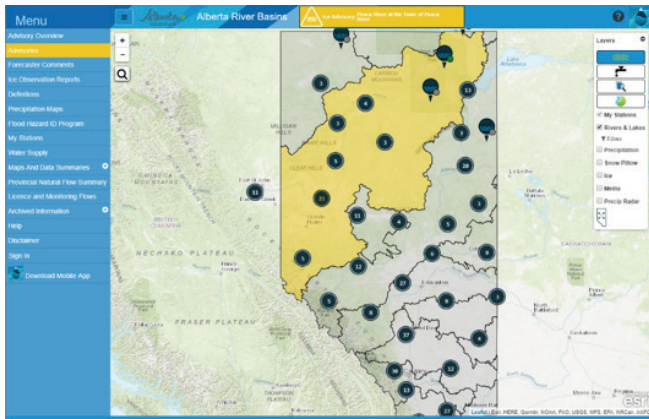


# Alberta's River Forecast Centre: Awareness and Communication

The River Forecast Centre provides Albertans with information related to current and future river or river ice conditions to enable decisions to be made related to water usage, recreation and emergency response. The Centre has three major steps in its information flow – maintaining situational awareness, anticipating flood events, and communicating river conditions. Warning of adverse river conditions is one facet of that flow.

## How does the River Forecast Centre maintain situational awareness?

The Centre monitors river and weather conditions across Alberta on a daily basis looking for trends and anomalies. The forecasting expertise of several partner agencies across multiple levels of government informs these daily observations. In addition to river data from Water Survey of Canada and weather information from the Alberta Wildfire Coordination Center, and Environment and Climate Change Canada, the Centre evaluates outputs from various gridded and ensemble weather models looking at air temperatures, rainfall locations, amounts, intensity and the certainty that the meteorologists assign to those variables. That information, when combined with current river conditions, allows river forecast models to be run to predict river flows and changes in water levels.

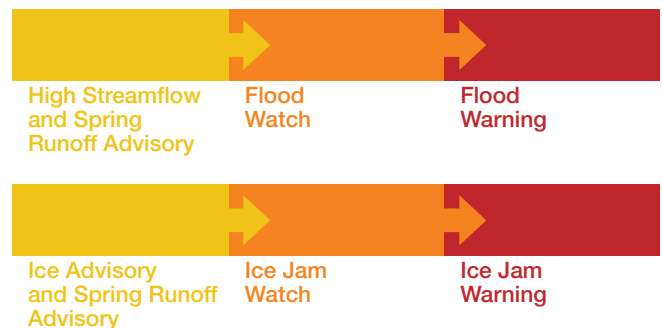


*Using the data and charts on the <https://rivers.alberta.ca/> website or mobile app is a good way to maintain your personal awareness. A variety of information is available such as: current river level and flow data, normal flow ranges, snowfall accumulation, precipitation radar, and river ice conditions.*

## How does the River Forecast Centre prepare in anticipation of events?

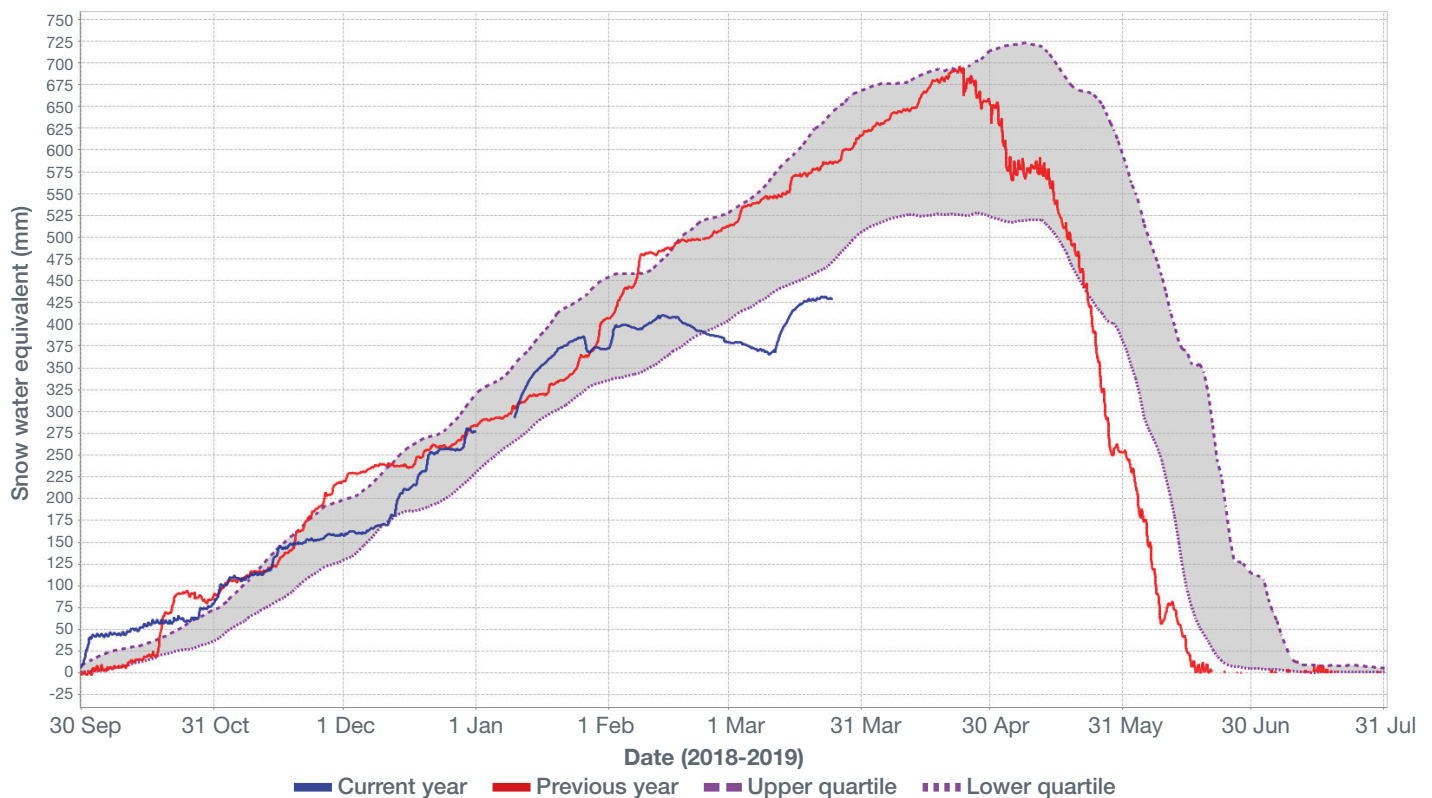
Weather model information, particularly rainfall locations, amounts and intensity, is very important in determining where in Alberta rivers may respond to rainfall. Extended-range forecasts (with lead times of one to two weeks) will give an indication of when and where rainfall may occur. Medium-range forecasts (with lead times of two to seven days) begin to provide more accurate information on location and amounts. By day 5, the weather forecast information becomes reliable enough for river forecasting purposes; however the River Forecast Centre may still not know the full amount of rainfall if it extends past the forecast period.

When weather forecasts or river forecast model results suggest that a significant event may occur, the Centre initiates progressive stages of increased watchfulness and communication, both with potentially affected communities and with its emergency preparedness partners. Anticipated events are often described and discussed in Forecaster Comments, which is available on the [rivers.alberta.ca](https://rivers.alberta.ca) website and mobile app. As information is updated and more becomes available, the Centre will begin to issue Advisories, Watches and Warnings to the public. Behind the scenes, the Centre is also in direct communication with communities, provincial public safety officials, dam operators, and potentially affected parties such as transportation or utility companies.



*To learn more about what advisories, watches and warnings the River Forecast Centre issues see “Flood Forecasting and Warning and Ice Forecasting and Warning Information Sheets.”*

The Centre may enter into 24/7 operations based on the size and timing of predicted forecasts in creating unsafe river conditions.

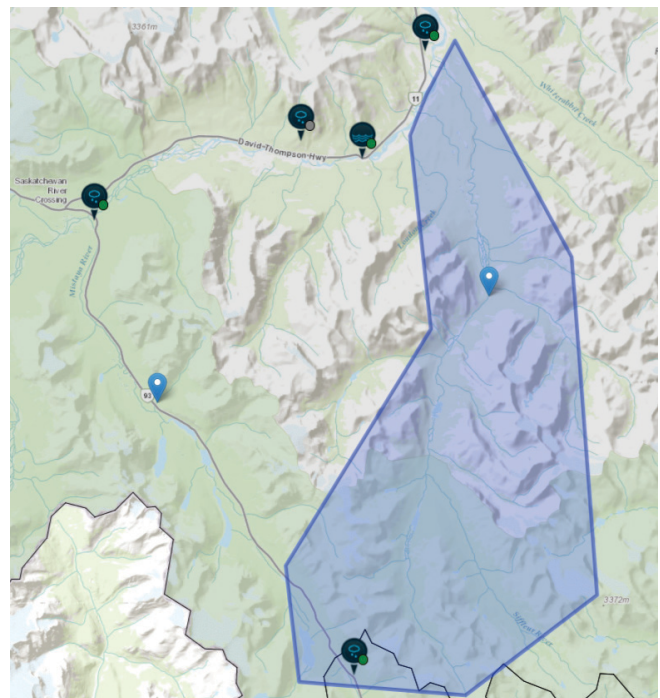


Snow water equivalent for the current year (blue), the previous year (red), and the normal range (grey) for station 05BB803 Sunshine Village

## How does the River Forecast Centre communicate during high water events?

The Centre uses conventional methods such as direct telephone calls, conference calls and emails; however its main communication tools are the renewed Alberta River Basins website <https://rivers.alberta.ca/> and the mobile app. When appropriate, the Centre can send push notifications to all users of the Mobile App, including the general public, to communicate that timely information has been updated. The Centre also uses features built into the website to brief multiple users, such as public safety officials. During these briefings, areas and points of interest can be highlighted to help direct monitoring or emergency preparedness actions.

A hypothetical briefing map (right) showing an area of future rain and pins at locations of interest (e.g. malfunctioning gauges).



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