

**Utilities & Environmental Protection Report to  
Intergovernmental Affairs Committee  
2019 June 20**

**ISC: UNRESTRICTED  
IGA2019-0809**

**Bearspaw Reservoir Tri-Lateral Task Force**

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**EXECUTIVE SUMMARY**

The purpose of this report is to provide Council with an update on the work completed by the Bearspaw Reservoir Tri-Lateral Task Force (Task Force). The Bearspaw Reservoir (Reservoir) is the primary source on the Bow River for Calgary's drinking water supply. Including Rocky View County's utilities, this water source helps supply safe, clean drinking water to almost 1.4 million customers in the Calgary region. Governance of the Reservoir is complex and multi-jurisdictional, as the reservoir is located primarily within the municipal boundaries of Rocky View County, and the dam is owned and operated by TransAlta.

The Task Force for the Bearspaw Reservoir was initiated in 2018 by The City of Calgary, and includes participation from Rocky View County and TransAlta. The Task Force has collaborated to identify key risk factors and explore management and governance strategies to achieve the following objectives:

- 1) Balance human activities on or near the Bearspaw Reservoir to protect source water quality.
- 2) Balance human activities on or near the Bearspaw Reservoir to protect public safety and access.
- 3) Delineate roles and responsibilities for the purpose of implementing source water protection.

The Task Force has completed a Bearspaw Reservoir Tri-Lateral Task Force Consensus Report (Attachment 1), which provides a full description of the background, alternatives and analysis completed by Task Force members to date. Building on the consensus report, the next steps include developing a risk management strategy for Bearspaw Reservoir. To inform the strategy, The City and Rocky View County are proposing to collaboratively initiate public consultation in 2019 and report back with a Risk Management Strategy by June 2020. Administration is seeking Council's approval of this approach.

**ADMINISTRATION RECOMMENDATION:**

That the Intergovernmental Affairs Committee recommend that Council:

1. Direct Administration to initiate public consultation on the Bearspaw Reservoir Risk Management Strategy in collaboration with Rocky View County administration; and
2. Direct Administration to report back with the Bearspaw Reservoir Risk Management Strategy to the Intergovernmental Affairs Committee on progress no later than June 2020.

**PREVIOUS COUNCIL DIRECTION / POLICY**

In January 2018, City Council approved the Mediation Settlement Agreement for the Glenbow Ranch Area Structure Plan (ASP). The settlement directed that *"The County shall participate in a task force with the City of Calgary, and other relevant stakeholders, to discuss opportunities to collaborate on issues of mutual interest regarding the Bearspaw Reservoir as source water for drinking water utilities"*.

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### **BACKGROUND**

The Reservoir is formed by a dam that was originally constructed in 1954, and is located primarily within the municipal boundaries of Rocky View County, with a portion of the shoreline on the east side within the jurisdiction of The City of Calgary. TransAlta owns the dam and most of the shoreline surrounding the Reservoir.

Stormwater impacts related to urban development have been identified as one of the top risks to the drinking water supply for Calgary and the region. To mitigate this risk, The City has invested in capital improvement projects, and has required developers to route stormwater downstream of The Bearspaw Water Treatment Plant's water intake structures for developments within City limits.

For development upstream of Calgary, Administration provides input on numerous regional intermunicipal circulations regarding stormwater and wastewater management issues and potential risks to The City's source water. In 2017, plans for large scale development in Rocky View County within the Glenbow Ranch ASP was appealed by The City to the Municipal Government Board. Detriment to Calgary's source water, along with impacts on transportation and recreation, formed the basis for The City's appeal. A mediated settlement agreement was reached with Rocky View County in early 2018. In addition to improved stormwater management policies in the ASP, the following language was agreed to by Rocky View County and set the stage for initiation of the Task Force:

*Section 1.09: The County shall participate in a task force with the City of Calgary, and other relevant stakeholders, to discuss opportunities to collaborate on issues of mutual interest regarding the Bearspaw Reservoir as source water for drinking water utilities.*

In December 2017, Administration requested that Rocky View County and TransAlta representatives participate in the Task Force. This was subsequently followed by the development of a Terms of Reference, which was signed and executed by all three parties in July 2018. The Task Force has collaborated to identify key risk factors and explore management and governance strategies to achieve the following objectives:

- Balance human activities on or near the Bearspaw Reservoir to protect source water quality.
- Balance human activities on or near the Bearspaw Reservoir to protect public safety and access.
- Delineate roles and responsibilities for the purpose of implementing source water protection.

### **INVESTIGATION: ALTERNATIVES AND ANALYSIS**

The Reservoir is a major component of the source water supplying about 1.4 million customers in the Calgary region. With urban growth, increased recreational use and other hazards, this relatively pristine source of water is at risk of pollution. To address this risk, the Task Force was established to collaboratively identify key risk factors related to the Reservoir and explore management and governance strategies to mitigate these risks.

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Through a series of workshops held throughout 2018 and early 2019, the Task Force assessed a number of different risks and issues and developed the following outcomes, principles and potential future options for the effective management of the Bearspaw Reservoir.

<u>Outcomes:</u>	Protection of water quality Management of public safety
<u>Principles:</u>	Collaborative management Long-Term sustainability Precautionary approach Accommodate low impact uses
<u>Management Options:</u>	Public education and user awareness Emergency response Limiting higher risk recreational uses Improved stormwater pollution management in planning & design Obtain jurisdiction and authority to regulate activities on the water Monitoring and enforcement

Based on the collective outcomes, principles and management options, a consensus report (Attachment 1) was completed that established a set of recommendations and next steps. Recommendations from the Task Force included:

1. All three parties adopt the outcomes and principles, that will form the basis for an effective risk management strategy for the Bearspaw Reservoir.
2. Conduct public consultations to obtain input on options and tools for a Bearspaw Reservoir Risk Management Strategy. The public consultations should be co-led by the two municipalities, with input from TransAlta.
3. Draft a recommended Bearspaw Reservoir Risk Management Strategy and report on progress to both Councils no later than June 2020.

Proposed next steps from the Task Force included:

1. Develop public education materials on the importance of the Bearspaw Reservoir as a drinking water source and as a hydroelectric facility.
2. Continue to explore the process for exemption under the *Canadian Navigable Waters Act* and the *Canadian Shipping Act*, to enable enforcement authority regarding boating on the Bearspaw Reservoir.
3. With respect to the regional study area, address source water quality risks related to storm water quality through:
  - (a) evaluating tools and strategies to advance the treatment of storm water, with the invited participation of the Town of Cochrane and the Province of Alberta.
  - (b) regional direction from the Calgary Metropolitan Region Board (CMRB).

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The key recommendation is to develop the Bearspaw Reservoir Risk Management Strategy. To inform the strategy, The City and Rocky View County are proposing to collaboratively initiate public consultation in 2019.

**Stakeholder Engagement, Research and Communication**

The Task Force met for five half day workshops during 2018 and one additional workshop in Q1 2019, and has presented updates to the City of Calgary – Rocky View County Intermunicipal Committee (IMC) twice. If approved by Council, stakeholder engagement, education and communication will be conducted during the next phase of work and will be done in partnership with Rocky View County. It is anticipated that this will be completed over the next 6-8 months.

**Strategic Alignment**

Protecting Calgary's source water and participating as a member of the Task Force is aligned to the One Calgary 2019 – 2022 Service Plan and Budgets, including:

- A Healthy Green City
  - Directive (H3): Integrated watershed management – Accomplishing sustainable, effective watershed management within Calgary and the region will also require working collaboratively with other orders of government, adjacent municipalities, residents, landowners, developers, businesses, and the First Nations. It also meets the directive to protect public health and the environment.
- A Well-Run City
  - Directive (W4): Recognizing missed opportunity for innovation in service delivery and planning because of an existing culture of risk avoidance. The Partnership remains a model for integrated watershed management in Alberta.

This work is also identified as an action under The City of Calgary's Source Water Protection Plan and is aligned to the Provincial Water for Life Strategy and South Saskatchewan Regional Plan, and will be an input for plans being developed by the Calgary Metropolitan Region Board.

**Social, Environmental, Economic (External)**

A wide range of Social, Environmental, and Economic (External) impacts and risks were addressed by The Task Force throughout their discussions. These discussions are reflected in the Outcomes, Principles, Recommendations, and Next Steps agreed upon by the Task Force in Attachment 1. The proposed public consultations will obtain additional input on Triple Bottom Line issues, and feedback will be carefully considered within the Bearspaw Reservoir Risk Management Strategy.

**Financial Capacity**

***Current and Future Operating and Capital Budget:***

It is anticipated that the joint public consultation process with Rocky View County will require approximately \$100,000 that will be split equally by both municipalities. Water Resources will allocate \$50,000 under the Water Treatment and Supply operating budget to complete this work in 2019-2020.

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### **Risk Assessment**

Protecting our source of drinking water at the Bearspaw Reservoir is important to minimize risks to public health and drinking water safety. Risks to public safety as a result of increased access to the Reservoir and increasing demand for water-based recreational activities are also present and should be managed appropriately. Since the Bearspaw Reservoir is not owned or operated by The City and is not within The City's jurisdiction, risk mitigation and management options require collaboration with Rocky View County and TransAlta Utilities.

<b>REASON(S) FOR RECOMMENDATION(S):</b> The recommendations provide direction to Administration to consult the public prior to finalizing a Bearspaw Reservoir Risk Management Strategy
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### **ATTACHMENT(S)**

1. Attachment 1 – Bearspaw Reservoir Tri-Lateral Task Force Consensus Report