

Water Measurement and Reporting

Water Availability Engagement



Population growth, economic growth and water variability are challenging the water management system in Alberta. New policy and regulatory tools could be used to increase water availability for Albertans and optimize the water management system to better address these issues while continuing to protect the aquatic environment.

This document provides background information on just one type of water management opportunity identified through conversations with stakeholders. It is intended to spark ideas and generate conversation.

The Government of Alberta invites your feedback on any opportunity to increase water availability in the province.

Current situation

Alberta takes a practical approach to water use reporting requirements. To minimize financial and time burdens on Albertans, most licensees (tens of thousands) are relatively small and therefore generally have not been required to report any information. The department has placed basic mandatory reporting conditions on most medium to large licences (several thousand licensees, which account for most of the water allocated in Alberta) – though some old licences have no requirements.

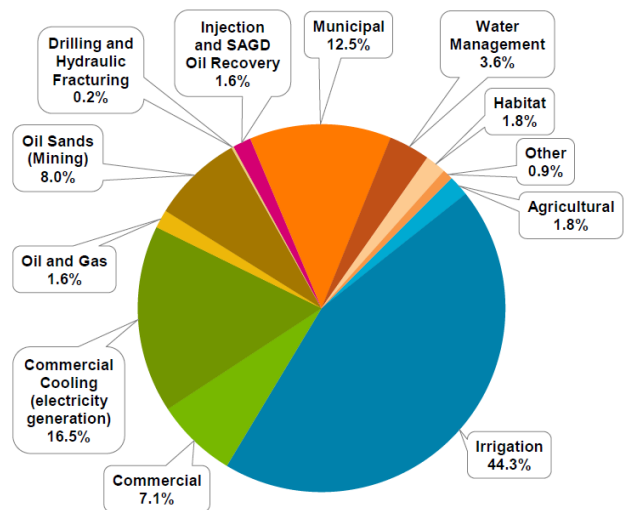
Water use reporting by licensees is varied and inconsistent. Changes to the *Water Act* could help improve the consistency and timelines of reporting, validation of data that is submitted, reporting

compliance, and access to reported water use data in a centralized platform that accommodates regular reporting.

Alberta manages its water resources for the overall benefit of Albertans, for its people, the economy, and environment.

Building a more detailed system for water measurement and reporting would come with financial costs. Government would need engage further to understand how those costs and other responsibilities, such as ensuring reliable and quality data, would be distributed.

2023 surface water allocations by purpose



The opportunity

The *Water Act* could potentially be amended to ensure any licensee can be directed to monitor and report their water use, (including how it should be done to be consistent and supports allocation and management decisions). Tools could be developed to establish the methods, standards, and reporting protocols necessary to ensure data is transparent and validated.

Understanding water use within Alberta

While Alberta closely tracks how much water is allocated to licensees, an allocation is not actual water use. In fact, the allocation in a licence and the water diverted for use under a licence can sometimes be quite different. Water allocations may be utilized less during wet years, while the higher allocation might be necessary during dry periods. However, licensees often do not use their entire allocation and adjust their usage based on the available water supply. Monitoring and collecting water use data helps us understand Alberta's actual water availability, realize potential efficiencies, and measure water productivity across the economy. The ability to identify who uses water, how much, and when (e.g., seasonal patterns) would help with operational management decisions, planning for growth, and protecting the environment. Acknowledging that use of an allocation requires flexibility and will vary from year to year, it would also inform allocation decisions such as water transfers, which would help increase water availability for new or growing needs.

Water use metering and drought

Knowing and planning for future water demand is an integral part of creating and monitoring drought indicators.

Monitoring and observation are the first stage of Alberta's response to drought.

Once a drought is occurring, collection and coordination of water use data would improve the ability to operate water storage infrastructure such as dams more effectively (e.g., optimize releases to better match actual demands, rather than estimating who might need or want to take water downstream), monitor drought indicators, allow for better planning and cooperation within provincial departments and with municipal and community partners, and support all water using sectors that are impacted by water scarcity during drought.

Digital Regulatory Assurance System

The Digital Regulatory Assurance System (DRAS) is Alberta's modernized environmental regulatory system. It is a secure platform that enables licensees to compile and view all parts of their licence(s) and activities that are subject to environmental regulation.

DRAS allows water licensees to report their water use data online, view licence records, including priority number and water use reports.

Currently, water use reporting is generally required on newer licences and those large to medium size licences that were previously amended. Older licences with no reporting requirements are not part of the DRAS system. This means Alberta lacks a complete picture of water use.

We want to hear from you

Consider these questions on water measuring and reporting before providing your feedback:

- How could government best address the challenges of data collection, availability, and usability?
- What information would be required to support enhanced water management, conservation, efficiency, and productivity?
- What information currently exists, and in what form or frequency?
- What would be the impacts of introducing mandatory water use measurement and reporting? What would be the benefits?
- How could water use be accurately measured over time?
- How could we start (i.e. should there be a prioritized or phased approach) – by region? size of licence? other?
- What types of incentives, supports, or regulatory requirements would be needed?

Get engaged

Learn more about the Water Availability engagement and have your say at alberta.ca/water-availability-engagement