

Water Management Thresholds

Water Conservation Objectives and Instream Objectives

Alberta's waterbodies face high demand from a variety of water users. Water management thresholds are guidelines for specific water level requirements that reflect the uses and needs of that unique river to help ensure that all users and the aquatic environment have water.

There are many positive reasons for water management thresholds, including:

- Ensuring there is a secure supply for drinking water and other human water use.
- Maintaining healthy aquatic ecosystems, including the management of fish and wildlife.
- Maintaining rate of flow of water or water level requirements needed for infrastructure, waste assimilation and other municipal uses.
- Protection of tourism and recreational opportunities.
- Meeting responsibilities to downstream communities.

Water management thresholds

There are different types of water management thresholds:

A **water conservation objective (WCO)** is a flow threshold that is usually set as part of a rigorous multi-stakeholder process as part of a water management plan. An example of this is the [South Saskatchewan River Basin Water Management Plan](#). WCOs help guide the allocation of water for licenses that were applied for after the WCO was set. A WCO can also guide the Minister of Environment and Protected Areas in establishing a Crown Reservation of water.

An **Instream Objective (IO)** is another type of flow guideline. IOs are set for sections of rivers throughout the province and have been developed to address local and regional concerns.

Establishing a WCO or an IO does not guarantee that a river will have a given flow rate at all times, especially during drought conditions. Also, not every river in Alberta has a water management threshold. They are regulatory tools that can help to control how much water can be stored via dam operations or diverted and used via water licenses.

Water management thresholds in water licences

Water licenses that were signed after thresholds were established will reference the WCO or IO and require some users to stop withdrawing water if flows drop below a threshold. Some water licenses were signed prior to a WCO or IO being developed, so they are not obligated to stop withdrawing if flows have dropped below thresholds.

Know your local water management threshold

Water license holders and other water users should be aware of the conditions of their local water source.

Near real-time data on river and reservoir levels is available on www.Rivers.Alberta.ca. The second layer titled "Water Management Data and Water Shortage Advisories" displays basins which have water advisories in place. Water management station pins will display in yellow if flows at these stations are approaching water management thresholds. They will display in red if flows are below water management thresholds.

You can view the recorded flow, as well an applicable IO or WCO, by selecting the Table Data on a water management station pin. These thresholds usually change week by week as river flows change throughout the year.

Crowsnest River at Frank | Table Data

Timestamp	Recorded flow (m ³ /s)	IO (m ³ /s)	WCO (m ³ /s)
2023-11-21	---	1.810	---
2023-11-20	---	1.810	---
2023-11-19	---	1.810	---
2023-11-18	---	1.870	---
2023-11-17	---	1.870	---

Additional Resources

[South Saskatchewan River basin water information sheets](#)
[South Saskatchewan River Water Management Plan](#)

[Learn to Use Rivers.Alberta: Get to know your River Flow](#)