



RioTinto

Nechako Reservoir / River / Freshet Information Sharing – Community Leaders

02 February 2022

Prepared by Andrew Czornohalan and Alec
Mercier

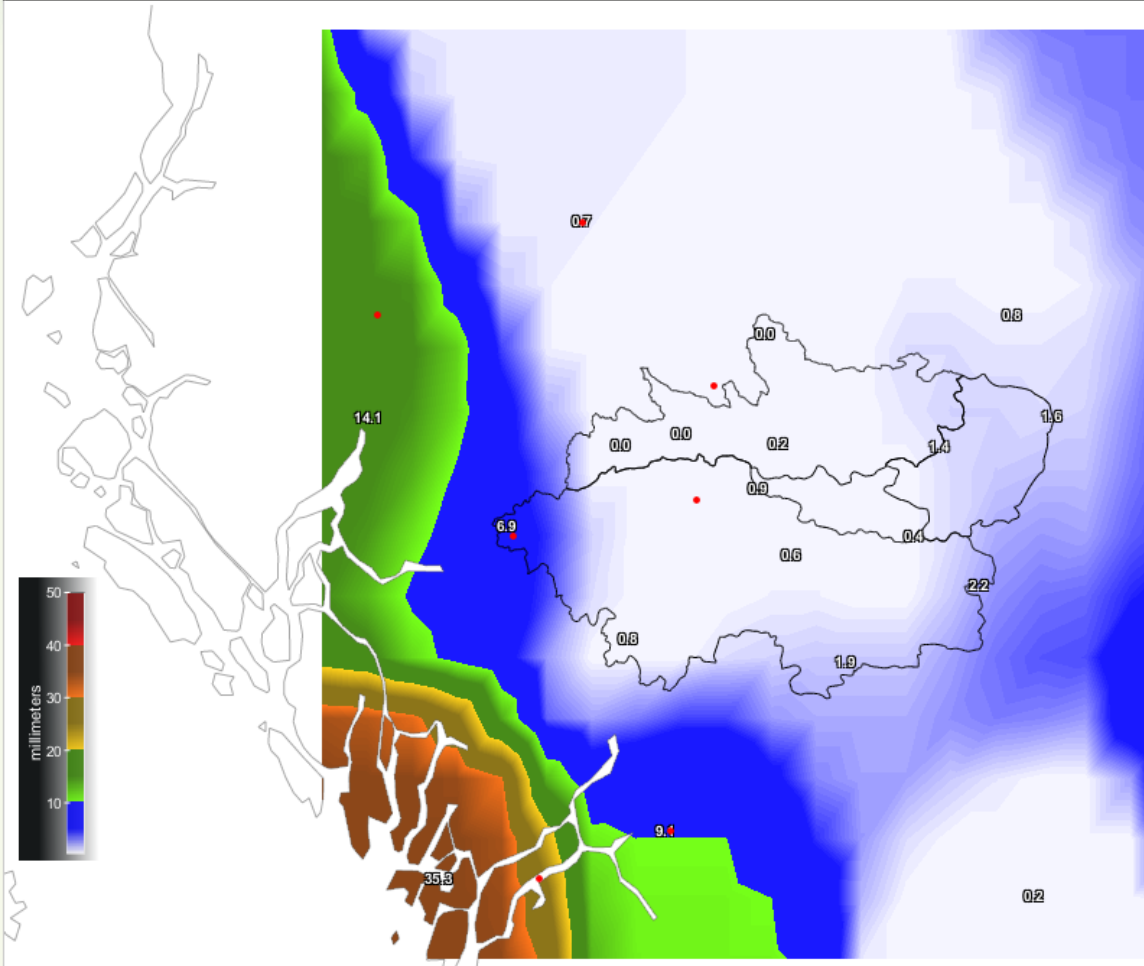
Key Focus

1. Current Watershed Data:
Precipitation and
elevation
2. Winter Operation &
Forward look to Spring

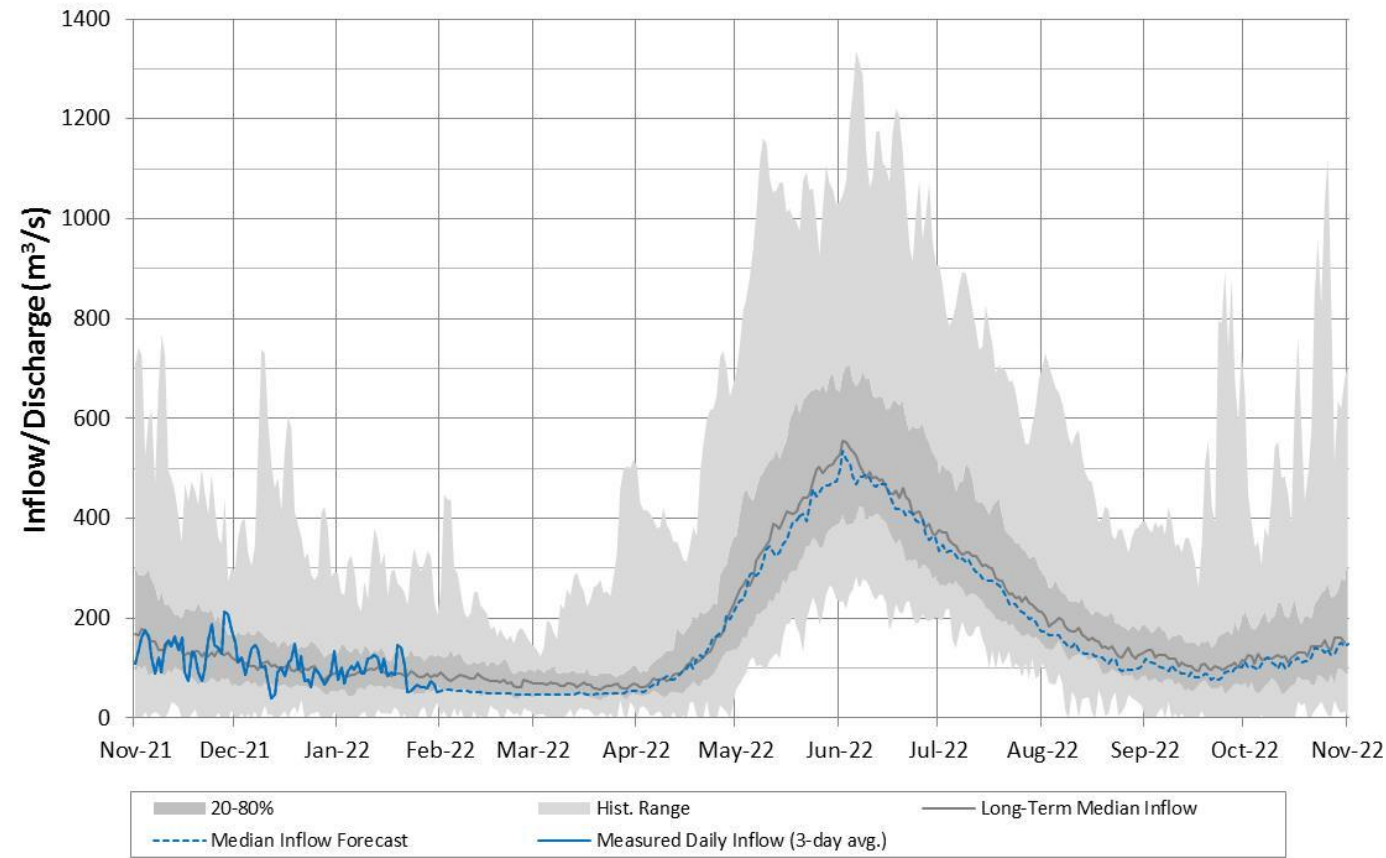


Observed Precipitation, Inflows vs Historical

7-day cumulative rainfall

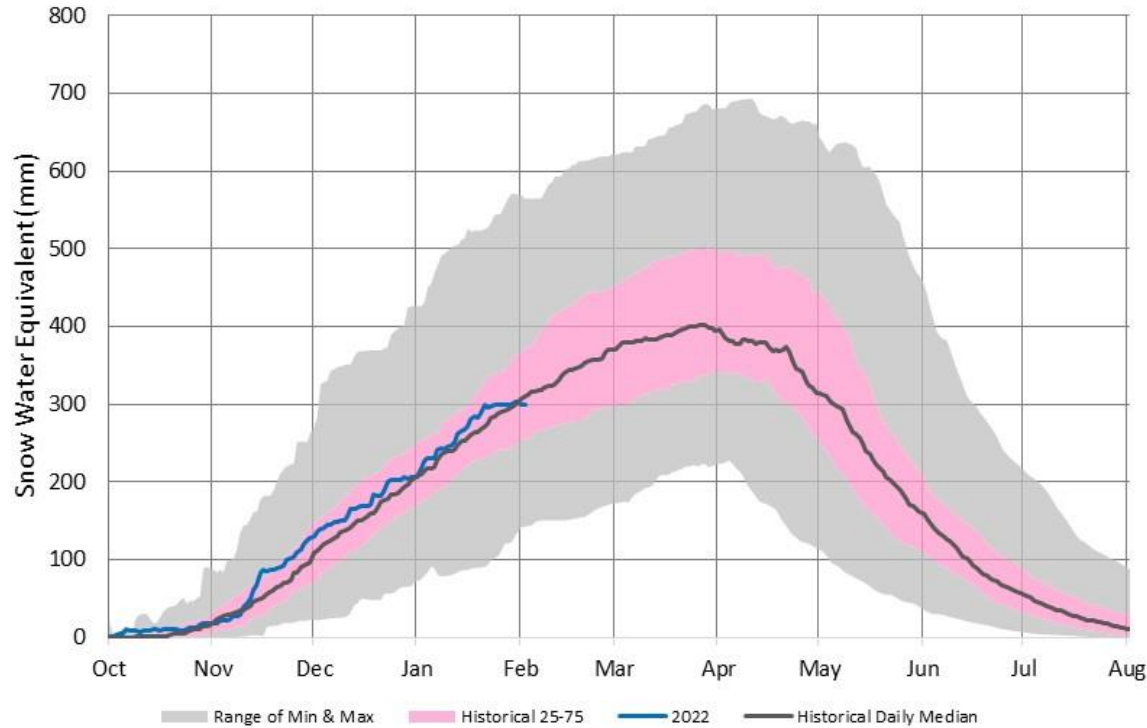


Nechako Reservoir Operation
Observed Inflow and Discharge 2021-2022



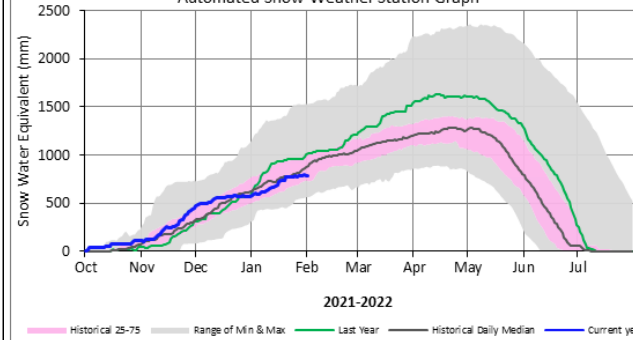
Current Snowpack

Nechako Reservoir Snowpack



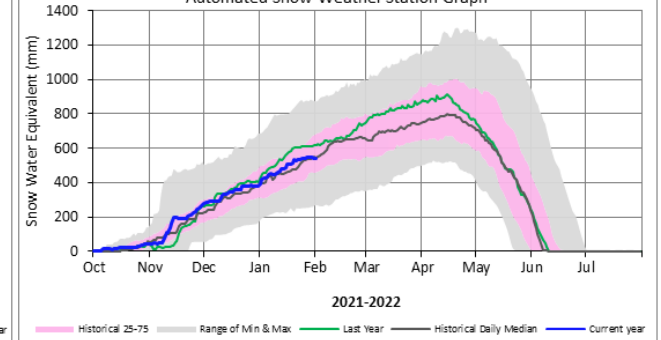
Tahtsa Lake

Automated Snow Weather Station Graph



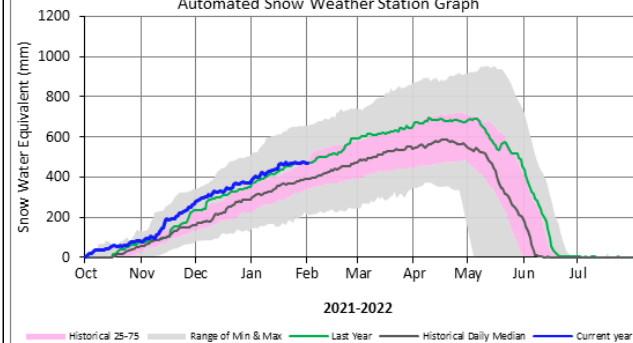
Mount Pondosy

Automated Snow Weather Station Graph



Mount Wells

Automated Snow Weather Station Graph

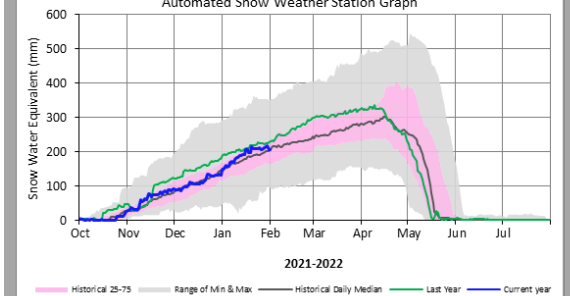


Station	Current Value (mm)	LTA* (mm)	%LTA*	Percentile Rank*
Tahtsa Lake	784	909	86%	28%
Mount Pondosy	537	573	94%	48%
Mount Wells	467	406	115%	72%

* (1992-2021)

Lu Lake

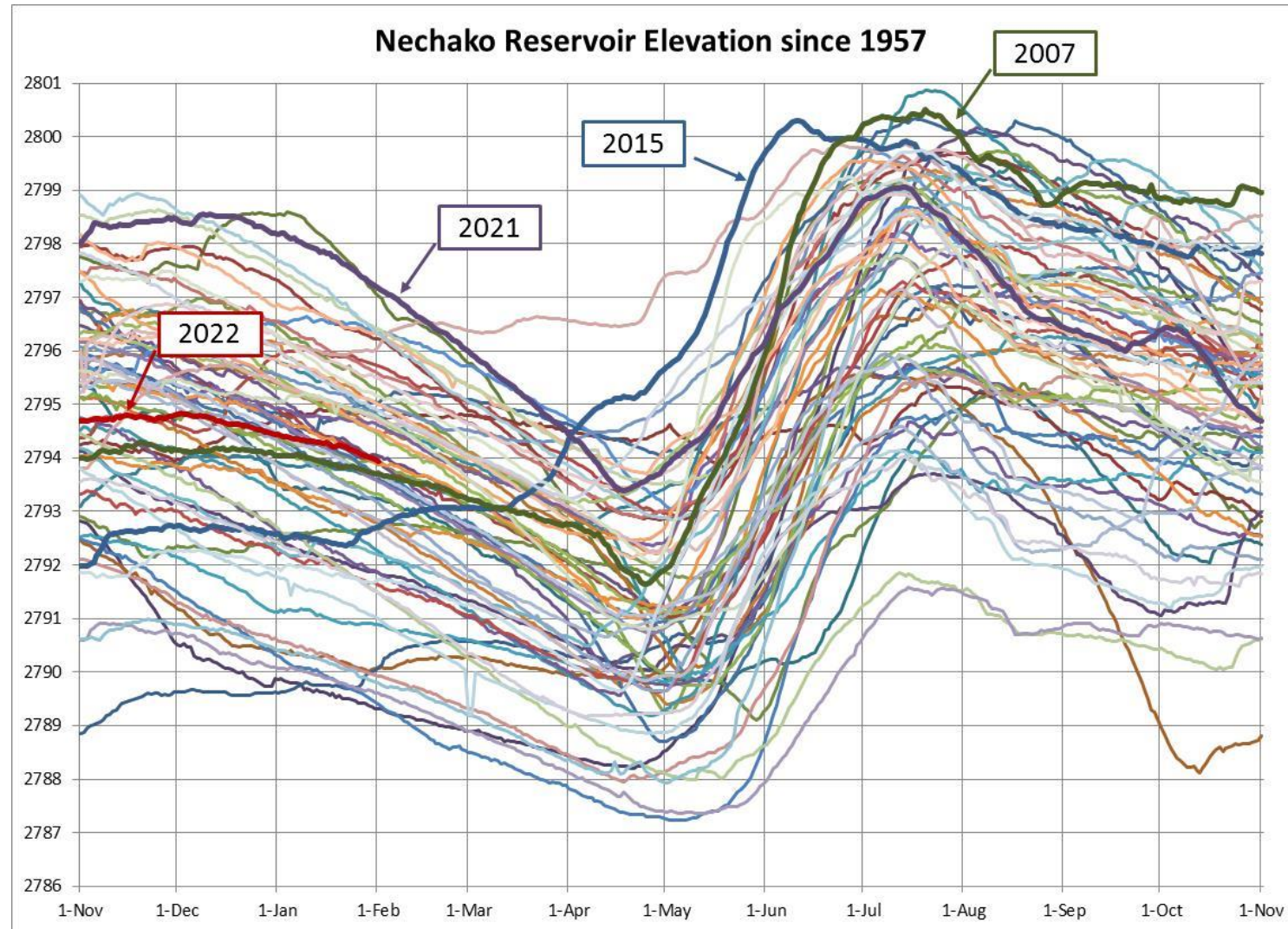
Automated Snow Weather Station Graph



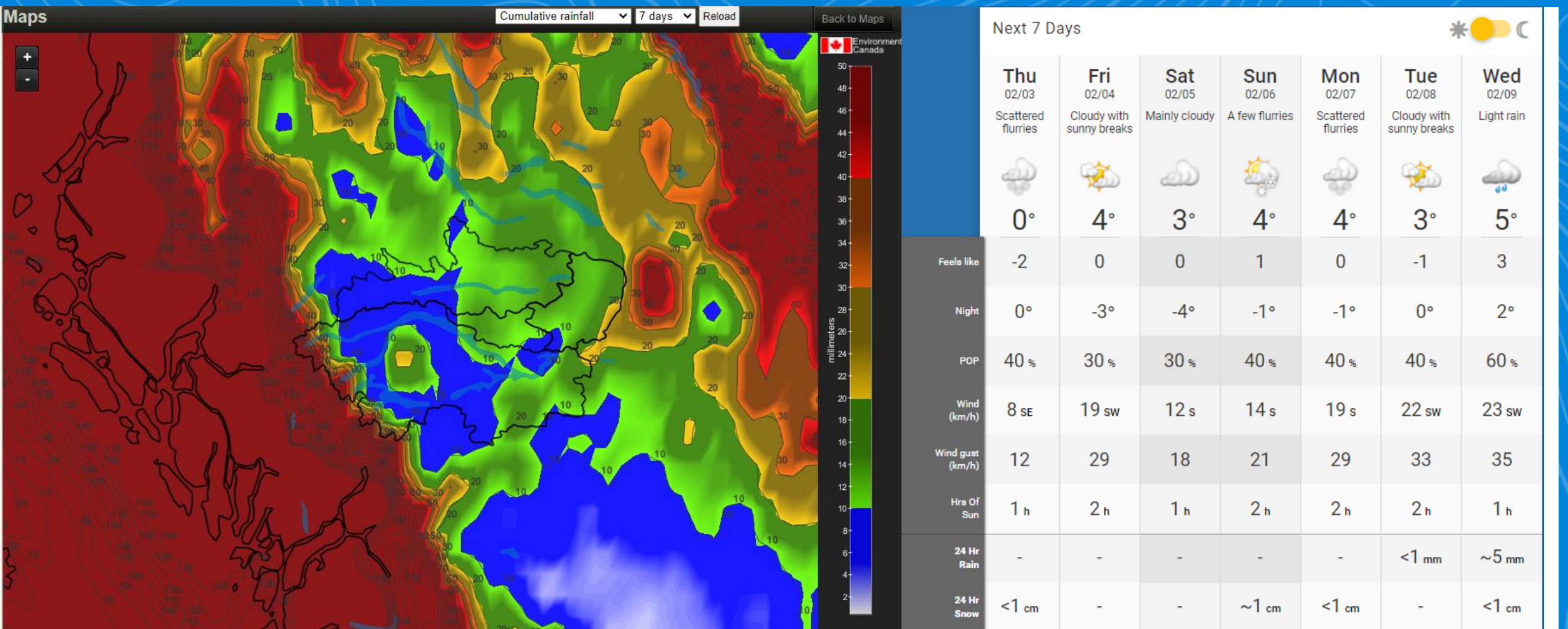
Station	Current Value	%LTA*
Lu Lake	205	100%

* (1997-2021)

Historical Reservoir Elevation

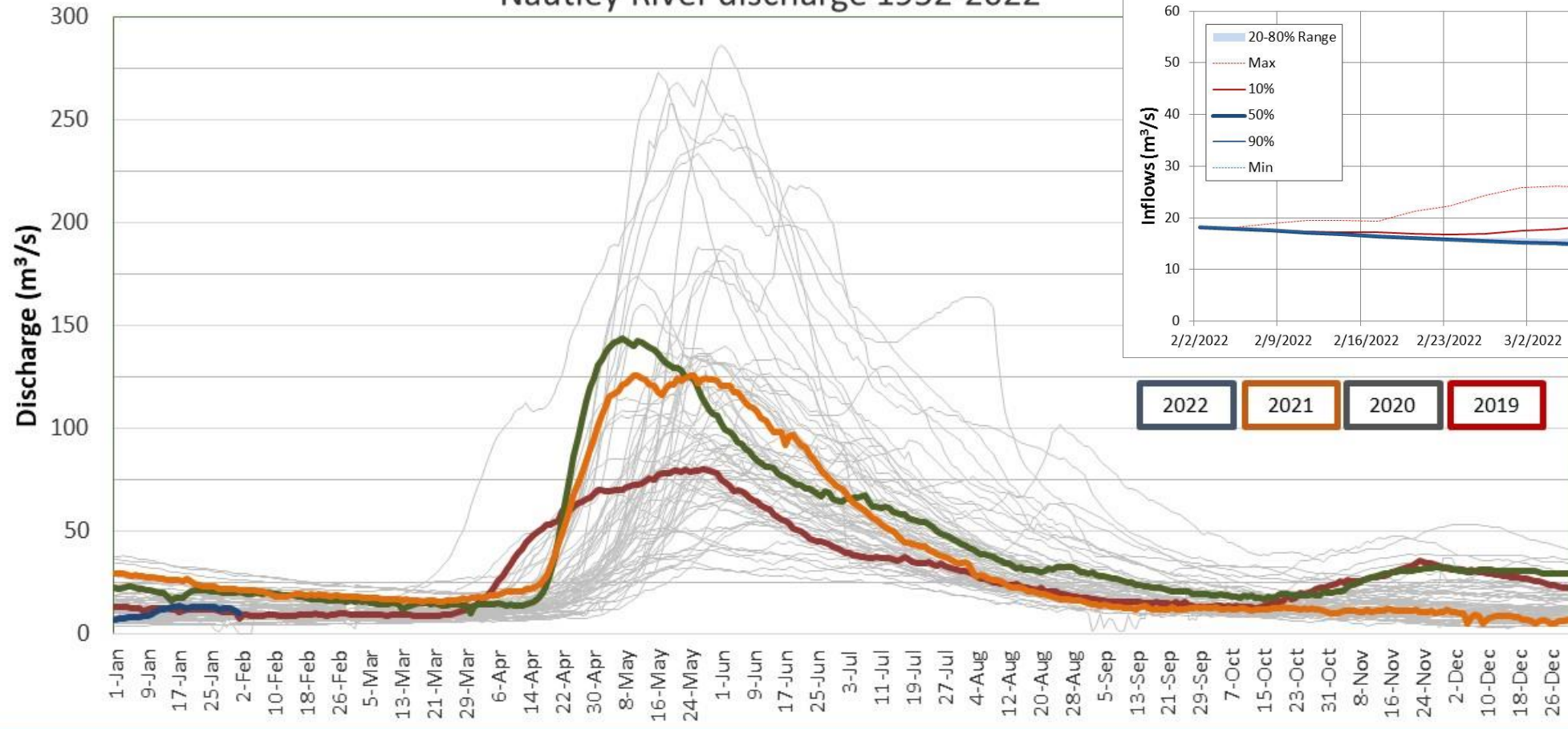


7 Day Weather Forecast



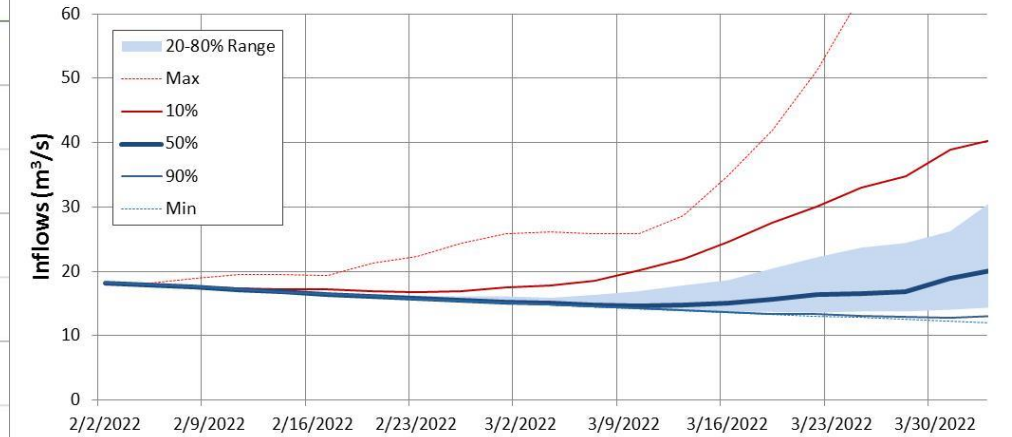
Nautley River Flows, Forecast

Nautley River discharge 1952-2022



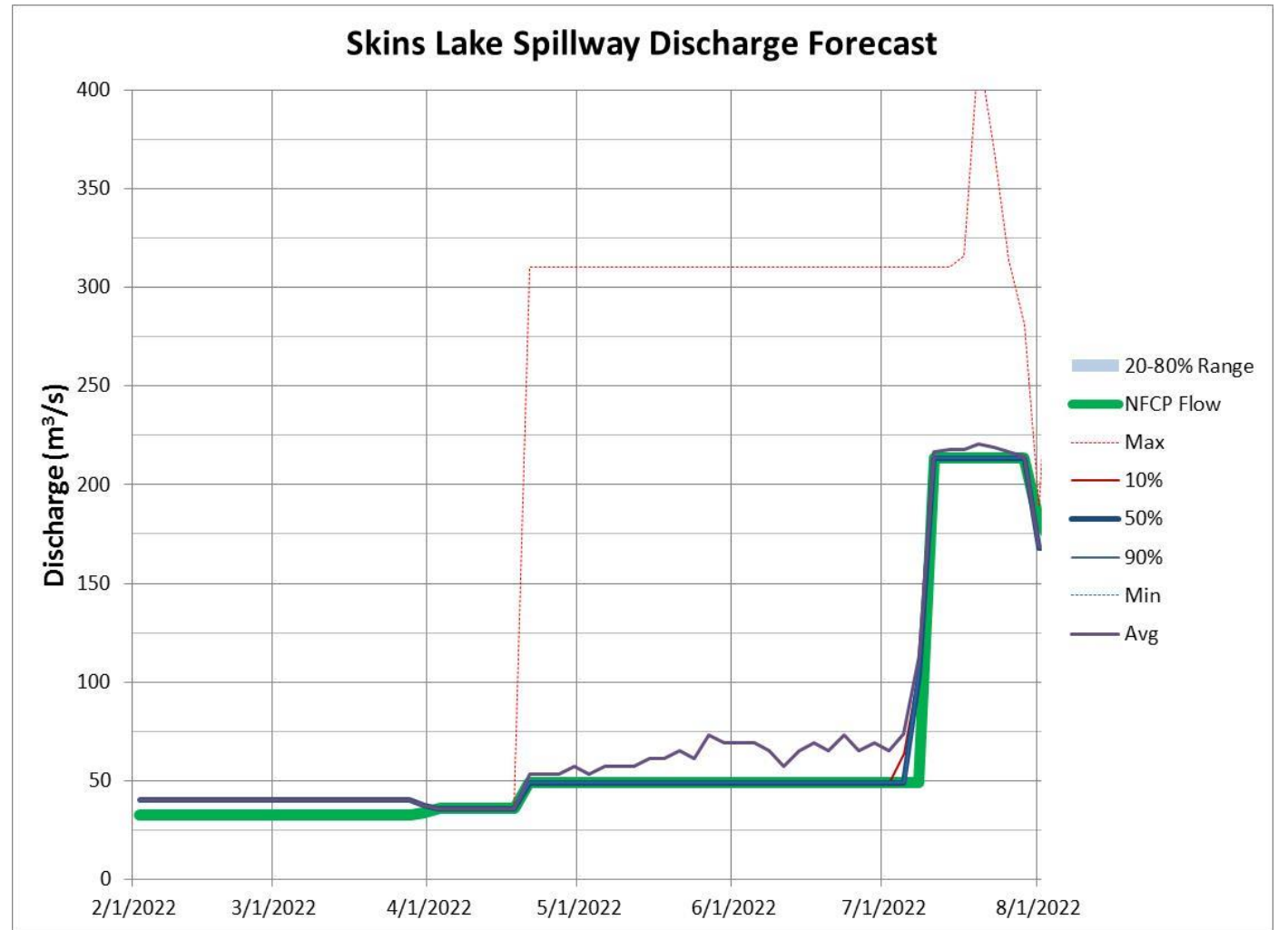
Expected Natural Inflow on Nautley/Nechako Rivers at Vanderhoof

(excludes discharge from Nechako Reservoir)

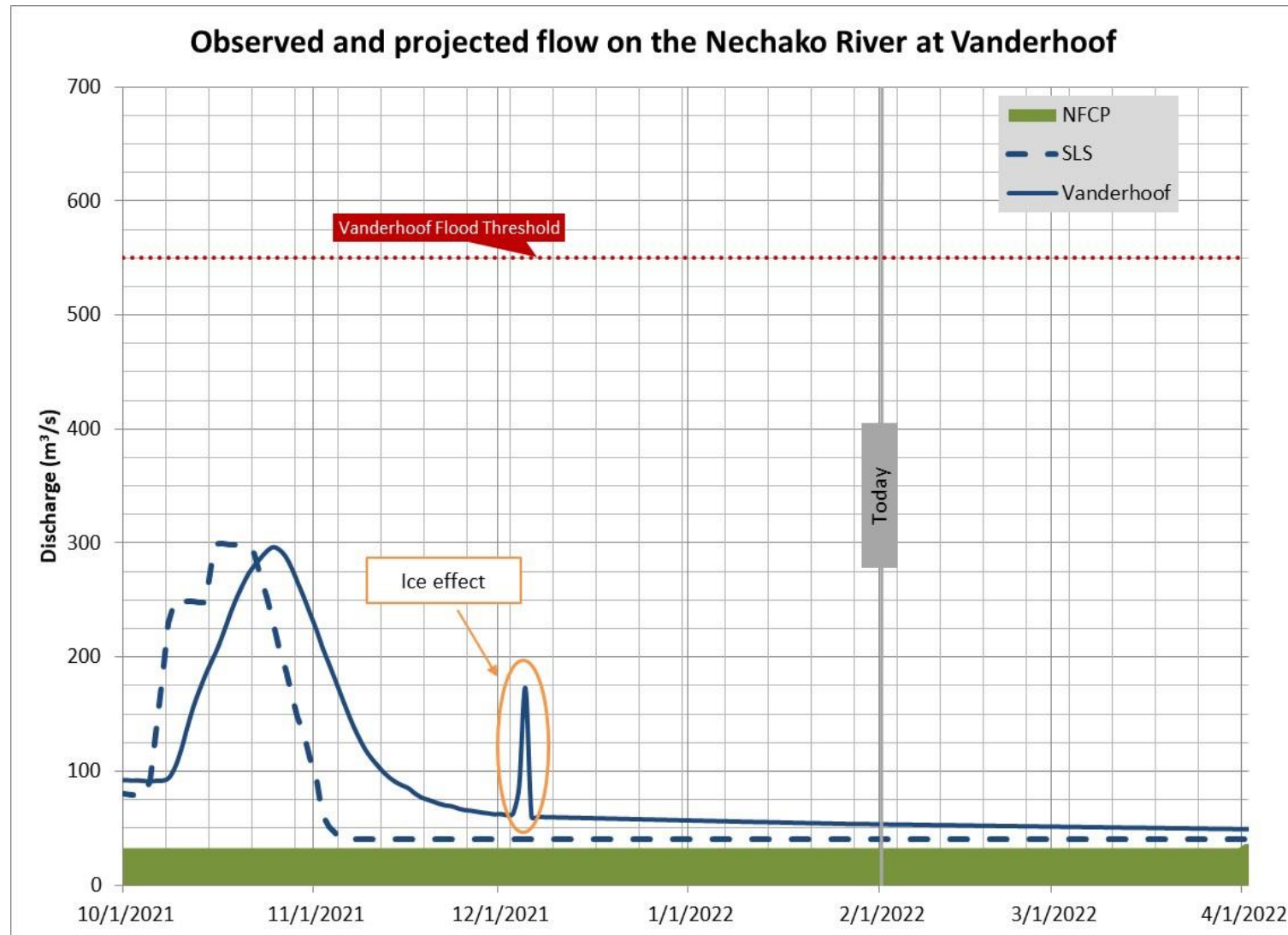


Spillway Management – Looking to Winter and Spring

- SLS discharge currently 40 m³/s, and is most likely to be maintained at 40 m³/s throughout winter;
- Working through the Smelter load and re-start scenarios
- Ice Jam risk and winter flow protocols - collecting data as per NHC recommendation
- Spring Freshet flood risk; Murray Cheslatta System and Vanderhoof

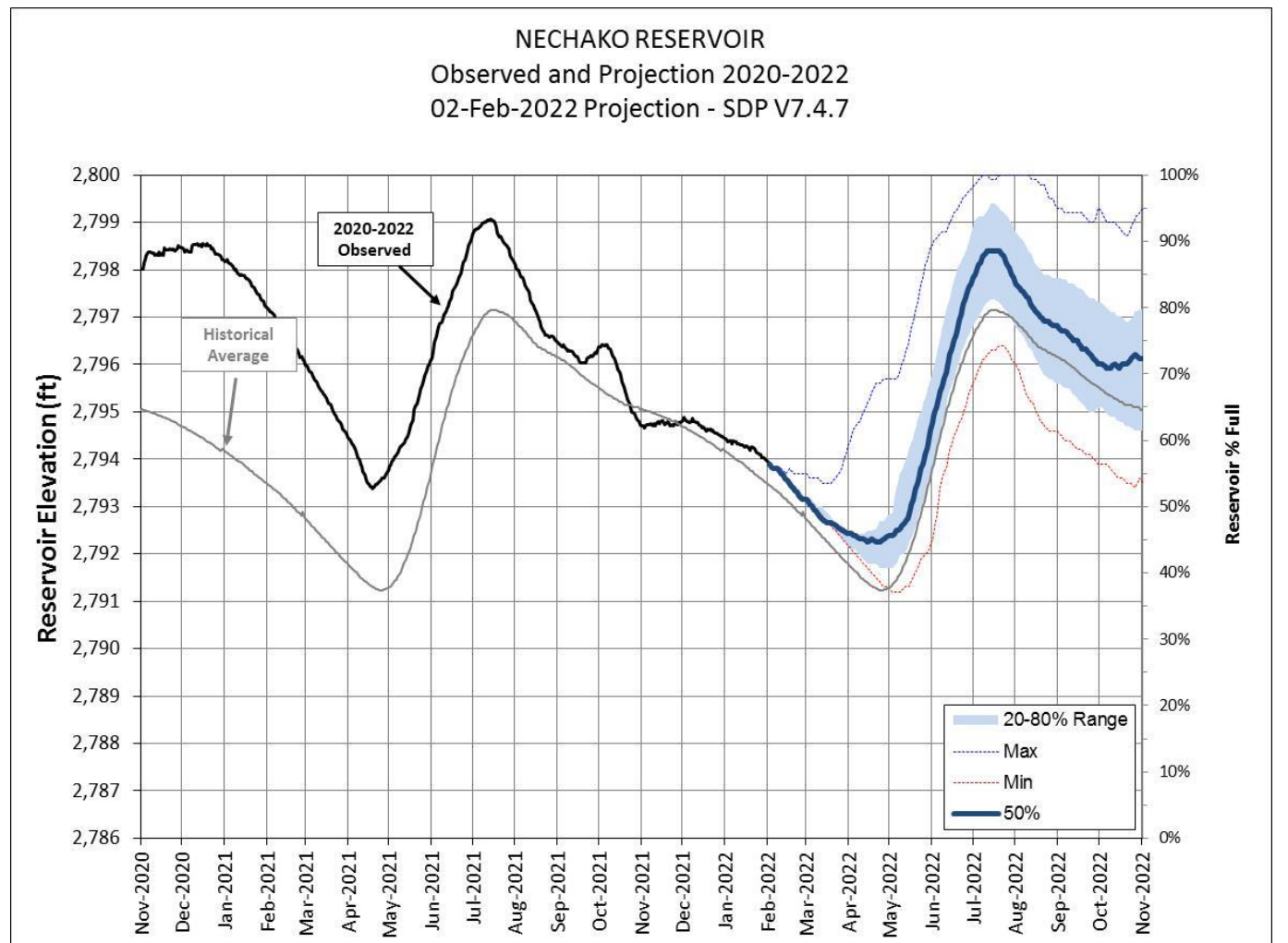


Forecast – Vanderhoof Flows



Reservoir Level Projection

- Inflow projections are used to estimate reservoir levels over time considering current hydrology and historically observed additional snow and rain.



Next Steps – Actions

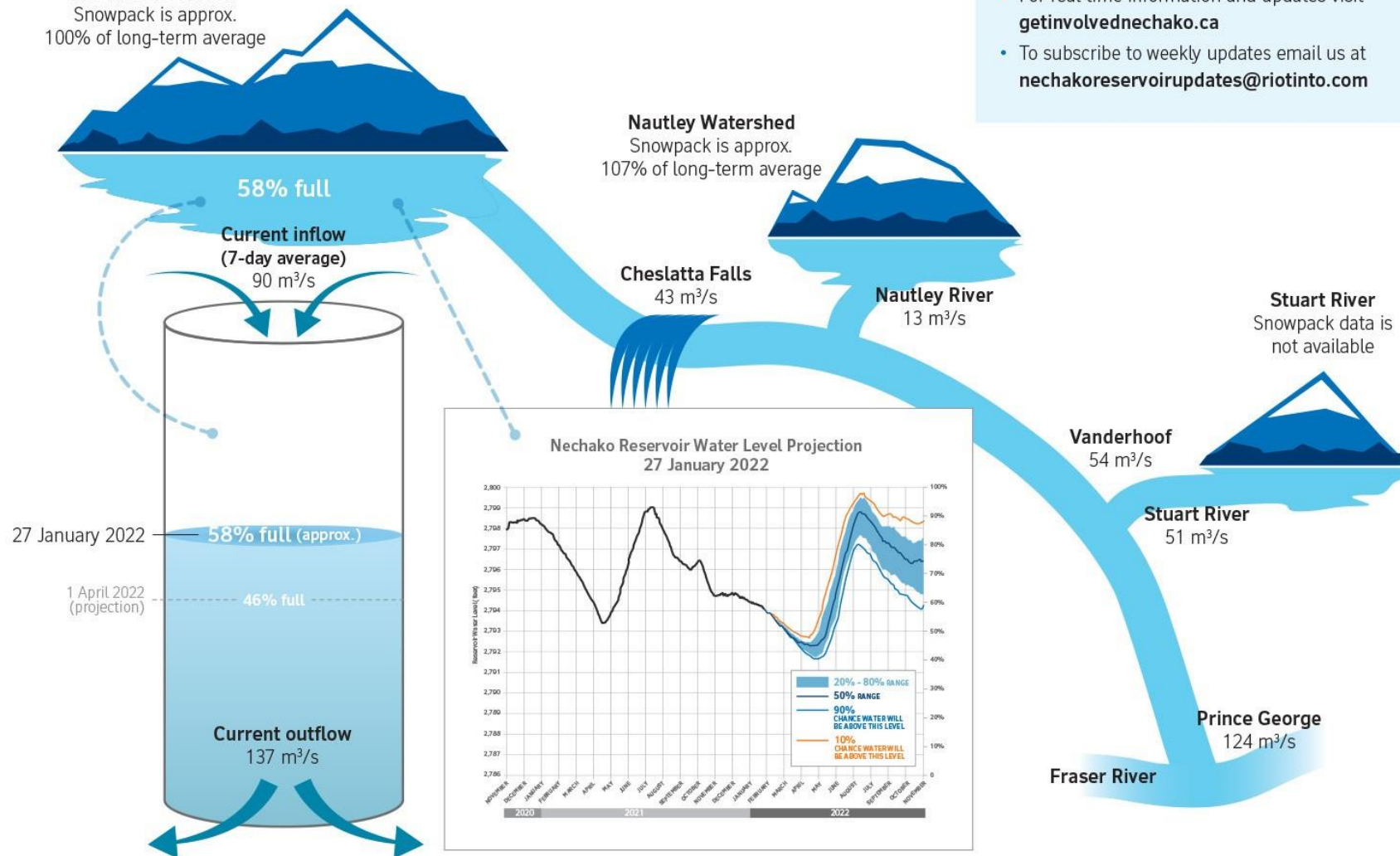


1. Model update and communications.
2. Ice Surveys Ongoing
3. Confirm next meeting date – **16 February**

Presentations are available on the Get Involved Nechako website under 'Our Operations'. Recordings can be requested up to 30 days following the meeting.

Current Conditions - 27 January 2022

Nechako Reservoir
Snowpack is approx.
100% of long-term average



Nechako Reservoir operations update

- Skins Lake Spillway discharge is likely to be maintained at approximately 40 m³/sec for the duration of the winter in accordance to the Nechako Fisheries Conservation Program guidelines.
- For real time information and updates visit getinvolvednechako.ca
- To subscribe to weekly updates email us at nechakoreservoirupdates@riotinto.com

Feedback & Reflections

