

## DROUGHT MANAGEMENT WATER STATISTICS MONTHLY UPDATE

### Issue

In preparation for the 2025 outdoor watering season, the Drought Management Water Statistics Monthly Update is provided to Council for information.

### Motion Proposed by Administration

That the Drought Management Water Statistics Monthly Update for April 2025 be received as information.

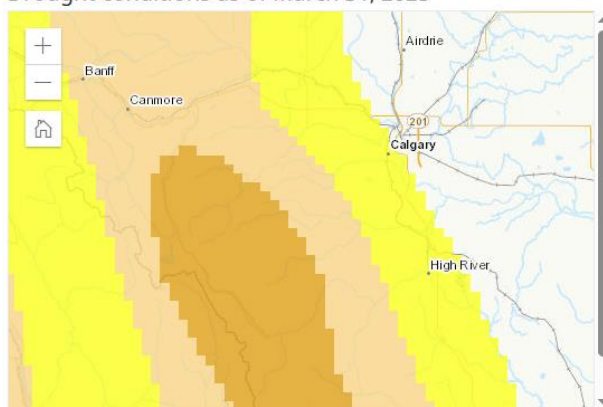
### Report, Analysis and Financial Implications

#### 1. Drought Classification and Indices

##### Canadian Drought Monitor

- Current Classification (Okotoks Region): D2-D3 Moderate to Severe Drought
- Date of Data: as of March 31, 2025
- Trend vs. Previous Month: Drought conditions deteriorated
- Canadian Drought Monitor Maps:

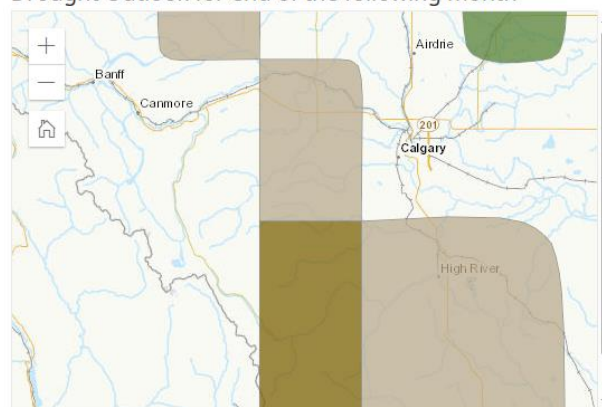
Drought conditions as of March 31, 2025



Legend for current drought conditions:



Drought Outlook for end of the following month



Legend for drought outlook:

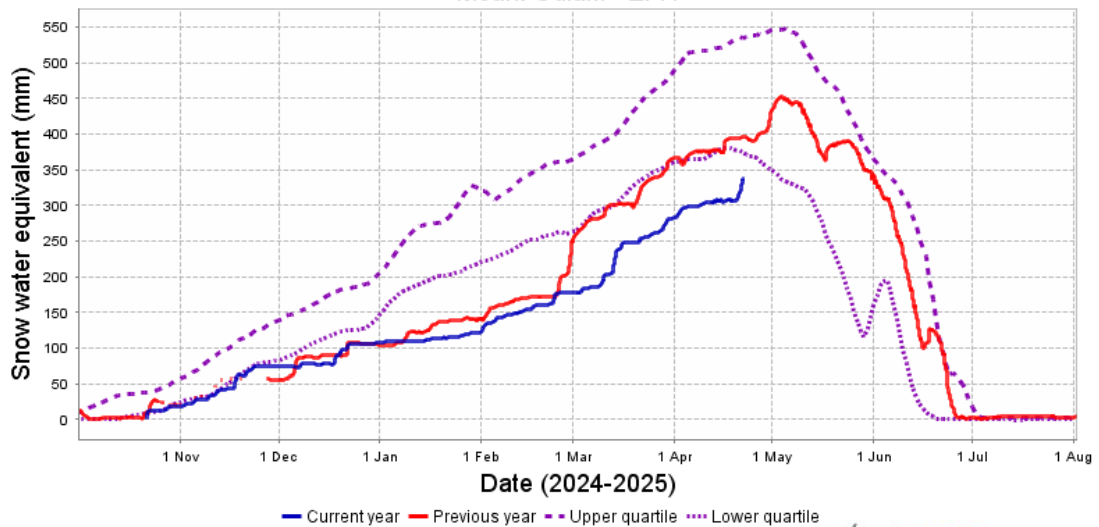


Reference: <https://agriculture.canada.ca/en/agricultural-production/weather/canadian-drought-outlook>

## 2. Mountain Snowpack and Runoff Forecast

Station	Current Value (Snow Water Equivalent mm)	Historical Average Comparison	Runoff Forecast	Runoff Forecast – Change from last month
Mount Odium	337mm (April 22/25)	Below average (75% of historical average)	Much below average to below average for March to September period	Snowpack improves

Snow water equivalent for the current year (blue), the previous year (red), and the normal range (purple) for station 05BL812  
Mount Odium - EPA



Generated at: 2025-04-22 04:29:25

## 3. River Flows (Sheep River)

Station	Combined Flow m3/sec	Instream Objective	Status or advisories
Diamond Valley + Threepoint Creek	River flow data not available	N/A	Based on April data, the forecasted river volumes for the April to September period are similar to slightly below those observed last year

#### 4. Groundwater and Well Production

Metric	Current Value	Comparison to Last Month	Data Source
Well Production Capacity (MLD)	10-11 MLD*	No Change	Previous 7-day average
Average Water Demand (MLD)	7-8 MLD*	No Change	Previous 7-day average
Capacity vs Demand	Capacity exceeds demand by ~ 30%		
Reservoir Levels	90-95%	No Change	Previous 7-day average

\*MLD Mega Litres per Day

#### References

##### *Canadian Drought Monitor*

<https://agriculture.canada.ca/en/agricultural-production/weather/canadian-drought-monitor>

##### *Mountain Snowpack*

Measured in "snow water equivalent" (mm), compared with the historical average (% of historical average).

<https://rivers.alberta.ca/>

##### *Sheep River Flows*

Information relating to Sheep River flow rates (taken from Diamond Valley and Threepoint Creek flow stations). Includes any posted water advisories and instream objectives (during spring/summer months).

##### *Well Production Capacity vs Water Demand*

Current total well production capacity (raw water supply) compared with water demand (treated water to distribution). Based on seven (7) day average, measured in MLD. Total well production is influenced by groundwater levels (i.e. production increases or decreases with groundwater levels).

##### *Reservoir Levels*

Operating levels across three main reservoirs: South Reservoir, Zone 2 North, and Zone 3/4 North.

## Strategic Plan Goals

<input type="checkbox"/>	Responsibly Managed Growth	<input checked="" type="checkbox"/>	Demonstrated Environmental Leadership
<input type="checkbox"/>	Strong Local Economy		
<input type="checkbox"/>	Organizational Excellence	<input type="checkbox"/>	Enhanced Culture & Community Health

## Equity/Diversity/Inclusivity Impacts and Strategy

n/a

## Environmental Impacts

In the years 2022-2024, several river basins in Alberta faced critical water shortage conditions attributed to below-average precipitation, diminished snowpack, and elevated temperatures. These conditions persist into 2025, exacerbated by a robust El Niño winter forecast, anticipated above-normal temperatures, and minimal precipitation projections.

Alberta is presently in water shortage management stage 1 (out of 5), with the potential to escalate to higher stages before spring/summer 2025 if current dry weather conditions persist. Specific data on precipitation levels, temperature anomalies, and snowpack measurements can provide additional context for understanding the severity of the situation.

Concurrently, efforts to mitigate the impacts of the water shortage through conservation measures and sustainable water management practices are underway, with recommendations for individuals and communities to participate in water-saving initiatives.

As we move into spring and summer, Water Services will closely monitor the situation and, if drought conditions worsen, activate the water shortage response plan.

## Community Engagement Strategy

## Alternatives for Consideration

## CAO Comments

This is a monthly monitoring report to increase communication about experienced and anticipated drought conditions.

## Attachment(s)

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March 07, 2025