



CITY OF
FORT SASKATCHEWAN

Information Report
Regular Council Meeting - May 14, 2024

Drought Preparation Plan

Purpose:

The purpose of this report is to inform Council of a Drought Preparation Plan that may be enacted in response to drought conditions throughout Alberta.

Background:

Provincial Context

On December 20, 2023, Alberta's Minister of Environment and Protected Areas, Honourable Rebecca Schulz, issued a letter to Elected Officials informing municipalities about drought conditions in the province (Appendix A). Alberta has five stages in its water management plan ranging from Stage 1 (minor drought) to Stage 5 (province-wide emergency). Alberta is currently in Stage 4 (multiple water management areas). Critical water shortages that began in summer 2023 are expected to continue into summer 2024, prompting the creation of a provincial Drought Command Team and a 2024 Drought Emergency Plan.

In Alberta, precipitation has a major impact on water supply. As of April 15, 2024, Alberta's Water Supply Outlook showed below average water levels for most river basins despite high precipitation amounts in February and March. If predictions of critical drought conditions are realized, effective water conservation measures will need to be applied to protect supplies for necessary uses such as public health and safety, agriculture, aquatic environments, and industrial and commercial business use. The provincial Drought Command Team is working on collaborative agreements and regulatory tools to proactively produce water sharing agreements (primarily in the South Saskatchewan River Water Basin). The Province continues to monitor precipitation, rivers, and tributaries to determine if entering Stage 5 of the water management plan will be necessary.

Fort Saskatchewan Context

Fort Saskatchewan is located within the North Saskatchewan River Basin which has three active water shortage advisories (last posted update on April 15, 2024). Forecasted flows until September are currently listed as "below average" or "much below average" by the Province.

Historically, the City of Fort Saskatchewan has relied on EPCOR, the Regional Water Customers Group, and / or the Capital Region Northeast Water Services Commission (CRNWSC) to advise when water restrictions and bans are in place, and what non-essential water uses should be suspended. Fort Saskatchewan has primarily focused on limiting water use within internal operations. Expanding Fort Saskatchewan's efforts to address other high potable water use activities, such as recreation facilities and community outdoor water use, can help protect aquatic environments and the integrity of the water management system during extreme drought conditions.

The advisories include Water Demand Measure A (least severe restrictions), Measure B, and Measure C (water ban). Water Demand Measure A is declared if regional reservoirs are forecasted to be below 65% of capacity within the next five days. Water Demand Measure B is declared if regional reservoirs are forecasted to be below 50% of capacity within the next five days. Water Demand Measure C is declared if regional reservoirs are forecasted to be below 35% of capacity within the next five days. The water restriction and ban requirements for each of these Demand Measures are summarized in the table below.

Table 1: Water Demand Measures

Demand Measure	Forecasted Reservoir Capacity	Water Restriction / Ban Requirement
A	65%	<ul style="list-style-type: none"> Ban on municipal operations.
B	50%	<ul style="list-style-type: none"> Ban on municipal operations. Restrictions requiring the general public to reduce non-essential water use.
C	35%	<ul style="list-style-type: none"> Ban on municipal operations. Ban prohibiting the general public from non-essential water use.

Summary Analysis:

Managing water supply during a critical shortage event may require more involved municipal action. Communities across the province will have to act quickly to limit water consumption if a prolonged water ban or province-wide emergency is declared.

The Water Demand Measures provide municipalities with the latitude to determine how best to adjust everyday activities to reduce water consumption. To ensure Fort Saskatchewan can respond quickly and decisively, Administration is proposing a series of restrictions or bans on both internal operations and community-based activities that have the potential to consume large amounts of treated water (Appendix B). Community-based activities include all residential and commercial customers who access treated water through the City. Restrictions or bans will be implemented, communicated, and enforced (where applicable), depending on the Demand Measure.

If a Water Demand Measure A is declared, the following activities will be suspended:

Internal Operations	Community-Based
<ul style="list-style-type: none"> Preventative maintenance flushing programs. Projects requiring the use of hydrant meters. All activities requiring the use of a pressure washer, including waste cart cleaning. Fire Department training exercises requiring water. Street cleaning (sweeping and flushing). Parks watering activities. Fleet vehicle washing, including transit buses. Planting of new trees, grass, shrubs, or flowers 	<ul style="list-style-type: none"> None

If a Water Demand Measure B is declared, the following activities will be suspended:

Internal Operations	Community-Based
<ul style="list-style-type: none"> All activities listed in Demand Measure A. Delay projects that require use of treated water. 	<ul style="list-style-type: none"> Decrease water pressure and reduce operating hours at Spray Park. Notice at bulk water station encouraging users to fill only if required.

If a Water Demand Measure C or a province-wide emergency is declared, the following activities will be suspended:

Internal Operations	Community-Based
<ul style="list-style-type: none"> All activities listed in Demand Measures A & B 	<ul style="list-style-type: none"> No outdoor water use from a hose, sprinkler, or pressure washer. No pool or hot tub filling. Closure of Spray Park, Harbour Pool, and ice rinks. Closure of bulk water station for non-residential uses. Actively encourage reduction in high-water use activities such as laundry and car washing.

Alternative Water Sources

Rainwater from a quarry just south of Fort Saskatchewan is an alternative water source that will reduce the impacts of Demand Measures on Parks and Roads Operations. This resource will help maintain beautification, planting, and maintenance efforts across the City during drought conditions. If Demand Measures persist and the quarry’s rainwater has been exhausted, watering and maintenance activities will be suspended accordingly.

Community-Based Outdoor Water Use

Outdoor activities using a hose, sprinkler, or pressure washer consume large amounts of treated water and will be postponed during Water Demand Measure C. Watering of gardens or newly planted trees will still be permitted using a watering can or similar vessel.

During the summer months, Fort Saskatchewan sees a water consumption increase of about 20%. Limiting outdoor watering activities is necessary to help maintain supplies in our reservoirs.

Communications & Compliance

Communications will be produced and distributed to raise awareness about water resources and emphasize the importance of conservation. Messaging specific to restrictions or bans will be released as regional Demand Measures are communicated to the City. For all Demand Measure restrictions and bans, Administration will evaluate reservoir levels and water usage prior to communication, implementation, or enforcement. Reducing the impact on the community will be prioritized. For example, amenity closures or strict bans will only be applied if regionally mandated or deemed critical by Administration.

Next Steps

The drought conditions in Alberta will continuously evolve. The proposed Drought Preparation Plan plans for extreme situations with the hope that restrictive measures are rarely applied. Should the Province declare an emergency because of the drought conditions, additional conservation measures may be imposed on municipalities. Demand Measures may also be imposed because of infrastructure issues that may temporarily reduce the supply of potable water.

Administration will monitor water use and community response as it relates to this Drought Preparation Plan. Changes will be made to improve the Drought Preparation Plan as required, as information received may help improve future water conservation efforts.

Financial Implications:

No major financial implications are expected from the Drought Preparation Plan. Existing budgets will be used for communications.

Internal/External Impacts:

Corporate Communications will be involved in messaging surrounding water conservation, Demand Measures, and any programs or services that are impacted by restrictions or bans. Protective Services resources may be required to enforce Demand Measures. Financial Services will support these efforts by gathering data through the Water Portal and communicating high water usage messaging to residents.

If an extreme and prolonged drought is experienced, programs and services within multiple departments will be impacted. These impacts would extend into the community in the form of closed or reduced services (such as the Spray Park and bulk water station) and restrictions to outdoor water use (including filling of the Lion's Pool).

Diversity Impacts:

The Drought Preparation Plan prioritizes water resources for drinking, hygiene, and emergency services.

Plans/Standards/Legislation:

Compliance will only be monitored for Water Demand Measure C activities. Enforcement will occur in accordance with [Bylaw C10-20 - Waterworks Bylaw](#), when required. Utility and billing staff will work closely with Municipal Enforcement Services and Corporate Communications to ensure education is prioritized.

City's Strategic Plan:

Goal - Environmental Stewardship (a commitment is in place to using our resources wisely and implement sustainable best practices).

The 2023 – 2026 Strategic Plan includes the following Strategic Initiative:

“Create a Drought Preparation Plan and develop strategies that can be used to reduce potable water use throughout the city during high-demand periods.”

Attachments:

1. Appendix A – Letter to Elected Municipal Leaders – Minister Rebecca Schulz
2. Appendix B – Demand Measures Summary

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