

# Enhancing Water Availability

## Engagement to Identify Opportunities in Alberta



Water is one of Alberta's most precious resources. Every one of us use it, consume it, and rely on it.

The province is facing both increasing water demand and severe weather events including drought and floods. While government has taken a number of recent actions to respond to droughts and support water users, this is just the start.

We know that a resilient and efficient water management strategy is essential for safeguarding Alberta's community health, environment and economy. That's why Alberta Environment and Protected Areas is engaging to look at the best ways to strengthen the system and sustainably enhance water availability for years to come.

### Increasing pressures and challenges

Our province is poised and being called on for growth across economic sectors. This includes growing communities, increased agriculture and food production, increased hydrogen production to serve global energy needs, interest in nuclear energy and data centres and so on. All of this requires water.

At the same time, we know that additional stress is being placed on the water system. Not only is the province growing rapidly, but recent drought, water shortages and water infrastructure failures have all highlighted why we must manage water resources carefully and thoughtfully.

Just consider these recent events:

- In 2023 and 2024, Alberta experienced drought conditions in many parts of the province. The Oldman, South Saskatchewan and Milk River basins faced significant drought conditions in multiple water management areas. At the same time, the Peace River / Slave River, Red Deer River and Bow River basins were in priority call management, and the Athabasca River was under the monitoring and observation stage.



- In June 2024, a water pipe in Montana that diverts water from the St. Mary River to the Milk River burst and the St. Mary canal diversion was shut down. The infrastructure will not be fully repaired until 2025.

- In June 2024, the City of Calgary experienced water main breaks that significantly affected water availability and highlighting the need for effective maintenance and resiliency of systems. This led to water conservation measures.
- In August 2024, BC Hydro started filling the Site C reservoir, resulting in reduced flows in the Peace River downstream of the dam. The Site C dam is located 62 kilometres upstream of where the Peace River crosses the British Columbia-Alberta border. Alberta Environment and Protected Areas measured and forecasted flows in the river and continues to work closely with BC Hydro to identify and manage potential impacts downstream.

These are just a few examples of recent events that impacted Alberta's water system. While each is unique, they all highlight areas where different approaches, policies and infrastructure might be required. That is why Alberta Environment and Protected Areas is leading this water engagement and seeking your input.

## Building off recent actions

Alberta has shown that it can rise to any challenge. Over the past year, water licence holders, water users, communities, Indigenous partners and the public have taken various actions to address the challenges posed by water shortages and drought and infrastructure challenges.

Alberta's government has made water management a top priority. This includes the following actions taken over the past year:

- Established the Minister's water advisory committee, and stood up the Drought Command Team.
- Increased the monitoring of snowpack (using LiDAR) and precipitation trends.
- Launched the Drought and Flood Protection Program to help protect homes, businesses and lives.
- Released Alberta's Drought Response Plan to guide the province through any and all drought conditions.
- Facilitated the largest voluntary water-sharing agreements in Alberta history. In southern Alberta, major water licence holders, including irrigation districts and municipalities voluntarily agreed to reduce their water use, allowing more water to stay in the system so junior licence holders did not run dry.
- Worked with Municipal District of Pincher Creek and the village of Cowley in southern Alberta to reposition their water intakes, which had gone dry with the low levels of the Oldman reservoir.
- Worked with municipalities to understand and coordinate the release of wastewater effluent to avoid stressing the water system during times of low water flow.
- Reduced regulatory burden through expedited regulatory processes to address concerns related to drought. This includes prioritized applications and processes related to groundwater licences, surface water licences and approvals under the *Water Act*.
- Worked with communities in northern Alberta to understand how they use water for transportation, especially in the context of emergency evacuation routes with increased wildfire risk.
- Amended legislation to allow government to take key actions to improve response time and act quickly to address and alleviate the effects of a water emergency, including: determine the priority of water use; allow temporary low-risk, water transfers between major water basins; exempt certain drought or flood mitigation activities to speed up the process; and allow temporary entrance, occupation and use of private property and land if specific actions are needed to mitigate the emergency.
- Committed \$1.3 billion in capital funding over the next three years, including \$251 million to better prepare the province for floods and droughts; \$272 million for irrigation projects; and \$539 million to support municipal water supply and wastewater infrastructure.
- Launched [alberta.ca/drought](https://alberta.ca/drought) to provide regular updates and improve public communication.

## Responding to the Office of the Auditor General

In July 2024, the Office of the Auditor General released a Surface Water Management Audit report, noting the need to enhance effective processes to manage surface water allocation and use. The auditor recommended establishing a process identifying the need for water conservation; improving licence and compliance monitoring processes to ensure decisions are consistently made and use of water is appropriately monitored; and having the department publicly report water usage and allocation.

The department is already taking action to maximize Alberta's water supply, reduce the impacts of drought, support businesses and communities, and make every drop count. For example, water conservation objectives are in place in areas with high water demand or where water shortages are more common. The department is also improving documentation processes for water allocation and management, including working to make water licensing and use information more readily available.

## Looking to the future

Albertans and water licence holders have repeatedly proven they can work together and successfully navigate challenges. Water stewardship is a shared responsibility, and we appreciate the work of the many water users and stakeholders who continue to find solutions to manage through drought, water shortages and other challenges.

With increasing water variability and a growing province, new policy and regulatory tools may be needed to increase water availability for Albertans and optimize Alberta's water management system while continuing to protect the aquatic environment.

We are looking to the future. We need to build off the great work that has been done by many across this province and see if there are other long-term solutions that can help address the water management issues that are facing the system. This includes reviewing Alberta's existing policy and legislation and seeing if there are ways to make our water systems more sustainable and supportive for communities, the economy and the environment.

That's where you come in. We want your input.

## Engagement on Water Availability

Alberta's *Water Act* focuses on the planning, use and enforcement needed to manage and protect Alberta's water. It has not been substantively amended since 1999, when it first came into force.

The Minister of Environment and Protected Areas' mandate letter includes a commitment to "review Alberta's water management strategy to increase the availability of water and water licences to Alberta municipalities, businesses and agricultural producers while maintaining the highest standards of water conservation and treatment."

Environment and Protected Areas wants to hear from Albertans about ways to enhance Alberta's water management system and make more water available for use for sustainable growth. We want to hear about opportunities and barriers. We want to hear ways that this province can:

- increase water conservation, efficiency, and productivity
- free up and optimize use of available water
- better capture and improve access to existing water sources
- improve water management and make faster approval decisions

## Engagement Scope

We know Albertans are passionate about water and have important local knowledge of their watersheds and the issues being faced. Feedback over the years has identified some initial opportunities, including:

- improving measuring and reporting on water use and availability;
- enhancing water conservation, efficiency, and productivity;
- identifying opportunities and barriers for using alternative sources of water and wastewater reuse;
- clarifying use of rainwater;
- improving water allocation and transfers to accommodate need and demand;
- identifying criteria for when transfers of water between major river basin boundaries might be appropriate; and
- updating or enabling additional exemptions for water diversions or activities.

Alberta Environment and Protected Areas is open to hearing your thoughts on these ideas or any opportunity to more effectively manage water in this province. Here are some guiding questions to help identify ideas before providing your feedback:

- What opportunities are there to manage water more effectively in Alberta?
- Which policies, programs, or approaches are working effectively? Which need to be strengthened, and how?
- What challenges or barriers do you face within Alberta's current water management system?
- Are there means to improve allocation, licensing, and transfers?
- Is the information available to support your water management needs?
- What do you think should be the top priorities for the province when considering its review of water management policies and potential amendments to the *Water Act* and its policies?
- What are grey and green infrastructure opportunities to enhance water availability?
- What technology and innovation is available and emergent for more effective water use and management – efficiency and productivity, infrastructure maintenance and longevity, metering, forecasting, etc.?

This open engagement will help to identify priority areas of focus. Your input and considerations will be used to help inform future policy options and possible legislative amendments.

Importantly, we know that water is a shared resource. This requires collaboration across the government, and Environment and Protected Areas is working in step with Agriculture and Irrigation, Municipal Affairs, Indigenous Relations and others. This also requires collaboration across water users and managers, be it for household, business, agriculture, environmental, recreation or other needs.

## **What comes next?**

We appreciate you sharing your thoughts. We're undertaking a staged engagement process starting in the fall of 2024, which will build from the lessons learned from water management issues addressed over the past few years.

In October, government will start engaging key water-using sector associations and organizations, Indigenous communities and organizations, and water partners like the Alberta Water Council.

In November, we will expand this work and include more water-using sector participants, more water partners and public engagement.

Input on opportunities and barriers can be provided through [alberta.ca/water-availability-engagement](https://alberta.ca/water-availability-engagement)

We know that improving water management requires ongoing time and effort. We will listen closely and review the input received through engagement before deciding next steps.

## **Thank you**

We appreciate your input. Working together, we can find the most effective ways to maximize water available for sustainable growth in Alberta.