

Provincial Freshet and Flood Status

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Dashboard

Freshet 5 - 2021

Provincial Lead Contact:

Manager, River Forecast Centre & Flood Safety

George Roman
Water Management Branch,
Ministry of Forests, Lands, Natural Resource
Operations and Rural Development (FLNRORD)
george.roman@gov.bc.ca
250-896-2725

Media Relations contact:

Provincial Information Coordination Officer

Tyler Hooper
Public Affairs Officer
Tyler.Hooper@gov.bc.ca
250-213-8172

Provincial Summary

There are no floods occurring in BC this week. Flows in most of the central Interior have been easing and are expected to continue to recede over the next few days. Typically, peak flood season in most of the interior occurs from mid-May to mid-June, and flooding is still possible this spring. Provincial staff, local governments, First Nations, and other parties continue to monitor changes in weather and flows to support preparedness for potential flood emergencies. The public is advised to stay clear of all fast-flowing rivers and streams and unstable riverbanks during spring high streamflow periods.

Weather (Current and Forecast)

This week and over the next few days, most of B.C. is experiencing weak, nondescript weather patterns with scattered light showers this week and over the next few days. This spring has been drier than average in most areas to date, with the exception of the Upper Fraser watershed and North Coast. A high pressure ridge over southern BC is expected to bring warm temperatures through the weekend, and is forecast to be followed by a transition to wetter weather next week.

Flood Warnings and Advisories

There are no flood warnings or advisories in place today. All previous Advisories issued earlier this spring have ended throughout the interior.

Although no Flood Watches or Flood Warnings are anticipated based on weekly forecasts at this time, the [Current Flood Warnings and Advisories](#) map must be consulted for up to date advisories.

River Conditions and Outlook

Spring freshet season is continuing steadily, with minimal issues experienced in May to date. Flows in most rivers and streams across BC are normal or slightly above normal for mid-May. High stream flows in most of the central Interior have been easing and will likely continue to recede over the next few days. A warm followed by wet weather period this weekend into next is expected to lead to a period of rising river levels next week. The Fraser River at Hope to fluctuate between 5000-7000 m³/s throughout the coming week; this is within season range and well below flood concern levels*

Typically, peak flood season in most of the interior occurs from mid-May to mid-June. Adverse potential flood scenarios over the next 2 months or so include: extreme heat waves causing rapid snowmelt, heavy rainfall, or both. It is not possible to forecast these weather events more than 7-10 days out with any accuracy. The [River Forecast Centre](#) public website is updated daily and should be consulted for up to date information.

*All model outputs are subject to uncertainty, change, and revision. In addition, the level of service of federal and provincial partner agencies at remote snow and river gauges continues to be affected to some extent by operating constraints due to COVID-19, which may further reduce forecast accuracy.

Active Floods of Note

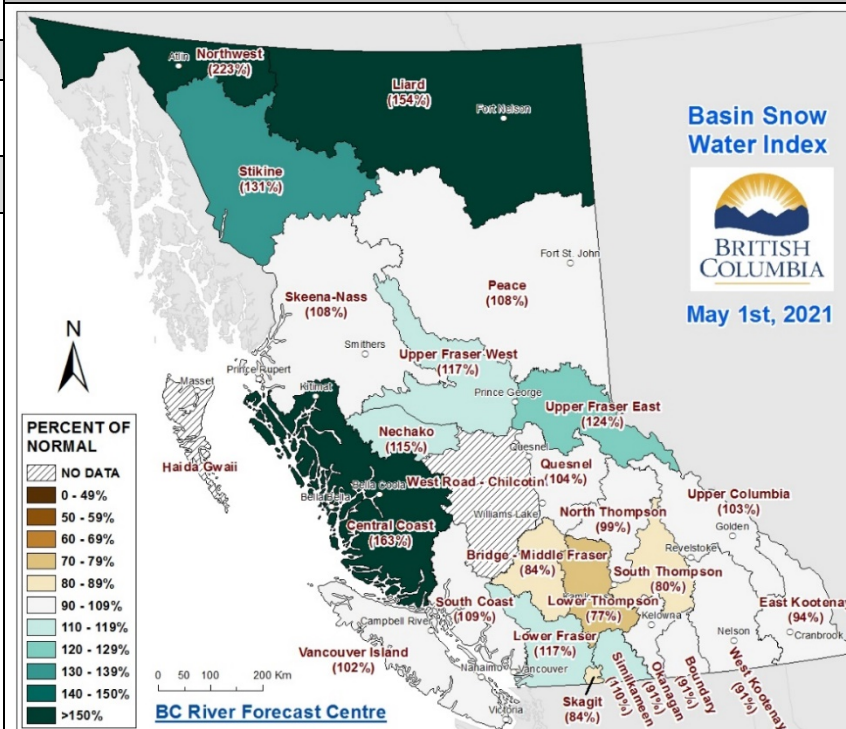
There are no active floods of note.

Resources

Emergency Management BC (EMBC) continues to support communities and First Nations throughout the province with seasonal readiness, preparedness, and response. This includes the coordination of flood-related resources and asset deployments where they are needed most.

FLNRORD staff throughout the province continue to support emergency management efforts through their roles and responsibilities as outlined in the Provincial Flood Emergency Plan.

Snow Conditions



The provincial average snowpack as of May 1st was slightly above normal at 106% of average. Higher than average snowpack persists in the north of the Province, including the Upper Fraser, Stikine, Liard and Northwest, and on the Central Coast.

Snow at most mid-elevations are in advanced stages of melt.

Future snow bulletins for this year are scheduled for release on May 21, June 8, and June 21st. Additional information can be accessed at the [Snow Conditions](#) webpage.

Definitions:

Flood Warnings and Advisories	
High Streamflow Advisory	River levels are rising or expected to rise rapidly, but no major flooding is expected. Minor flooding in low-lying areas is possible.
Flood Watch	River levels are rising and will approach or may exceed bankfull. Flooding of areas adjacent to affected rivers may occur.
Flood Warning	River levels have exceeded bankfull or will exceed bankfull imminently. Flooding of areas adjacent to the rivers affected will result.
Hydrometrics and Forecasting	
Hydrometric Conditions	Current water flow and/or level conditions, based on the federal Water Survey of Canada (WSC) hydrometric gauge station sites indicating flood conditions in BC, based on a total of 247 WSC stations, binned by flood frequency analysis.
Forecast Return Period	Forecast (estimated) future water flow and/or level conditions, based on the BC River Forecast Centre's hydrologic models. The primary spring freshet flood forecasting model is the Channel Links Evolution Efficient Routing (CLEVER) model. For spring 2021, the CLEVER model includes outputs for 311 sites. The return period values represent the inverse measure of the probability of a particular flow occurring in any given year. For example, a 50-year flow has a probability of 1/50 or a 2% chance of occurring in any given year, a 100-year flow has a 1/100=1% chance of occurring in any given year, a 20-year flow has a 1/20 or 5% chance of occurring in any given year, a 5-year flow has a 1/5=20% chance each year, etc.
Flood Frequency Analysis	Statistical analysis of historic peak flows used to understand the frequency or probability of extreme flows.
Snow Basin Index	Estimated average snow water equivalent (e.g. amount of water contained in the snowpack) across a watershed basin relative to its historic average.