

Ice Forecasting and Warning

What is an ice jam, and why are they important to Albertans?

Ice jams are accumulations of ice in a river that can lead to flooding. In Alberta, ice jams can cause severe flooding along rivers. They can happen quickly and without warning.

What kinds of advisories does the River Forecast Centre issue?

The Centre issues four types of advisories regarding winter and spring conditions:

- Ice Advisory
- Ice Jam Watch
- Ice Jam Warning
- Spring Runoff Advisory



What is an Ice Advisory?

An Ice Advisory means that the ice cover of a river is expected to change. They are typically issued only for built-up areas with a history of river ice problems. Ice Advisories may be issued during fall freeze-up or at spring breakup. The main purpose of ice advisories is to inform communities that river ice conditions may be changing soon. At the time an Ice Advisory is issued, major flooding is not anticipated and water levels are expected to remain within the river banks.

An Ice Advisory may be upgraded to an Ice Jam Watch or Ice Jam Warning if conditions become favourable for the formation of ice jams, or if an ice jam has formed and it is impacting infrastructure.

If an Ice Advisory is issued, be cautious because:

- The ice cover may change quickly—it might melt, break, or move; large pieces of ice may be flowing in the river.
- River levels can change very quickly.
- Changing ice conditions may cause isolated flooding in low-lying areas.

What is an Ice Jam Watch?

An Ice Jam Watch is issued when conditions are favourable for the formation of ice jams or when an ice jam has been reported and it is causing high river levels. Ice Jam Watches are issued for specific areas that are being impacted by an ice jam or are at risk of being impacted by an ice jam. Flooding of low-lying areas near the stream and groundwater seepage flooding may occur during an Ice Jam Watch. However, communities or infrastructure have not been affected.

Ice Jam Watches may be upgraded to Ice Jam Warnings if conditions worsen.

If an Ice Jam Watch is issued, be cautious because:

- Any areas near the river may be unsafe because river levels and ice conditions can change suddenly.
- The ice cover may change quickly—it might melt, break, or move; large pieces of ice may be flowing in the river.
- Ice jams can form and release without warning.

What is an Ice Jam Warning?

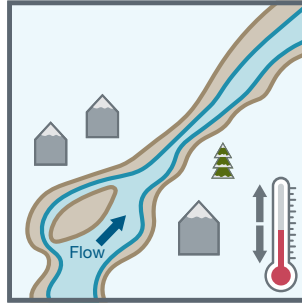
An Ice Jam Warning is issued when an ice jam has been reported and it is causing flooding which is affecting a community or other infrastructure.

Normal Winter Conditions



- River ice conditions normal

Ice Advisory



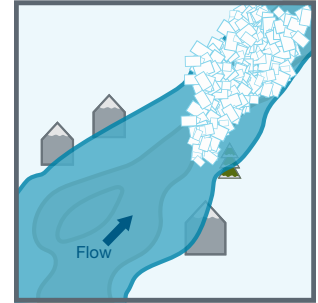
- River ice conditions expected to change
- Typically issued only for built-up areas with a history of river ice problems

Ice Jam Watch



- Conditions favourable for ice jams to form, or
- Ice jam reported, but not affecting infrastructure

Ice Jam Warning



- Reported ice jam affecting communities or infrastructure

If an Ice Jam Warning is issued, be cautious because:

- Any areas near the river may be unsafe because water levels and ice conditions can change suddenly.
- Ice jams can release without warning and affect areas downstream.
- Large ice pieces may be pushed up on to the river banks quickly and without warning.
- The ice cover may change quickly—it might melt, break, or move; large pieces of ice may be flowing in the river.
- River banks may be newly eroded and unstable.

Spring Runoff Advisories may be upgraded to Flood Watches or Warnings, or to Ice Jam Watches or Warnings for specific streams when conditions warrant.

Where can I find out about ice advisories in my area?

For the current ice advisory level in your area visit rivers.alberta.ca or see the AB Rivers mobile app. There you can find information about river advisories, river ice observation reports, maps and photos, and other information related to river conditions in Alberta.

What is a Spring Runoff Advisory?

A Spring Runoff Advisory lets Albertans know that stream levels are rising or are expected to rise across a large portion of the province due to the melting of snow. Spring Runoff Advisories are issued for large areas of the province and are not specific to any one stream or river. They are triggered in the spring when air temperatures rise high enough to cause the plains snowpack to melt, which is typically in late March to April.

If a Spring Runoff Advisory is issued, be cautious as:

- Minor flooding may occur near streams and rivers.
- Roads may be overtopped in low-lying areas where water does not have a direct path to a stream.
- Ice jams or ice runs are possible anywhere ice is still present in a stream.

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.