

<h1>Provincial Freshet and Flood Status</h1> <p>Date: May 16, 2024: 5pm</p> 	Dashboard # Freshet 2 - 2024	Provincial Lead Contact: Director, River Forecast Centre & Flood Safety Andrew Giles Water Management Branch, Ministry of Water, Land and Resource Stewardship Andrew.Giles@gov.bc.ca	Media Relations contact: Communications Director Sean Leslie Communications Director, Ministry of Water, Land and Resource Stewardship Sean.Leslie@gov.bc.ca
	Provincial Summary Spring freshet has begun around the province, with accelerated snowmelt observed over the past week. A series of troughs over the coming week will bring a period of cooler, unsettled conditions across the province. Moderate rainfall with enhanced thundershowers may contribute to localized high streamflow in the Columbia Mountains on Thursday to Saturday. Stable river conditions are expected Sunday through next week.		

Weather (Current and Forecast)
 A frontal system will push across British Columbia on Thursday and Friday. A series of weak troughing on Friday and Saturday will bring light to moderate showers across the province, with the potential for thundershowers and localized rainfall in eastern regions. Temperatures are expected to be cool, with dropping freezing levels through Saturday, and the potential for snowfall over higher terrain. A general clearing trend for western B.C. will start on Sunday, with continued unsettled weather in eastern regions of the province. Unsettled weather is expected through next week, with the potential for a warming trend later in the week.

Flood Outlook
 Based on high-end of rainfall forecasts, minor flood hazard is possible in tributaries in the Columbia Mountains on Thursday to Saturday. No High Streamflow Advisories, Flood Watches or Flood Warnings are in effect.
 Warnings and advisories may change at any time. For up-to-date information, please consult the [Current Flood Warnings and Advisories](#) map.

River Conditions and Outlook
 Streamflow has increased over the past week due to accelerated snowmelt from mountainous regions of the province. Normal to above-normal seasonal flows are now present in mountain-fed watersheds in the Coast Mountains, Columbia Mountains, Rocky Mountains and Interior Ranges. Streamflow in plateau areas through the central interior and in the north-east remain well below normal as watersheds are now generally snow-free.
 Rises in river levels are expected into the weekend, with some potential for higher flows in areas of eastern B.C. from rain and thundershowers and on-going snowmelt runoff.
 The peak of seasonal snowmelt runoff (i.e. freshet season) is anticipated over the coming 1-3 weeks across most of the province.
 The [River Forecast Centre](#) public website is updated daily and should be consulted by those seeking up-to-date information.
 *All model outputs are subject to uncertainty, change, and revision.

Active Floods of Note
 There are currently no floods of note.

Resources
 The Ministry of Emergency Management and Climate Readiness (EMCR) continues to support First Nations and communities 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. The public is encouraged to understand their seasonal flood hazards, and EMCR provides information on [how to be prepared](#).
 Ministry of Water, Land and Resource Stewardship staff throughout the province continue to support emergency management efforts through their roles and responsibilities as outlined in the Provincial Flood Emergency Plan. See [DriveBC](#) for current information on road and highway conditions and closures.
 Additional emergency information is available through [EmergencyInfoBC](#).

Snow Conditions

As of May 1st, the provincial snowpack was well below normal, with a provincial average of 66% of normal. Near-normal to above normal snowpack is present in the north (Stikine, Northwest and Liard basins), and below normal in the rest of the province. The overall Fraser River basin is at 66% of normal.
 Preliminary analysis of May 15th snowpack is indicating accelerated snowmelt. One-third of this season's snowpack has melted, which is twice the normal rate of seasonal snowmelt.
 The *May 15th Snow and Water Supply Bulletin* is scheduled to be released on Thursday, May 23rd.
 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 2023, the CLEVER model includes outputs for 348 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.