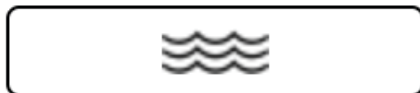


Get to know your Water Flow

Helping water users predict and prepare for water shortages

[Alberta River Basins](#) provides data about river and lake water levels, precipitation, and snow pillows in Alberta. The [Rivers.Alberta.ca](#) website or Alberta Rivers App can be used to monitor conditions to make informed choices about water use. For water licence holders, these tools can be very helpful to monitor during water shortages.



Near-Real-Time Data and Flood Advisories

When you enter the Alberta River Basins website, the Near-Real-Time Data and Flood Advisories layer will be active, and the province's streamflow and lake level gauges will be displayed. Precipitation stations and snow pillow stations can be toggled on. When the map is zoomed out, stations will be clustered together as black circles. As you zoom into an area, individual station pins will be shown at their true location.


Streamflow or Lake Level Gauge Station


Monitor your local and upstream stations, including watercourses such as rivers and streams, and waterbodies such as lakes or reservoirs. This will enable you to learn how various water levels relate to your on-the-ground experiences.

Quick View Bubble:
The current height of the river (stage or height of water above the datum) and discharge measurement in cubic meters per second (m³/s).


Streamflow and lake level gauges are displayed as pins with three wavy lines.

Data Indicator Circle
Green: data has been updated in the last 24 hours.
Grey: no current data.


Data Table:
Shows data over the last five days in a table format. Data can also be downloaded from here.

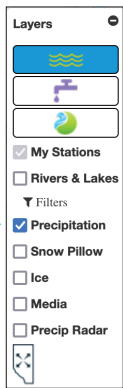

Weekly Graph:
Shows data over the last seven days in a chart format.


Yearly Graph:
Shows data over the last six months to one year.

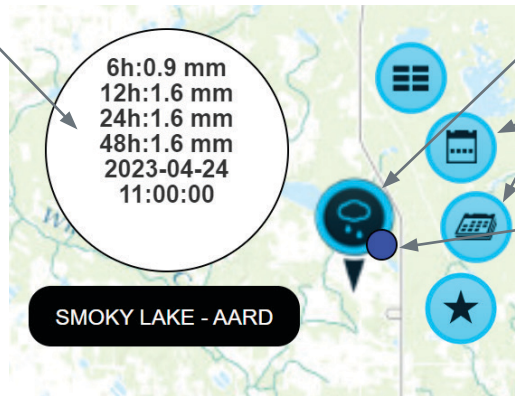

My Stations:
Add this station to "My Stations" for future reference. Access your stations from the menu.

Precipitation Station

Viewing precipitation station upstream from you can help you see if there will be more flow coming downstream.



Quick View Bubble: shows the total amount of precipitation measured in the last 6 hours, 12 hours, 24 hours, and 48 hours.



Precipitation stations are displayed as pins with a cloud.

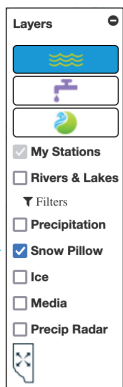
Weekly and yearly graphs show the rate of precipitation and accumulated precipitation.

Data Indicator Circle

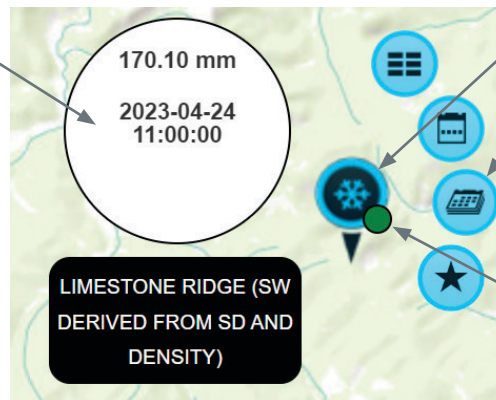
Blue: precipitation has been measured in the last 48 hours.
Green: data has been collected in the last 24 hours
Grey: data is not available during the past 24 hours.

Snow Pillow Station

The amount of water contained in snow can make a significant different to water volumes come spring and summer.



Quick View Bubble: shows the accumulated snow pack and the date and time it was last measured. Snow pack is measured in "snow water equivalent" (SWE), or the millimeters (mm) of water if the snow melted.



Snow pillow stations are displayed as pins with a snowflake.

Viewing the yearly graph will compare the snow water equivalent for the current year to the previous year and the normal range.

Data Indicator Circle

Green: data has been measured in the last 24 hours.
Grey: No recent data is available.

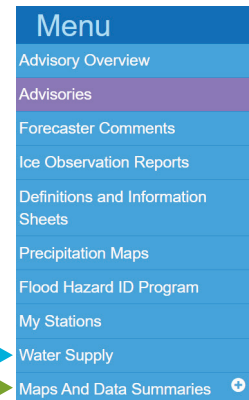
Water Supply Outlook

Data trends of snowpack and precipitation can help water users make informed farm planning and water use decisions and help identify potential water shortage situations as part of water management planning. The Water Supply Outlook report contains forecasts of runoff for southern and central mountain rivers, and in spring, snowmelt runoff in all non-mountainous areas. It also contains a summary of current snowpack, precipitation, river flow volumes, reservoir storage and soil moisture data. Find this data in the main menu under Water Supply (▶).

Runoff from the mountains is important for the major rivers in the province where reservoirs store water supplies for irrigation, hydroelectricity and community & municipal purposes. Plains area runoff is important for replenishing soil moisture and water storage in local storage facilities, such as dugouts.

Snowpack

During the winter months, snow pillows measure the snow water equivalent in the Rocky Mountains. In the springtime, plains snowpack is manually measured and can be found summarized in the Water Supply Outlook (▶) or by looking at Maps and Data Summaries (▶) in the main menu.

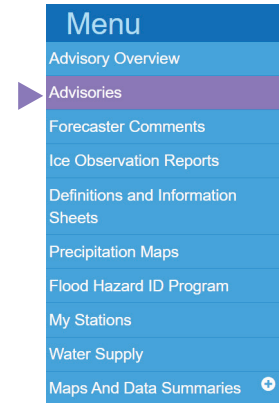



For more information on how Alberta's snowmelt impacts it's rivers, read the [Snow Does not Equal Flood Factsheet](#).



Water Shortage Advisories

To view water shortage advisories that are in place, select the second layer from the map page, shown as a purple tap. Alternatively, view all provincial advisories by choosing Advisories (▶) from the menu. A water shortage could be defined as having insufficient water flows to meet the needs of water licence holders, household users, or major water users. A water shortage advisory is implemented if water flows are lower than normal, are either approaching or are below key water management thresholds and water management actions are taken. Water management thresholds are specific water level requirements that reflect the uses and needs of that unique river. Instream objective (IO) and instream flow needs (IFN) are two examples of a threshold that may exist in certain rivers.

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.

When a water shortage advisory is in place, that water basin will be shaded in purple. Click on the purple shaded area to learn more about the advisory, and see if any of the following management actions are in place.



Water shortage advisory affects angling



Water shortage advisory affects temporary diversion licenses



Water shortage advisory affects term licenced withdraws

The advisories apply to streams, rivers, lake and reservoir levels. Depending on the severity of the conditions, water conservation measures may be recommended, or management actions may be invoked.

During water shortages, all water users are encouraged to conserve water wherever possible. It is the water users responsibility to ensure they are following their licence conditions. For example, a licence may limit diversions when there is insufficient flow to meet or exceed the instream objective. That instream objective should be listed in cubic meters per second (m³/s) on your licence and can be compared to the near-real-time data on the streamflow data monitoring station. The Government of Alberta may also temporarily stop issuing temporary diversion licences and suspend or cancel existing ones during water shortage advisories.

Facing frequent water shortages? Visit the [Farming in Dry Conditions](#) webpage for additional resources.

See this [Water Act Factsheet](#) for more information on water diversion for agriculture uses during low flow conditions.

Download the Alberta Rivers app for current information about snow, river flows, lake levels, precipitation, and ice conditions across the province, plus important advisories sent straight to your cell phone.

Alberta River Basins is operated by The River Forecast Centre (RFC). For more information, visit the help menu on the Alberta River Basins website. For technical enquires contact River Engineering and Technical Services Section at AEP.WebWS@gov.ab.ca.