

**MEETING DATE:** February 5, 2024

**SUBMITTED BY:** Shawn Olson, Director Engineering & Environment

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**REPORT TITLE:** Drought Conditions in Alberta

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## EXECUTIVE SUMMARY

Municipalities are being advised to prepare for water demand management due to the current drought conditions in the province. This report outlines relevant information and implications for the City of Leduc.

## RECOMMENDATION

That Council receives the report on Drought Conditions in Alberta as information.

## BACKGROUND

On December 20, 2023, a letter was sent to municipalities in Alberta from the Minister of Environment and Protected Areas regarding drought conditions in Alberta. The letter states that Alberta is currently in a Stage 4 drought, one step away from a Stage 5 drought which is a province-wide emergency. Municipalities are being advised to prepare by reviewing the terms of their water license, being prepared to work with the Drought Command Team, and ensuring the municipality has plans for water shortages.

The relevant water allocation for the City of Leduc is found as part of the Capital Region Southwest Water Services Commission (CRSWSC) allocation under the water license which is held by the Regional Water Customers Group (RWCG). In review of that license, under section 4.9, the Director of Environment and Protected Areas has the right to require additional monitoring or scale back water demand if the North Saskatchewan River cannot supply it.

On January 18, 2024, the CRSWSC Administration reported that there are no forecasted restrictions in the North Saskatchewan River. Following discussions with the RWCG license holder at Strathcona County (On January 26, the CRSWSC received communications from EPCOR aligning with the information received from the RWCG). The RWCG belief that there is unlikely to be abnormally significant restrictions is supported by:

1. The snow pack in stations contributing to the north Saskatchewan River at Southesk and Limestone Ridge were recently measuring at 48% and 141% respectively, and
2. The water allocated in the North Saskatchewan River is significantly less than other major rivers in the province. For additional perspective, the relative quantity of water for the entire Regional Water Customers Group (2 m<sup>3</sup>/s) is relatively low compared to the last recorded flow in the North Saskatchewan River in Edmonton (113 m<sup>3</sup>/s on December 14, 2023 at Station 05DF001).

While the current situation is not anticipated to drive demand management measures, it is imperative that municipalities be ready to act on them if needed (we typically go into demand management measures every summer during the hottest week of the year). In terms of that process, the CRSWSC will alert the City of Leduc if and when demand management measures are required as per the protocol on their website (<https://crswsc.ca/about/#policies>). Measures range from municipal restrictions and voluntary public

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participation, all the way to customer water rationing depending upon the severity of the demand management condition. As any further updates are received, the CRSWSC Administration will continue to provide updates to representatives of the CRSWSC board of directors to disseminate to their respective municipalities.

While restrictions to water supply may not be anticipated at this juncture, risk from provincial drought could still impact the City of Leduc in the form of emergency management responses to forest fire and resulting air quality and evacuation center issues. Additionally, concerns may surface related to enforcement of bulk water sales as water users in strained water sheds attempt to locate alternative supply (sales of water to areas outside of the regional water customers basin is prohibited). The latter is more of a concern for our rural neighbors as the City of Leduc offers limited bulk water supply. These related concerns will be addressed as they arise through existing emergency management and enforcement procedures.

It should be noted that if water demand measures were ever activated for a prolonged period of time, there could be financial implications to the City. During demand management measures, water sales decrease which can have an impact on the revenue received by the City to pay for the delivery of potable water. As there is no dedicated transmission and distribution cost associated with municipal water utility billing, recovery is based on sales of the potable water consumed over the year. Prolonged water restrictions could impact that recovery; however, this has not been a concern in the past.

### **NEXT STEPS**

The City of Leduc takes demand management measure guidance from the CRSWSC, who in turn receive it from the RWCG. The City of Leduc implements the demand management measures accordingly.

In the event demand management measures are implemented (an example was demonstrated during a transfer switch failure on January 29 at one of the two EPCOR water treatment plants), the City of Leduc Director of Public Services is responsible for communicating the demand measures in effect to CMS who will manage the external communication plan and implementation. The Director of Public Services may communicate internally to all City business units to restrict all non-essential water use for City operations. Upon reaching a demand management level B, digital Ver-Mac signs will be deployed to strategic locations to communicate odd/even residential watering requirements, or potentially more significant water restrictions. If demand management level C is implemented, the City of Leduc Emergency Response Plan (ERP) is activated to deal with restricting water supply to customers based on pre-established priority. In this case the city may activate an Emergency Operations Center dependent upon the severity of water restrictions. Council is additionally alerted as every condition is reached.

### **ATTACHMENTS**

None