



RioTinto

Nechako Reservoir / River / Freshet Information Sharing – Community Leaders

12 January 2022

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Mercier

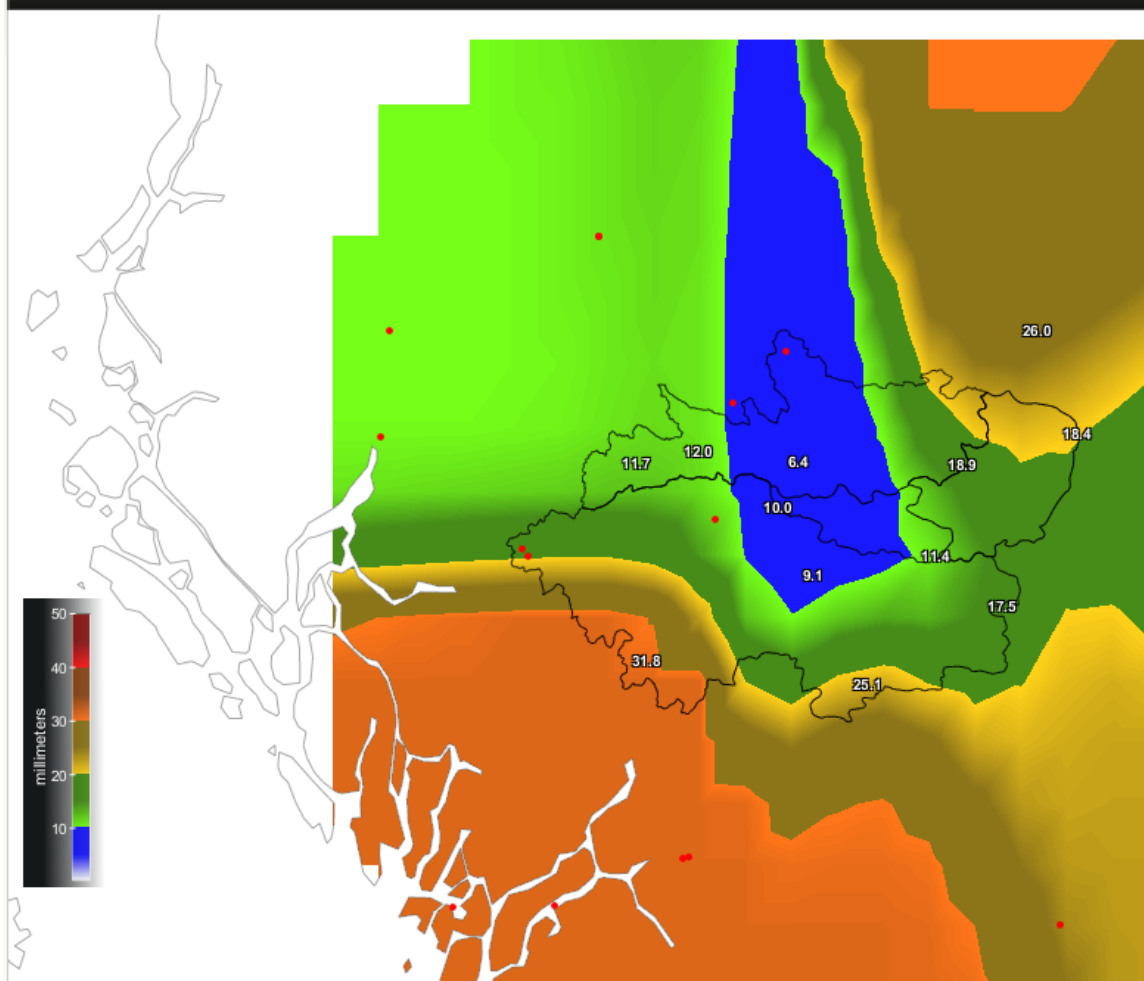
Key Focus

1. Current Watershed Data:
Precipitation and
elevation
2. Fall spill and winter
consideration

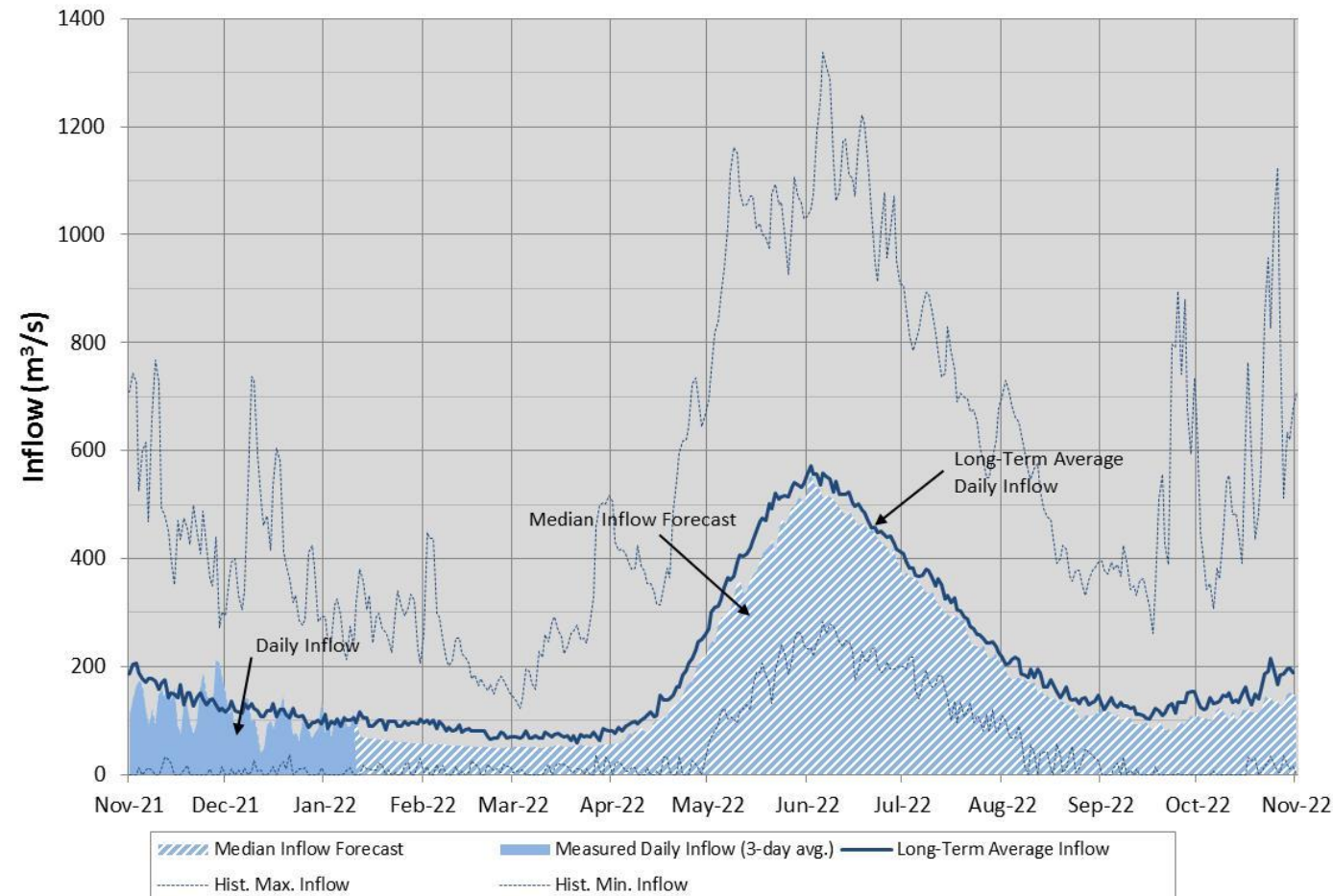


Observed Precipitation, Inflows vs Historical

7-day cumulative rainfall

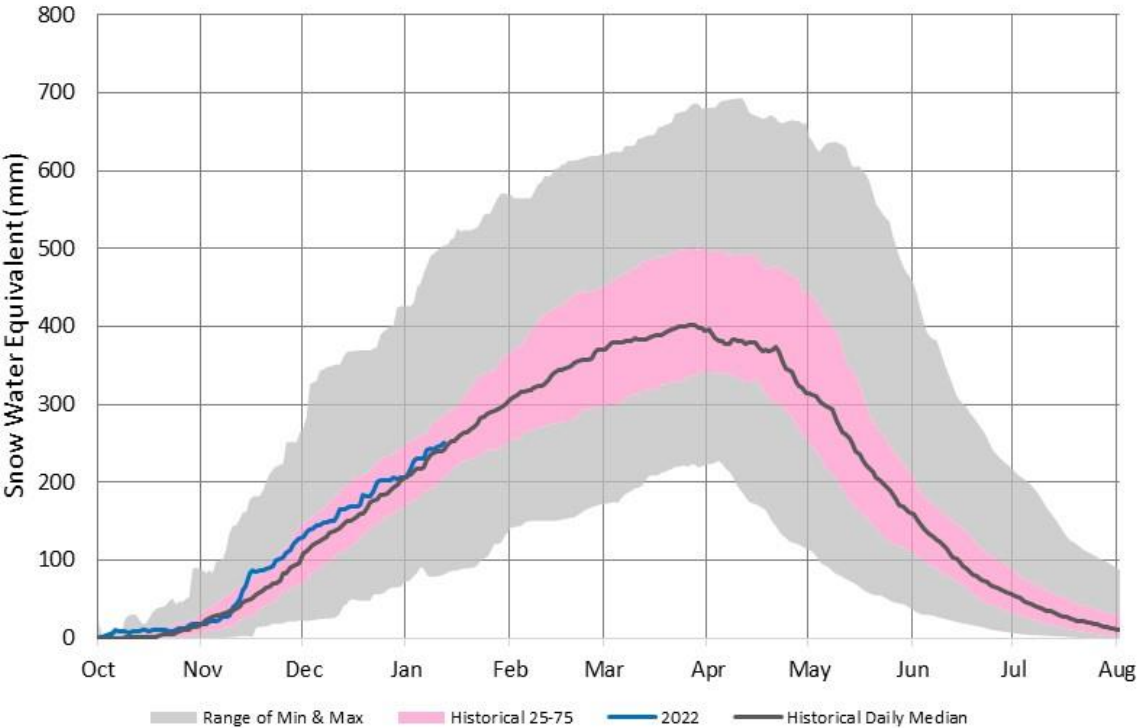


Nechako Reservoir Inflow, Observed and Forecast



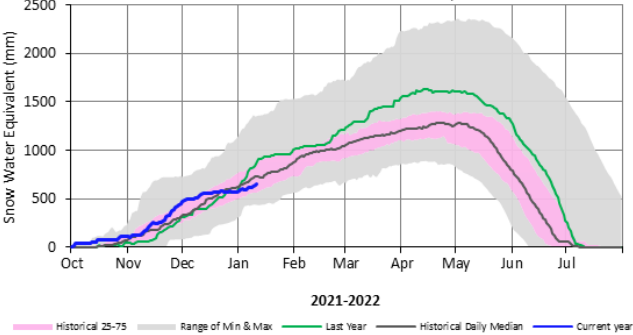
Current Snowpack

Nechako Reservoir Snowpack



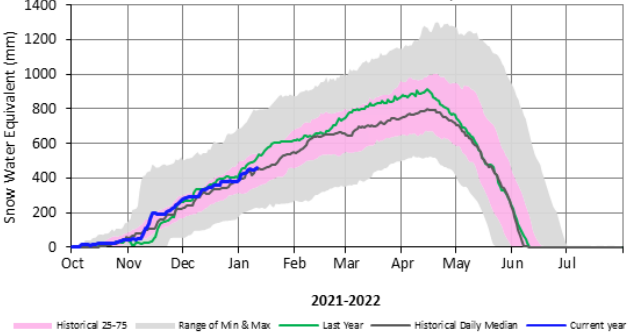
Tahtsa Lake

Automated Snow Weather Station Graph



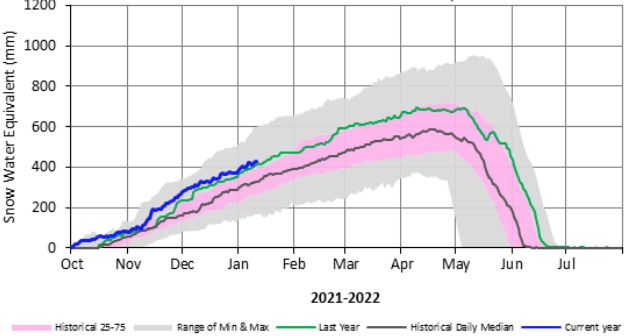
Mount Pondosy

Automated Snow Weather Station Graph



Mount Wells

Automated Snow Weather Station Graph

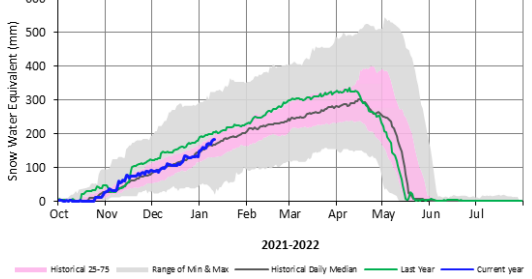


Station	Current Value (mm)	LTA* (mm)	%LTA*	Percentile Rank*
Tahtsa Lake	651	740	88%	34%
Mount Pondosy	457	462	99%	51%
Mount Wells	429	346	124%	79%

*(1992-2021)

Lu Lake

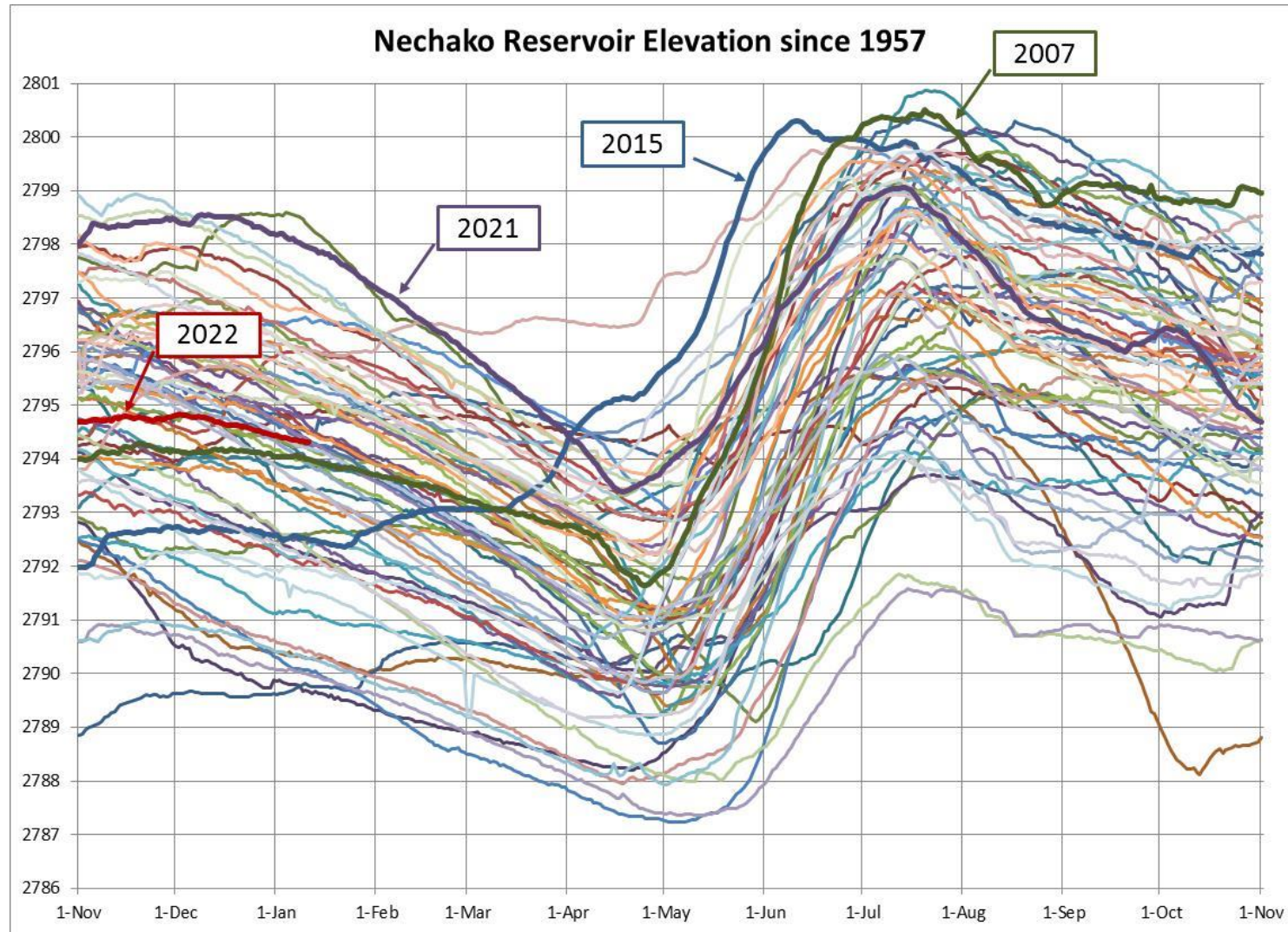
Automated Snow Weather Station Graph



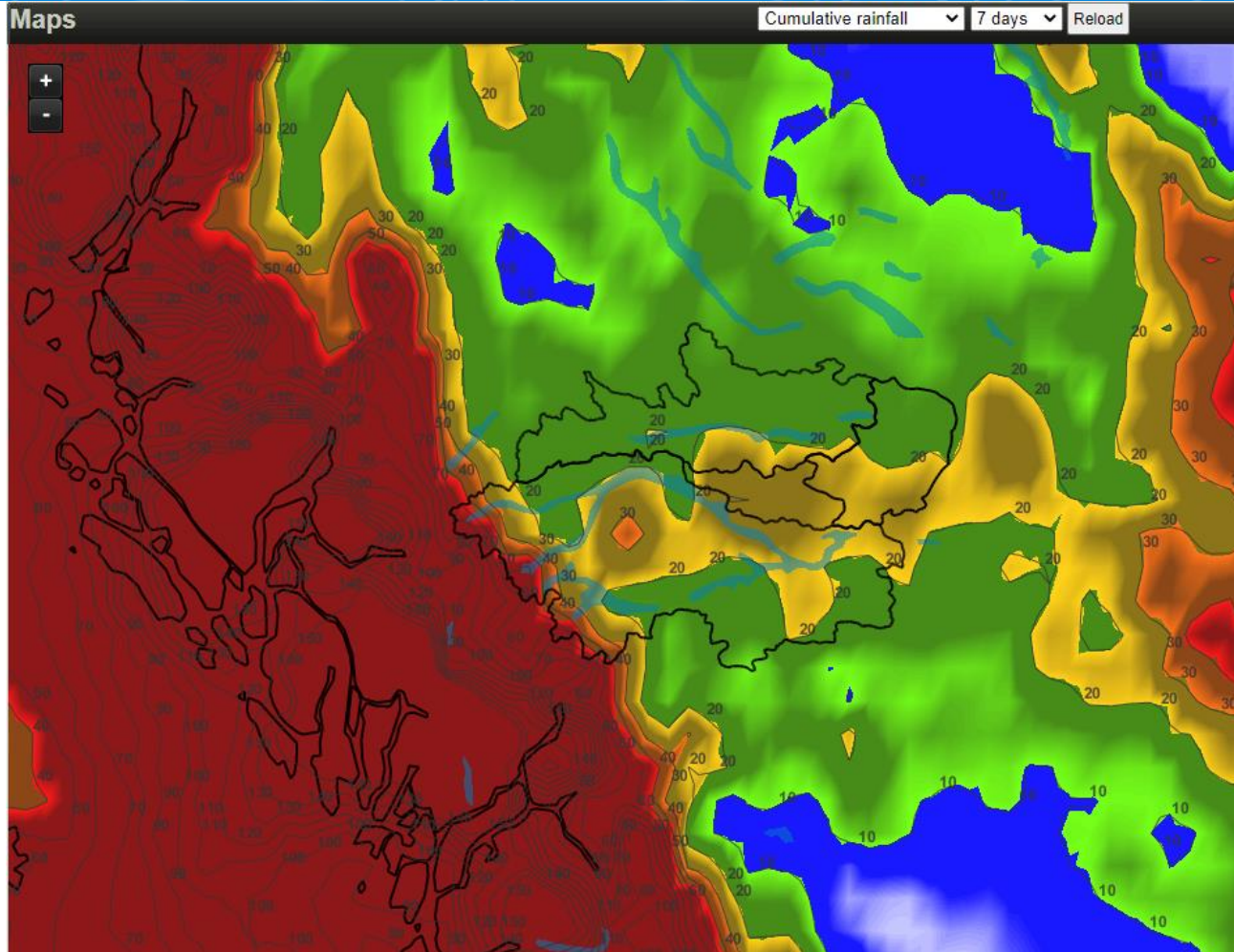
Station	Current Value	%LTA*
Lu Lake	183	110%

*(1997-2021)

Historical Reservoir Elevation



7 Day Weather Forecast

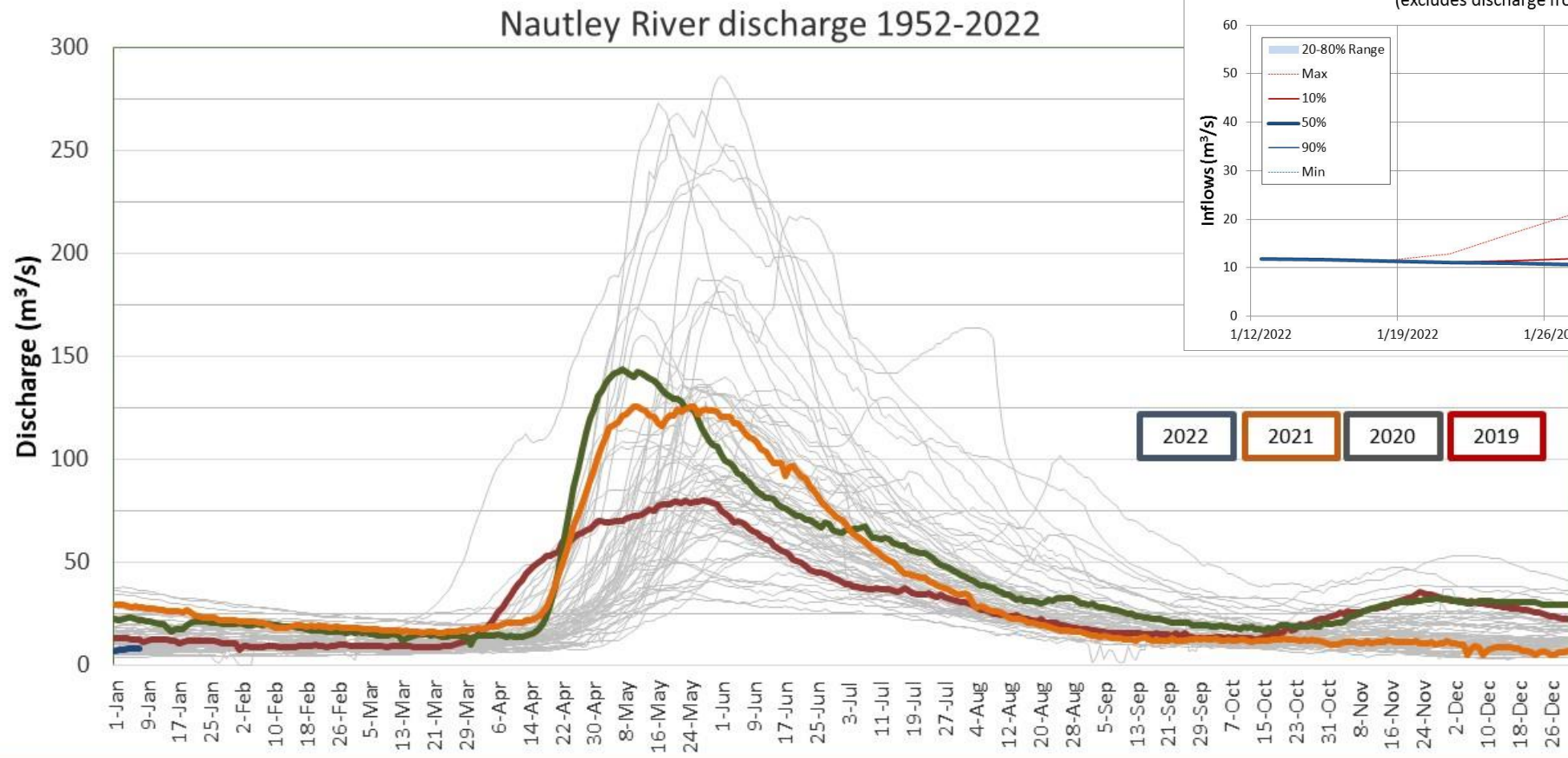


Next 7 Days

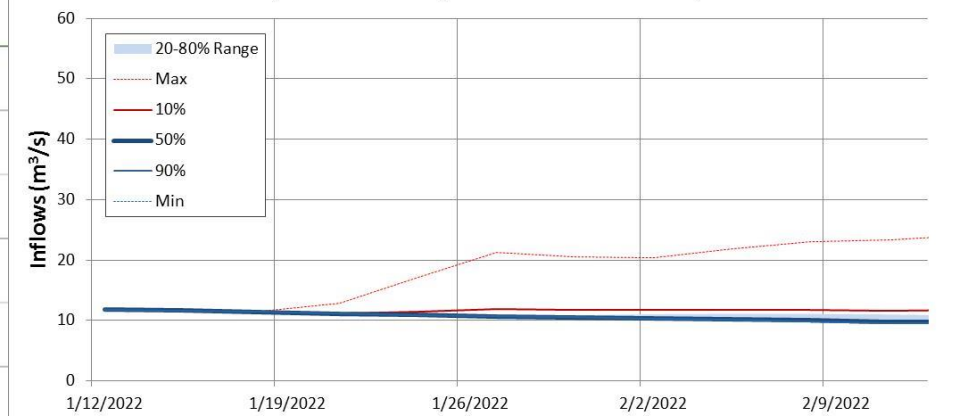


	Thu 01/13	Fri 01/14	Sat 01/15	Sun 01/16	Mon 01/17	Tue 01/18	Wed 01/19
	Cloudy with sunny breaks	Mixed precipitation	A mix of sun and clouds	Snow	Cloudy with sunny breaks	Mainly cloudy	Mainly cloudy
	-1°	2°	3°	0°	2°	-2°	-3°
Feels like	-2	-1	0	-2	2	-3	-4
Night	-2°	-4°	-2°	-1°	-4°	-7°	-5°
POP	30 %	40 %	30 %	80 %	30 %	30 %	30 %
Wind (km/h)	6 SE	14 SE	12 SW	7 SE	4 s	3 SE	6 SW
Wind gust (km/h)	9	21	18	11	6	5	9
Hrs Of Sun	1 h	1 h	2 h	0 h	1 h	1 h	1 h
24 Hr Rain	-	<1 mm	-	-	-	-	-
24 Hr Snow	-	<1 cm	~1 cm	~5 cm	-	-	-

Nautley River Flows, Forecast

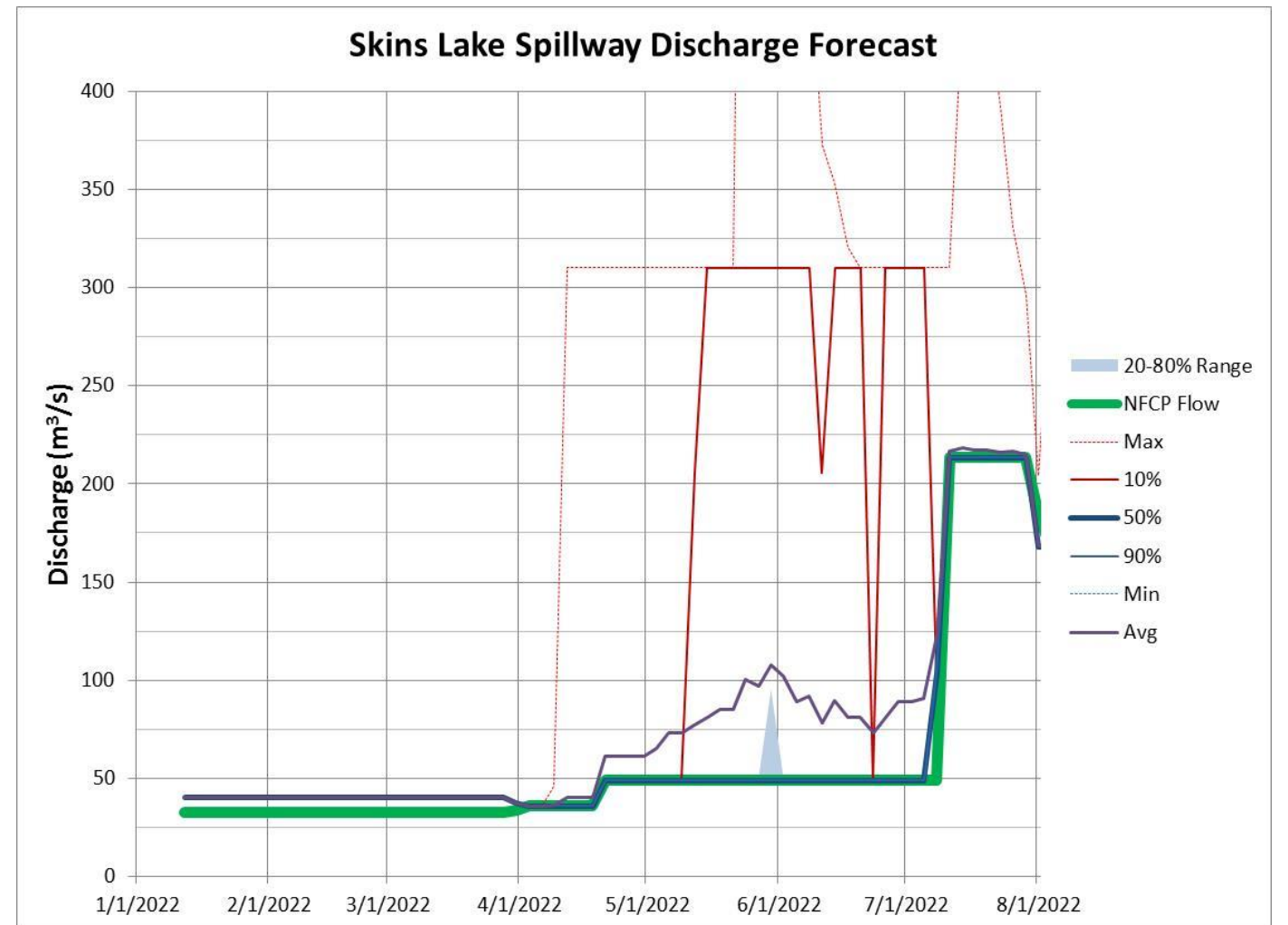


Expected Natural Inflow on Nautley/Nechako Rivers at
Vanderhoof
(excludes discharge from Nechako Reservoir)

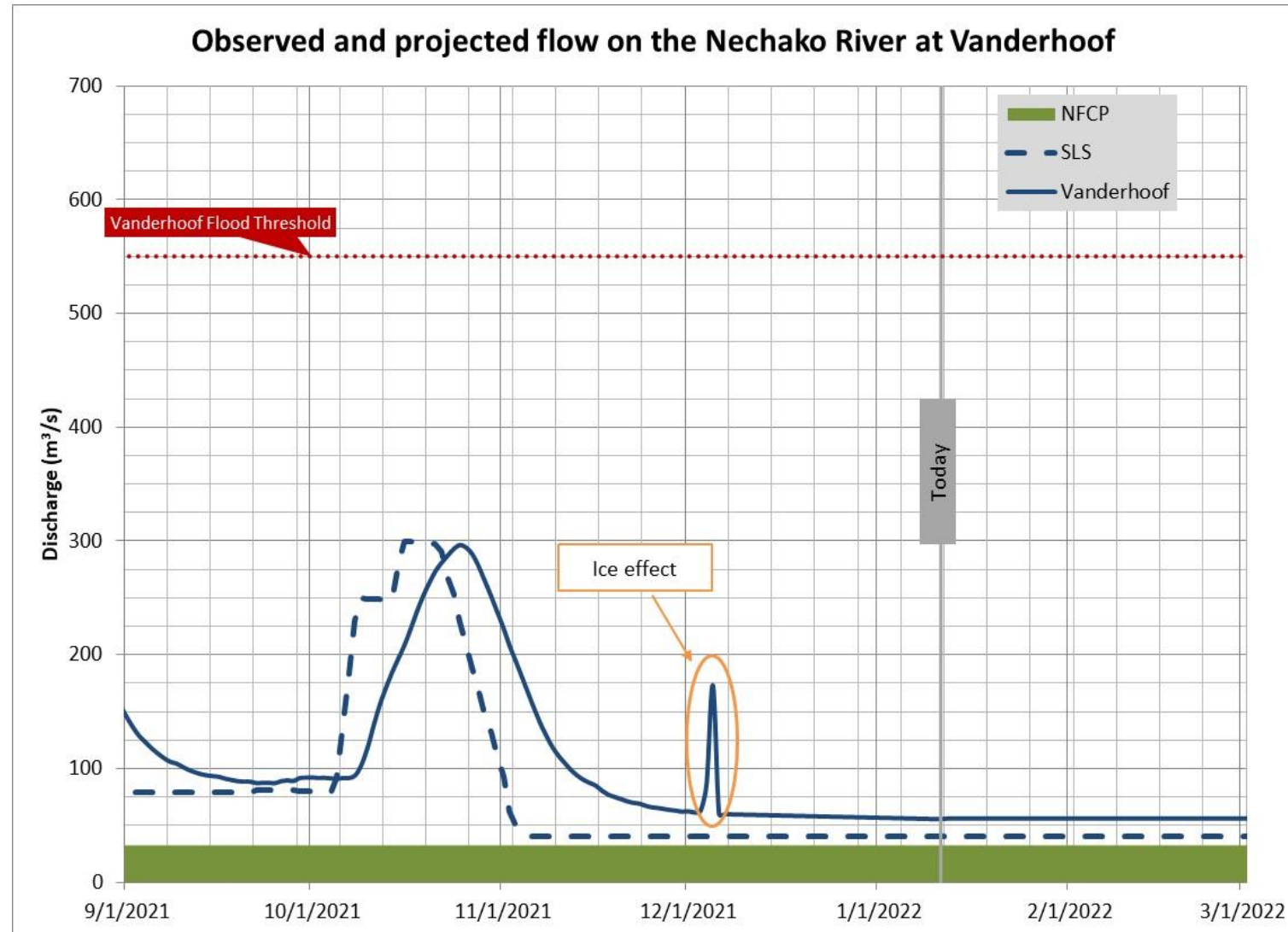


Spillway Management – Looking to Winter and Spring

- 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

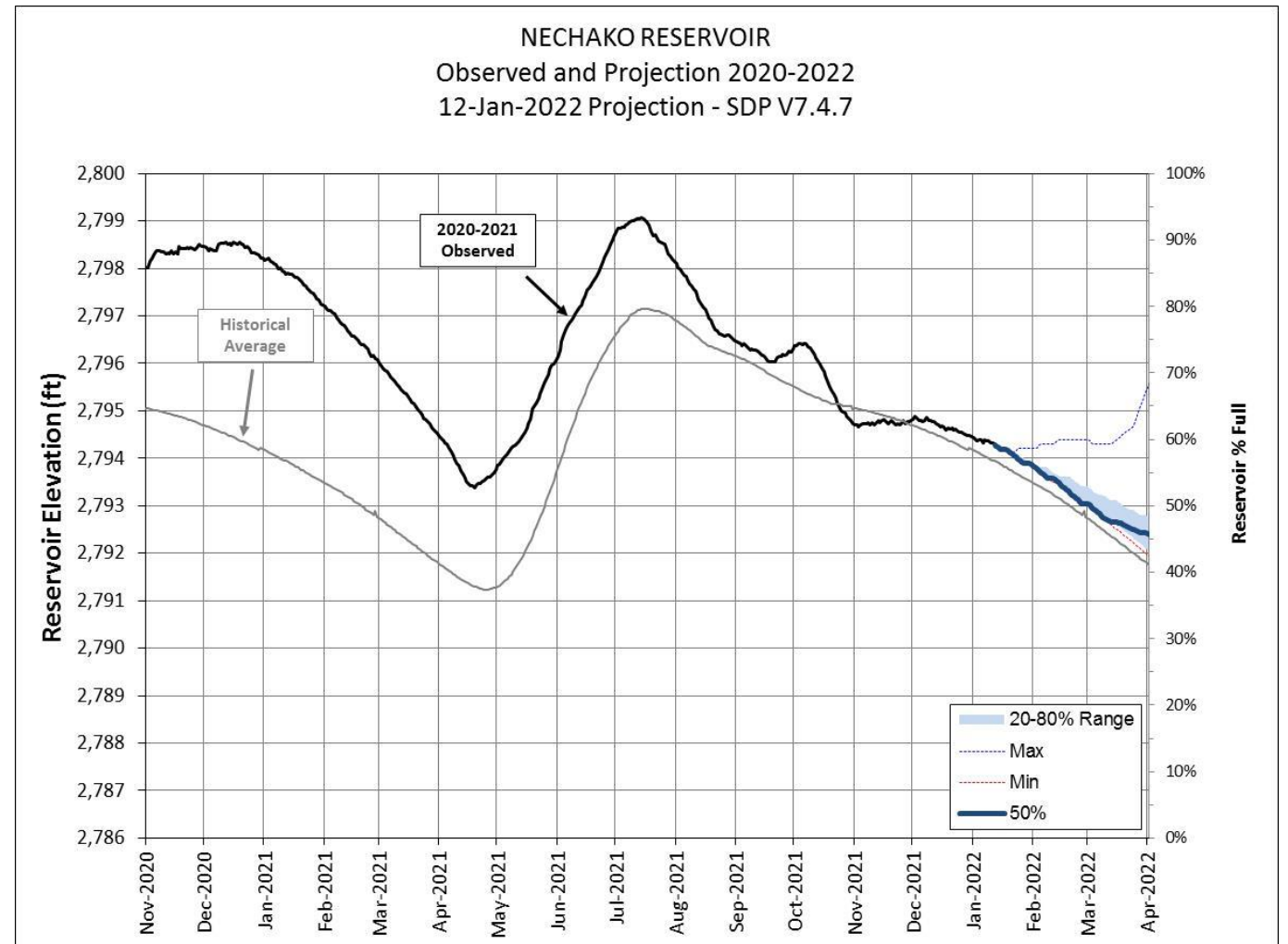


Forecast – Vanderhoof Flows



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

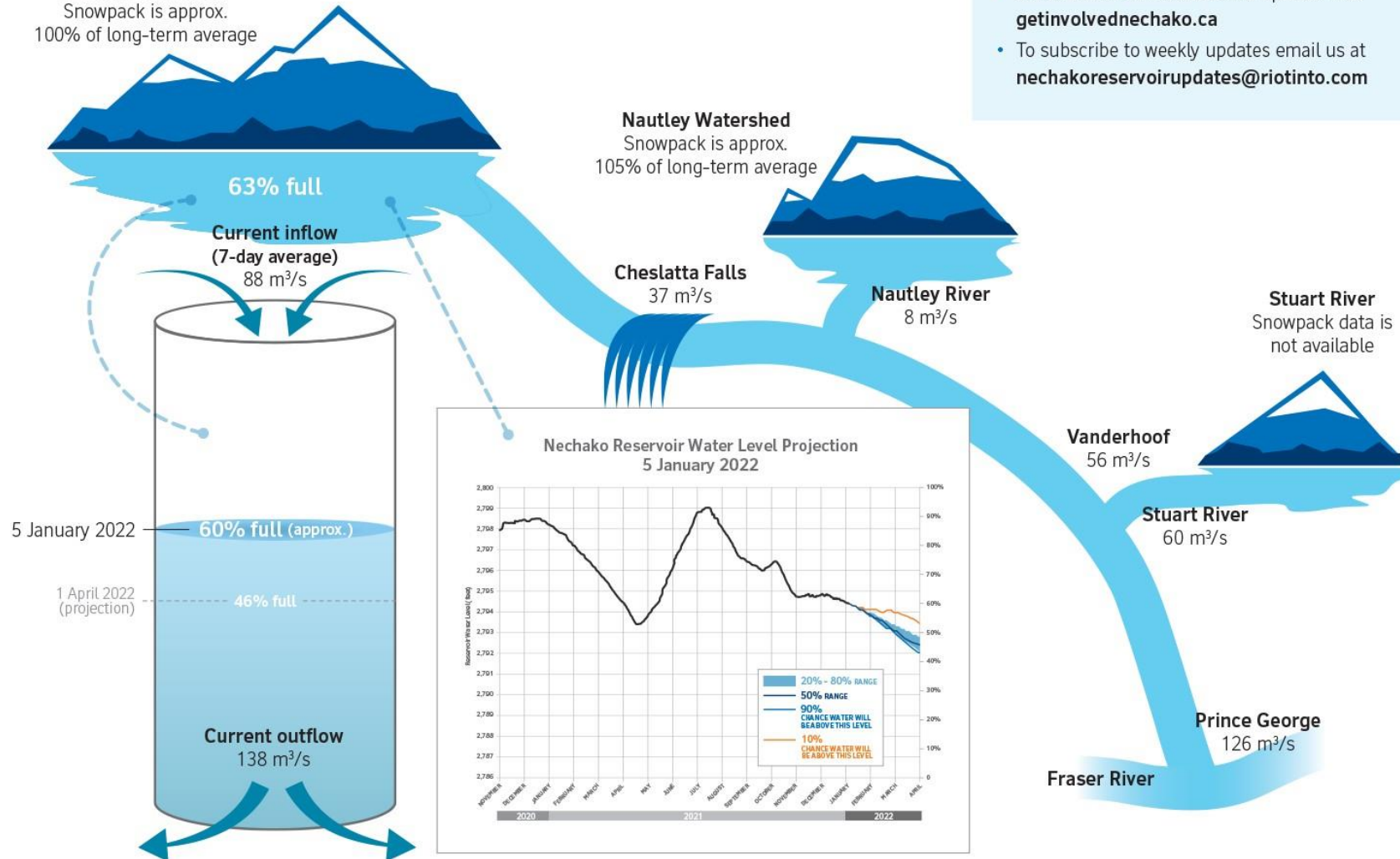


1. Model update and communications.
2. Ice Surveys Ongoing
3. Confirm next meeting date – **26th January**

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 - 5 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

