

April 30, 2024

# Drought

Alberta is experiencing drought in many parts of the province due to a below average snowpack in winter 2022-23, which meant less runoff filling rivers, lakes and reservoirs, and below average precipitation in most areas during the spring and summer of 2023. This is contributing to water shortage in some parts of the province, especially in southern Alberta. The City of Red Deer is preparing for possible drought conditions in spring and summer 2024.

#### 1. What is a drought?

Generally, Alberta relies on melting snow and precipitation for most of its water. Droughts are prolonged periods of dry weather that deplete water resources, including:

- natural sources (rivers, streams, lakes, wetlands, groundwater)
- constructed storage (reservoirs and dugouts)
- irrigation canals
- soil moisture

In the past 120 years, 5 major droughts have occurred across the Canadian Prairies. Starting in 1929 with the "Dust Bowl", multi-year droughts also occurred in the 1980s and the early 2000s.

Alberta is currently in water shortage management stage 4 (out of 5), where multiple water management areas are impacted by water shortage.

#### 2. What is the potential impact of a drought in Red Deer? Will we have enough water?

We continue to monitor conditions closely, and we are working with the Government of Alberta and regional water stakeholders to ensure we are prepared for all scenarios. Currently, the greatest area of concern in in southern Alberta, but water is a shared resource across the province so we must all do our part. There is no concern that we won't have adequate drinking water supply.

# 3. How is The City preparing for a possible drought?

- **Monitoring conditions:** We continue to closely monitor the conditions, including the Gennifer Reservoir and Red Deer River water levels, precipitation, and snowpack.
- Working with partners to share the available water supply: Along with 38 major water users in the South Saskatchewan River Basin, The City of Red Deer signed a water sharing agreement with the Government of Alberta. Under these agreements, major users have voluntarily agreed to reduce water use if severe drought conditions develop this summer. We're also coordinating with the regional water customers (NRDRWC and RD County) to share resources and align our response.
- **Reviewing internal operations:** City departments are reviewing operational water conservation measures while continuing to maintain regulatory compliance obligations.
- **Communications and public education:** Sharing information about drought, water conservation and outdoor water conservation with the community.



# **Outdoor Water Restrictions**

#### 4. When will outdoor water restrictions be in effect?

Voluntary outdoor water restriction start on May 1. If we don't get the precipitation needed, we may need to advance to mandatory Stage 2 restrictions at some point (as early as June 1).

#### 5. Are outdoor water restrictions mandatory?

During Stage 1, the public is asked to voluntarily reduce water use by following the outdoor water restrictions. In Stages 2-4, the restrictions are mandatory and apply for all water users in The City.

6. Why are outdoor water restrictions and water conservation measures necessary? Low Flow/Water Shortage Advisories have been issued by Alberta Environment and Protected Areas (EPA) for various rivers and tributaries in the South Saskatchewan River Basin (SSRB) including the Red Deer River Basin (RDRB) both upstream and downstream of Red Deer.

Taking this information into account as well as current Red Deer River flow rates and forecasted hot, dry weather for the upcoming summer through to the fall; the City has determined that it is important to remain proactive in reducing water use in an effort to preserve our precious water source.

#### 7. Who do the outdoor water restrictions apply to?

The restrictions apply to all water users in The City, including residential, commercial, industrial, institutional, and City operations.

There are some exceptions to these guidelines that allow certain customers to continue outdoor water use for health and safety reasons or for care business needs. This includes:

- Watering plants, shrubs and trees for commercial sales
- Washing outdoor surfaces for childcare facilities, restaurants, kennel and animal care facilities
- Washing of vehicles subject to health and safety regulations
- Businesses that have a license to operate exterior window washing services
- Water use for construction purposes, including grading, compacting and dust control

While The City aims to follow the outdoor water restrictions, there are some instances where water use is operationally necessary (street sweeping, water main flushing, etc.). We are working to adjust other operations, such as watering outdoor amenities to be in line with the restrictions.

#### 8. Can I still water my lawn?

You can still water your lawn, but there will be restrictions on days of the week and time of day. This incudes the use of sprinklers and irrigation. During Stage 1 (voluntary) and 2 (mandatory), there are no restriction on watering using a hose with a spray nozzle or hand watering.

Please refer to the Outdoor Water Restrictions chart for more information.

#### 9. Why can't I wash my vehicle in my driveway?

When you wash your vehicle in your driveway, any cleaning materials you use will go into the storm drain. This means the untreated water flows directly to the Red Deer River, which affects our drinking water. Most automatic car washes recycle and treat the water before it enters the wastewater system.



# FREQUENTLY ASKED QUESTIONS

#### 10. Will the spray parks and outdoor pool remain open?

Our outdoor water amenities, including the Outdoor Pool, Central Spray & Play, Capstone Fountain and Woody's Spray Park, are all operated with recirculated and constantly treated water, and would remain open up to Stage 3 of Outdoor Water Restrictions. The City made considerable capital investment in the development of these amenities to address impacts to the environment with reduced water consumption.

These amenities do require topping off to replenish water lost due to splashing and evaporation, but this is permitted through Stage 3.

#### 11. What if I have newly planted landscaping that needs to be watered?

During Stage 1 and 2, newly planted lawn can be watered on all days of the week at any time of day for three hours, for three weeks after planting. For other landscaping, such as trees, consider watering with a hose and spray nozzle.

#### 12. Will there be fines for not complying with restrictions? Can I report someone?

We strive to take an education-first approach about the importance of reducing water, rather than enforcement. We will be working with customers who violate the restrictions to help them understand that the role that we all need to play in reducing water consumption.

Fines can range from \$250-\$2,500, plus disconnection of water service. To report a violation of the guidelines, please contact Utility Services at 403-342-8750.

#### 13. If it rains, will the restrictions be lifted?

Decisions about restrictions are dependent on several factors, including reservoir capacity in the Gleniffer Reservoir, levels in the Red Deer River and direction from the Government of Alberta. We will continue to update residents on any changes in the level of restrictions.

#### 14. What if I'm not home during the designated watering time(s)?

Consider installing a timer or ask a friend or neighbour to turn on your sprinkler during the designated times.

#### 15. Are other communities in Alberta under similar restrictions?

Yes, many other communities in Alberta are facing drought conditions and outdoor water restrictions. Communities in southern Alberta are particularly at risk and are preparing for longer and more sever restrictions.

#### 16. Can I put the sprinkler out for my kids to run through?

This type of water use is considered non-essential, so we recommend you try to incorporate this fun use of water into your routine lawn water time(s). Our splash parks will also remain open as an alternative for cooling down during the warm weather.

#### 17. What about golf courses? Will they still be able to use irrigation?

The two golf courses within City limits use a dedicated, untreated water source for irrigation. Each of the courses utilizes sophisticated irrigation systems which are operated during the night, to ensure the most efficient use of water and maximize the playability of the turf. We will continue to work with them to ensure they are conserving water where possible.



#### FREQUENTLY ASKED QUESTIONS

#### 18. Do I have to restrict the water use inside my home/business?

The outdoor water restrictions don't apply to water use indoors, but citizens are encouraged to make every drop count by implementing water conservation measures both inside and outside year-round. Refer to our <u>conservation tips</u> to learn how to conserve water both inside and outside your home or business.

#### **City Operations**

#### 19. Why are you still street sweeping if we are supposed to be conserving water?

While we are following the Outdoor Water Restrictions where possible, there are some City activities that are operationally necessary. Street sweeping is necessary to ensure the debris left behind from the winter does not enter the storm drains, which ultimately flows into the Red Deer River. It is also necessary to ensure the street are safe for drivers, cyclists and pedestrians.

#### 20. Why are you still watering sports fields?

To maintain competitive surfaces for the safety of the athletes, The City's sports fields utilize irrigation systems that are activated at night. Using a zone system, each zone is watered for one hour two days a week.

#### 21. Why are you still watering City Hall Park?

Since 2018, The City has worked diligently to reduce water use by half at City Hall Park. As a community amenity that is enjoyed by residents and visitors alike, we will work to balance the operational needs of maintaining the park with the need to conserve water. City Hall Park is watered with hoses with spray nozzles on a zone system. Each zone is watered twice per week, which is similar to the requirements of the Outdoor Watering Restrictions.

Organic composting mulch is being added to the park, this mulch made of fish by-products and tree organics will hold moisture and protect the soil from sun and the heat. Drought resistant plants have been slowly added to City Hall Park replacing the plants requiring the more water.

The hanging baskets in the downtown area are watered in the morning, twice weekly using a water truck and hose, which helps to prevent water loss. The baskets are also planted in water saving pots to ensure that minimum water is used. If we move to Stage 3 of the Outdoor Water Restrictions, half of the hanging baskets will be removed.

#### Water conservation

# 22. Are there low maintenance plants you'd recommend planting this year to decrease the water needed?

Yes, we encourage you to consider plants that can withstand dry periods with minimal watering. We have put together a list of <u>drought-tolerant plants</u> that can qualify you for our <u>plant and mulch rebate</u>.

#### 23. Are you offering rain barrel rebates this year?

Yes. Residents who purchase and install a new rain barrel can apply for a rebate of \$50. We've expanded the program for 2024 to include an additional \$50 rebate if you install a second new rain barrel. Participants who received one rain barrel rebate in past years and install a second new rain barrel, can apply for one extra rebate to a maximum of two rebates per utility account for its lifetime. Visit <u>RedDeer.ca/RainBarrel</u> for more information.

#### 24. Are you offering any plant and mulch rebates this year?



# FREQUENTLY ASKED QUESTIONS

Yes, plant and mulch rebates are back for 2024. You can receive a rebate for drought-tolerant plants and permeable mulch that you purchase and plant/install in 2024. Visit <u>RedDeer.ca/PlantAndMulch</u> for more information and to view the <u>qualifying plants list</u>.

# 25. How can I care for my lawn/garden with the watering restrictions?

- Continue to water your lawn on the designated days and within the times provided for your address.
- Watering early in the morning or later in the evening reduces chance for evaporation and burning so that your lawn can soak up as much water as possible.
- Leave your lawn long, about 2-3 inches should do, and leave the grass cuttings on the lawn to slow water evaporation.

#### For more information, contact:

Corporate Communications The City of Red Deer 403-396-9533