

Calgary

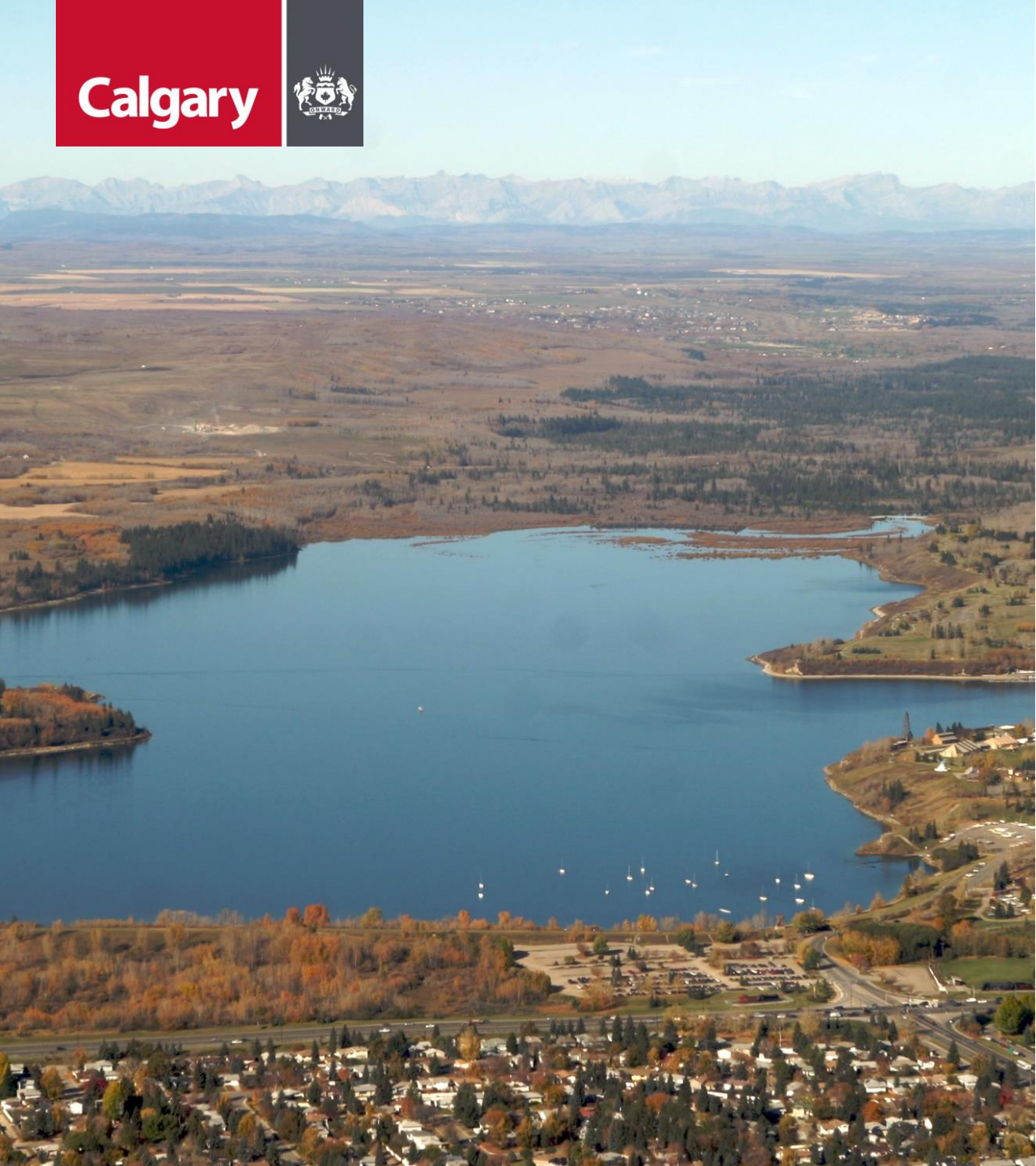


# Drought in Calgary

CPCIA AGM | April 2024

Aaron Boulton-Chaykowski





# Outline

1. 2024 Drought Conditions Update
2. Water Conservation 2024
3. Water Managed Sites Proposed Program



# Drought Indicators + Response



## Calgary Drought Conditions

### Triggers & Supporting Indicators



WATER SUPPLY  
OUTLOOK



SOIL MOISTURE/  
FIRE RISK



CURRENT RIVER FLOWS  
& RESERVOIRS LEVELS



WEATHER OUTLOOK  
(TEMP AND  
PRECIPITATION)



WATER DEMAND  
FORECAST



WT/WWT OPERATIONS

## Drought

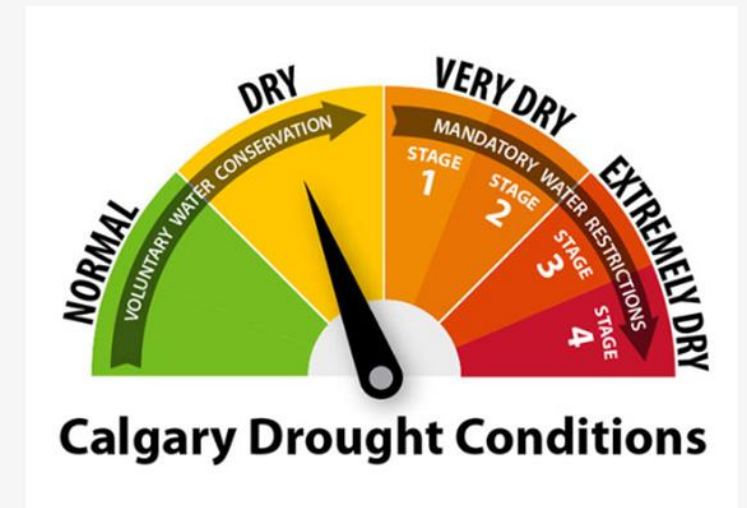
Updated March 19, 2024

Conditions have improved moderately since mid-winter, but the Calgary region remains in a drought.

### What we're seeing

- Natural river flows are low.
- Reservoir storage in the Bow watersheds upstream from Calgary is average for this time of year. Thanks to the investment of [higher gates](#) at the Glenmore dam on the Elbow River, The City has been able to keep the Glenmore Reservoir as high as possible through the winter.
- Mountain snowpack has increased since last month and is trending at below average to average.

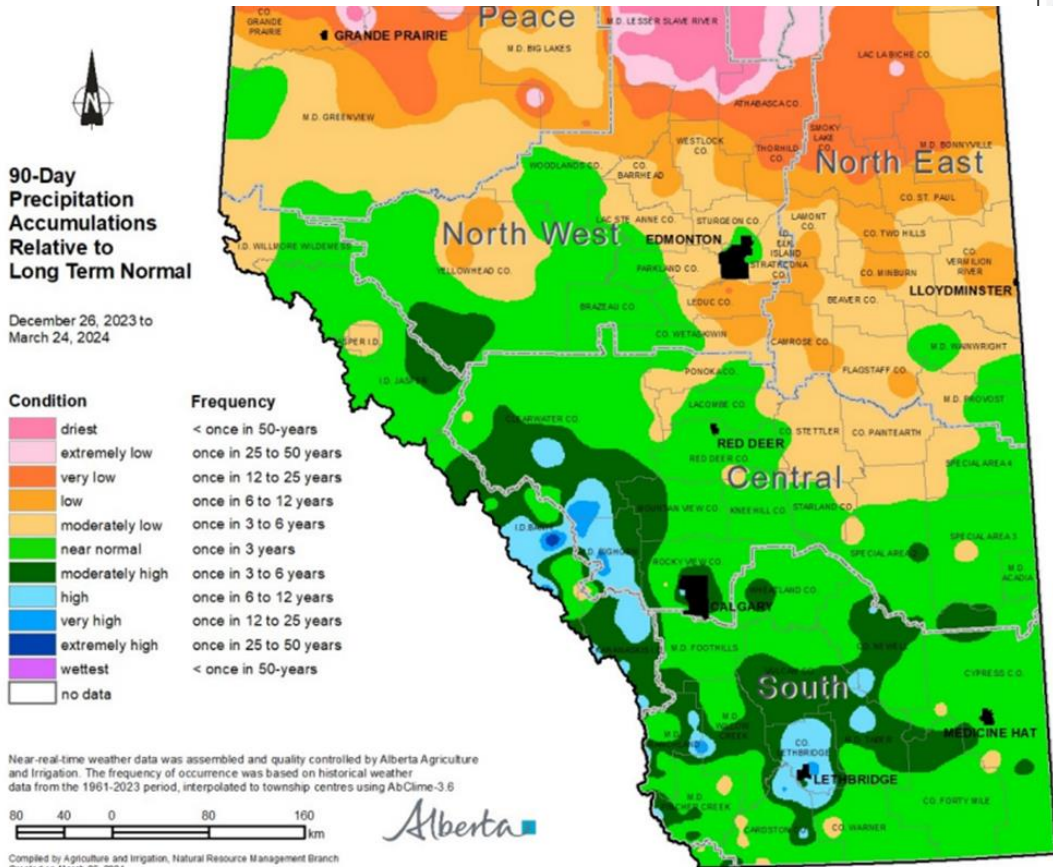
Current drought conditions



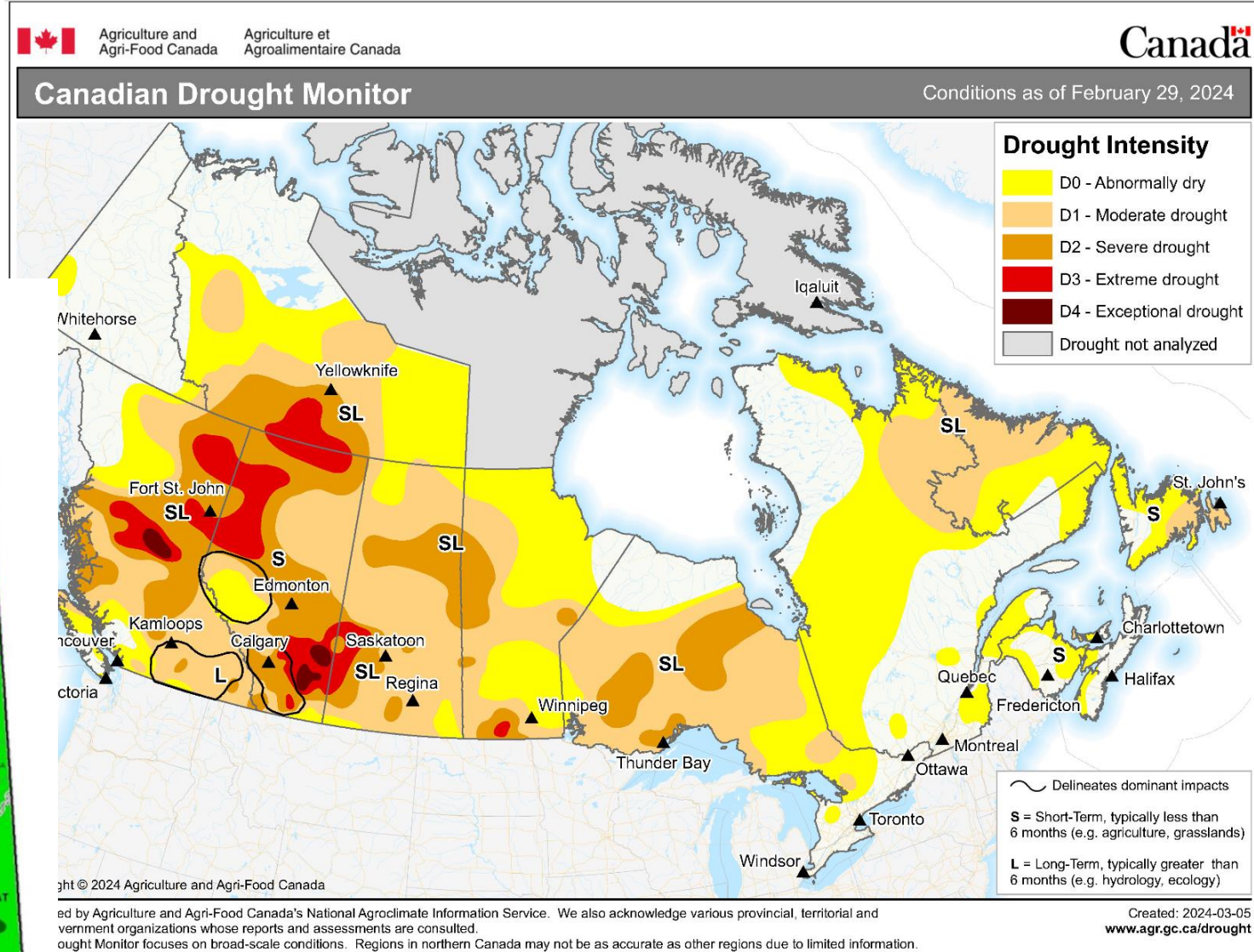




# Drought Situation + 2024 Outlook



Visit [weatherdata.ca](http://weatherdata.ca) for additional maps and meteorological data



Developed by Agriculture and Agri-Food Canada's National Agroclimate Information Service. We also acknowledge various provincial, territorial and government organizations whose reports and assessments are consulted. The Canadian Drought Monitor focuses on broad-scale conditions. Regions in northern Canada may not be as accurate as other regions due to limited information.

Created: 2024-03-05  
[www.agr.gc.ca/drought](http://www.agr.gc.ca/drought)

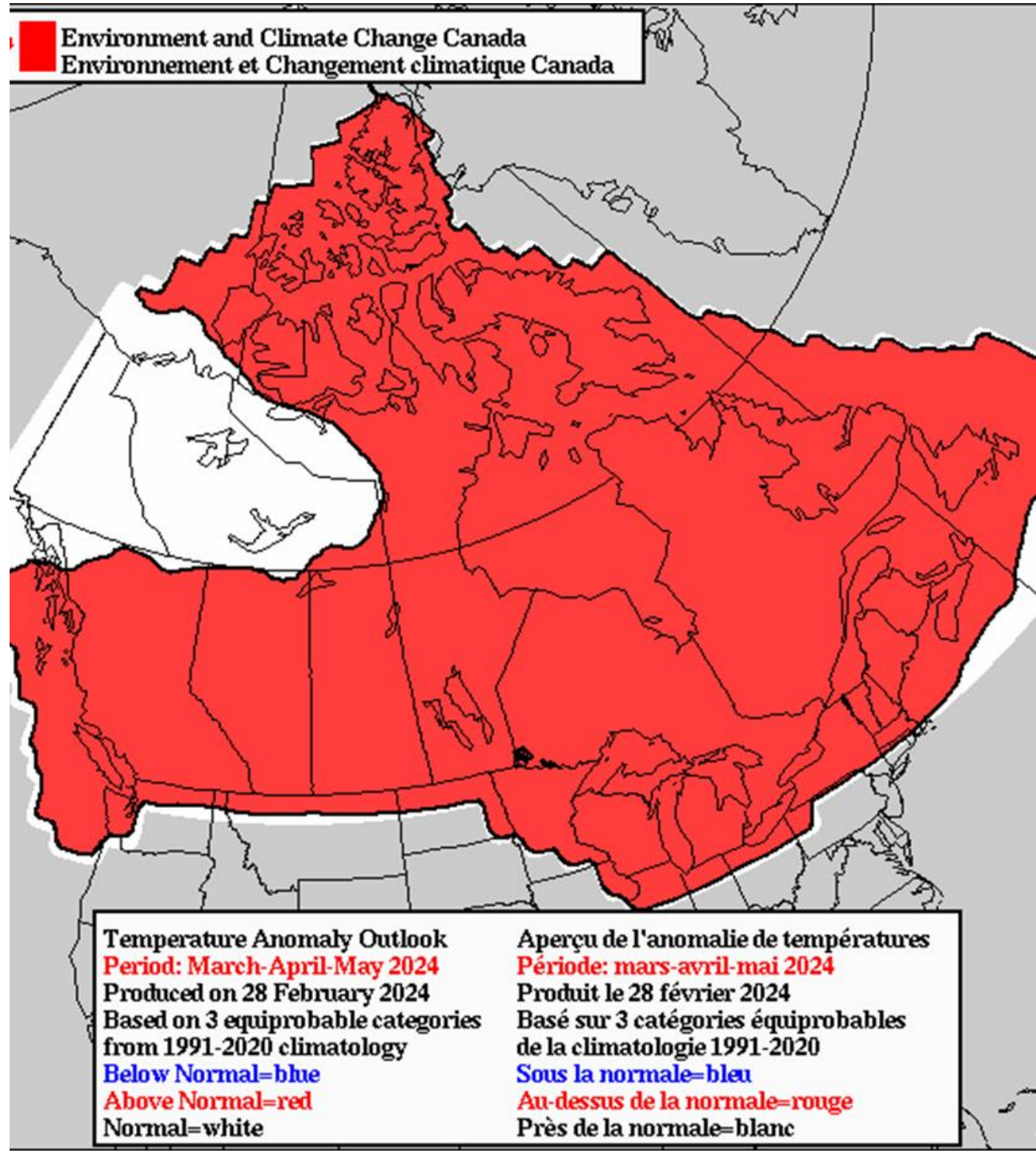


Calgary



# Environment Canada 3 Month Forecast: Temperature

Environment and Climate Change Canada  
Environnement et Changement climatique Canada



Temperature Anomaly Outlook  
**Period: March-April-May 2024**  
Produced on 28 February 2024  
Based on 3 equiprobable categories  
from 1991-2020 climatology  
Below Normal=blue  
Above Normal=red  
Normal=white

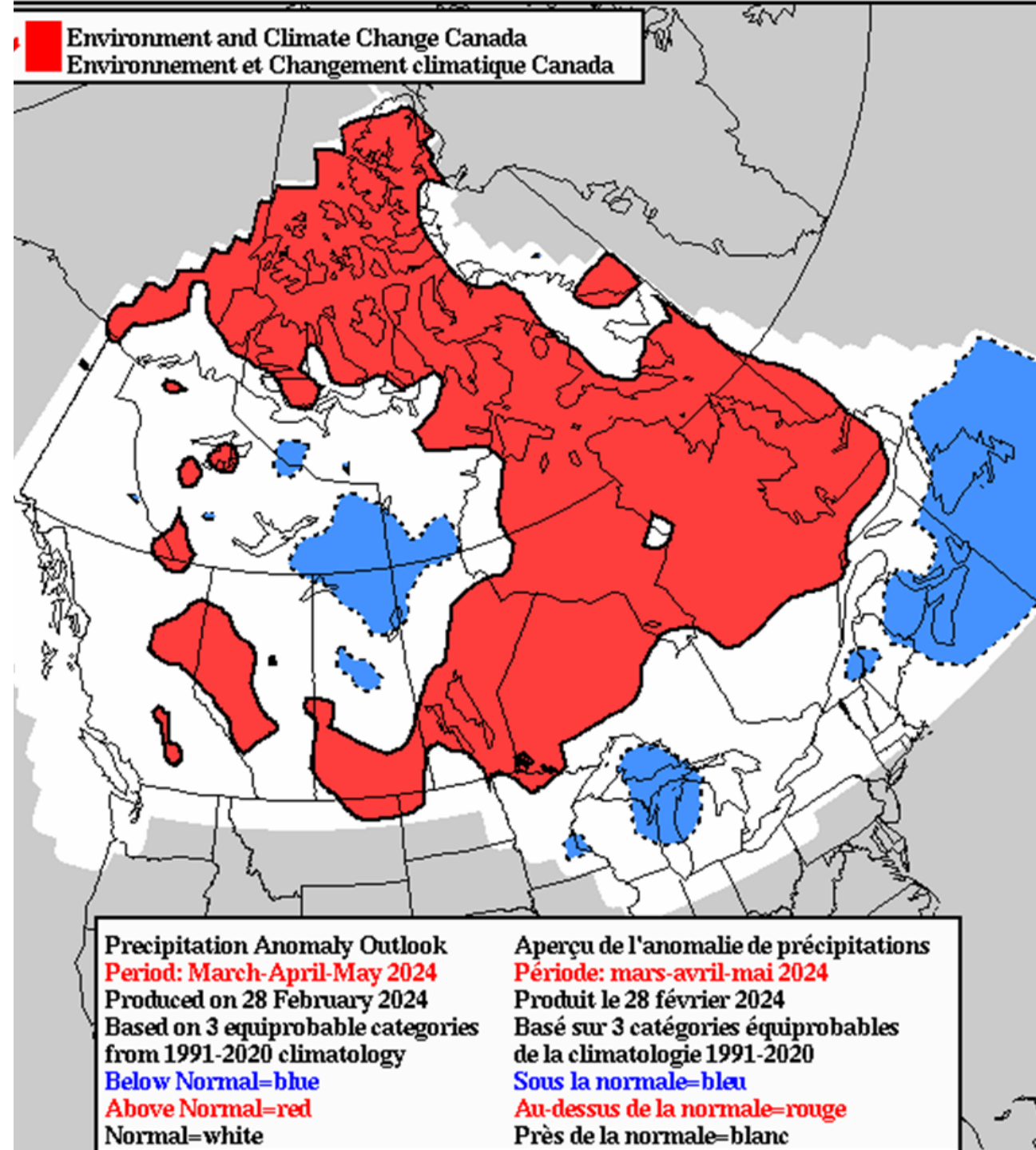
Aperçu de l'anomalie de températures  
**Période: mars-avril-mai 2024**  
Produit le 28 février 2024  
Basé sur 3 catégories équiprobables  
de la climatologie 1991-2020  
Sous la normale=bleu  
Au-dessus de la normale=rouge  
Près de la normale=blanc

Calgary



# Environment Canada 3 Month Forecast: Precipitation

Environment and Climate Change Canada  
Environnement et Changement climatique Canada





# What is The City doing to respond to drought?

## City parks



- Outdoor decorative fountains will run on reduced schedules or turned off completely;
- We will reduce outdoor watering of flowers, turf in parks (where possible) and sports fields.
- Watering of newly planted trees or turf will continue at a reduced rate.

## City vehicles



Exterior washing of City vehicles and buses will be limited to health and safety considerations.

## City buildings



Reduce outdoor watering at City-owned and operated buildings.



# Making every drop count



[calgary.ca/drought](https://calgary.ca/drought)

# Parks Water Management Strategic Plan

In 2002 Calgary City Council identified water management and water conservation as key priorities for The City of Calgary and identified the following water goals:

- Manage The City's water usage activities.
- Conserve water through responsible and efficient use.
- Lead by example.





## What is a Water Managed Site?

A Water Managed Site is a property with an in-ground irrigation system certified by The City of Calgary for water efficiency and managed by a Certified Landscape Irrigation Auditor.

Certified WMS systems must use either climatic or historical weather data to set watering schedules and meet water saving performance criteria.





# What are the benefits to being a Water Managed Site?

- Reduces overwatering, through climate monitoring controllers with environmental sensors
- Reduces water loss, through flow sensors protecting against unidentified leaks
- Provides large landscape owners/managers with a solution to limitations resulting from scheduled day/time watering restrictions during Stages 1-3
- Mitigates visits from Bylaw/Community Standards who will have a current record of Water Managed Sites





# Who can become a Water Managed Site?

All residential, commercial, industrial and institutional customers may apply to become a Water Managed Site.





# How does a site become a Water Managed Site?

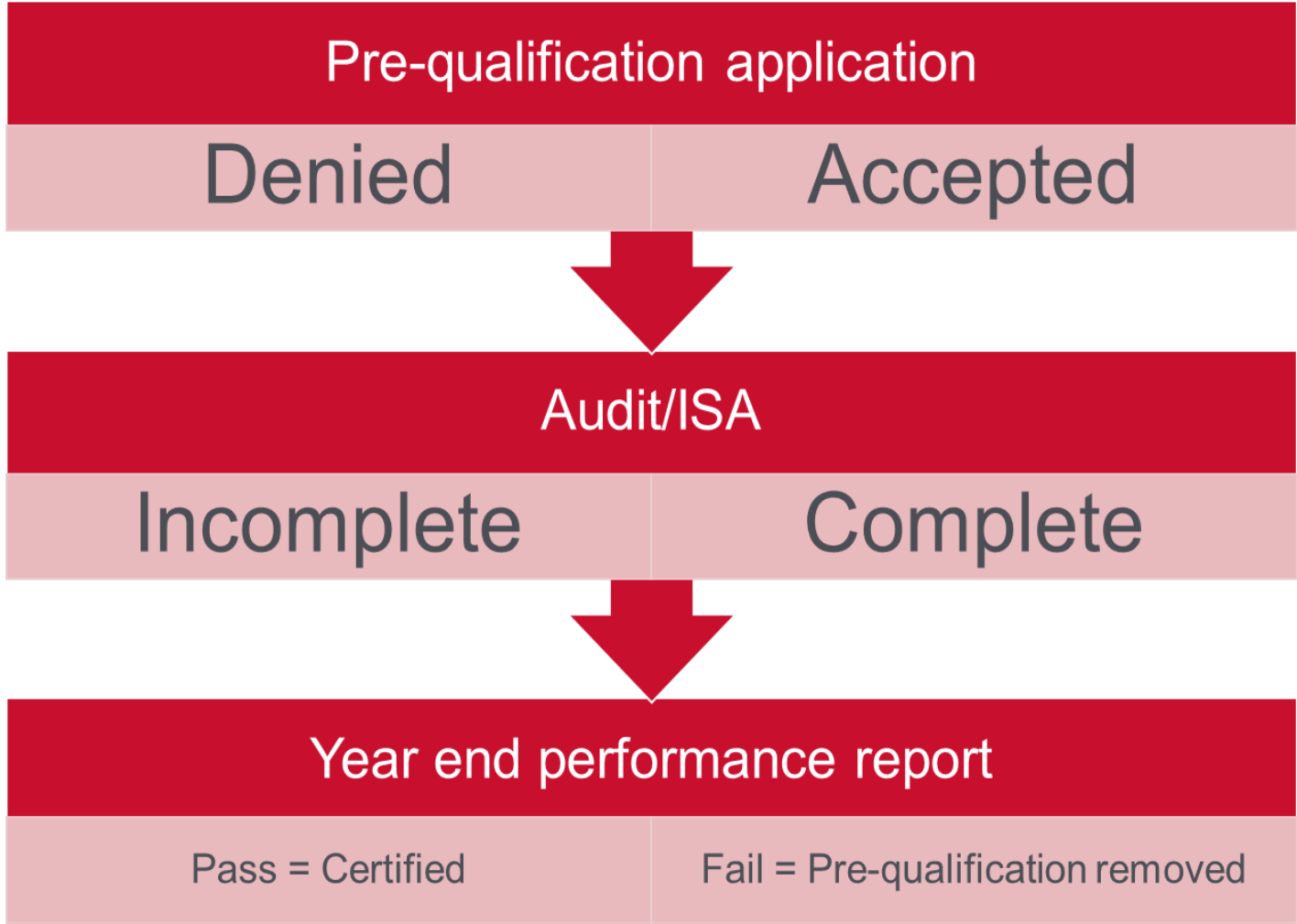
To become a certified Water Managed Site, your property will need to meet these requirements:

- A **Certified Landscape Irrigation Auditor** must visit your property to assess your in-ground sprinkler system and provide a report with schematics of your system (Audit/Irrigation System Assessment)
- Potable water used for the in-ground sprinkler system **must be connected to an irrigation meter\* and cross-connection control assembly**
- Your in-ground sprinkler system must include all of the criteria in the application
- Your irrigation system must be able to prove a water savings of 25% or more achieved over baseline consumption





# Becoming a Water Managed Site



1. Confirm necessary equipment is present and installed
2. Certified Landscape Irrigation Auditor submits pre-qualification application
3. CLIA submits completed Audit/Irrigation System Assessment report
4. Pre-qualified sites will be notified/provided for Community Standards officers
5. CLIA submits a Performance Report at the end of each irrigation season
6. **Certified sites will be required to provide annual performance reports and receive a pass to remain certified each year**

# FAQs for WMS program changes

## **When can applications be sent in?**

We are working to automate an intake system that would be available to start receiving pre-qualification applications in May 2024.

## **How long will application review/pre-qualified status take?**

The CPCIA has asked that processing time be 10 working days or less. Automating the intake process will help us achieve this.

## **How will the site be notified of its pre-qualified status?**

The applicant/site will receive an email from the program manager. These sites will also be immediately added to the Community Standards officer records.



# How will restrictions be enforced?



Until a site can be pre-qualified, it remains under the constraints of any restrictions that may have to be put in place regarding water use for irrigation

2024 water restrictions - if needed - will see two dedicated bylaw officers, in addition to regular support from Community Standards and 311

The City takes an education first approach. Repeat offenders will be ticketed.



# How will The City of Calgary keep the irrigation industry updated on drought conditions and restrictions?



The City of Calgary provides drought condition updates to all Calgarians at **[Calgary.ca/drought](https://calgary.ca/drought)**



The CPCIA will provide links to The City's page on their webpage as well **[cpcia.ca/resources](https://cpcia.ca/resources)**



Subscribe to The City of Calgary Newsroom at **[newsroom.calgary.ca](https://newsroom.calgary.ca)**



**Calgary**



**Questions?**