel during operation.

# Project Timing & Budget

The Government of Alberta is dedicated to moving forward with the Springbank Reservoir. An independent expert has been hired to assess the project's status and advise government about immediate action to move the project forward, while respecting the regulatory approval process and the ongoing consultation and engagement required with stakeholders and Indigenous groups.

Construction will begin following regulatory approval. The Springbank Reservoir will be functionally operational (1:100 year flood) after the second year of construction and fully operational after the third year of construction.

The budget for the Springbank Reservoir is \$432 million. The final budget will be known once land acquisition is complete, and costs for final design are known.