



RioTinto

Nechako Reservoir / River / Freshet Information Sharing – Community Leaders

01 June 2022

Prepared by Andrew Czornohalan and Alec
Mercier

Photo: Avison

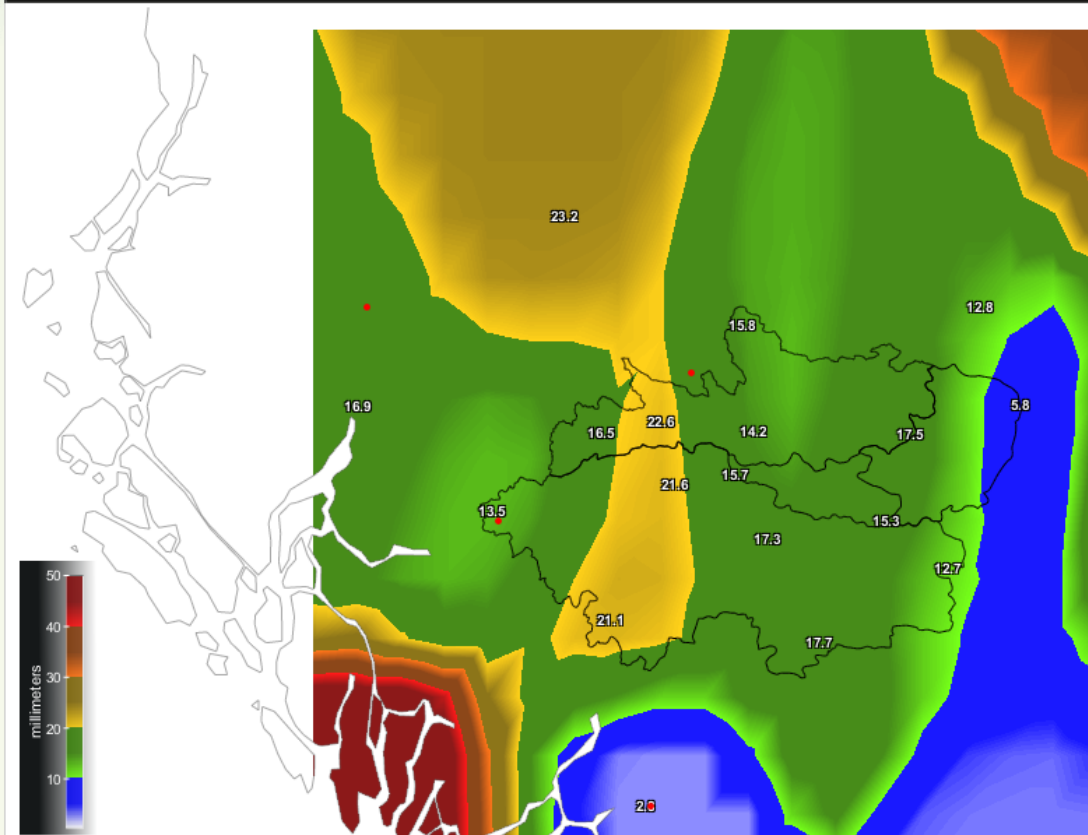
Key Focus

1. Current Watershed Data:
Precipitation and elevation
2. Freshet Forecast, looking
to the spring / summer
and next steps

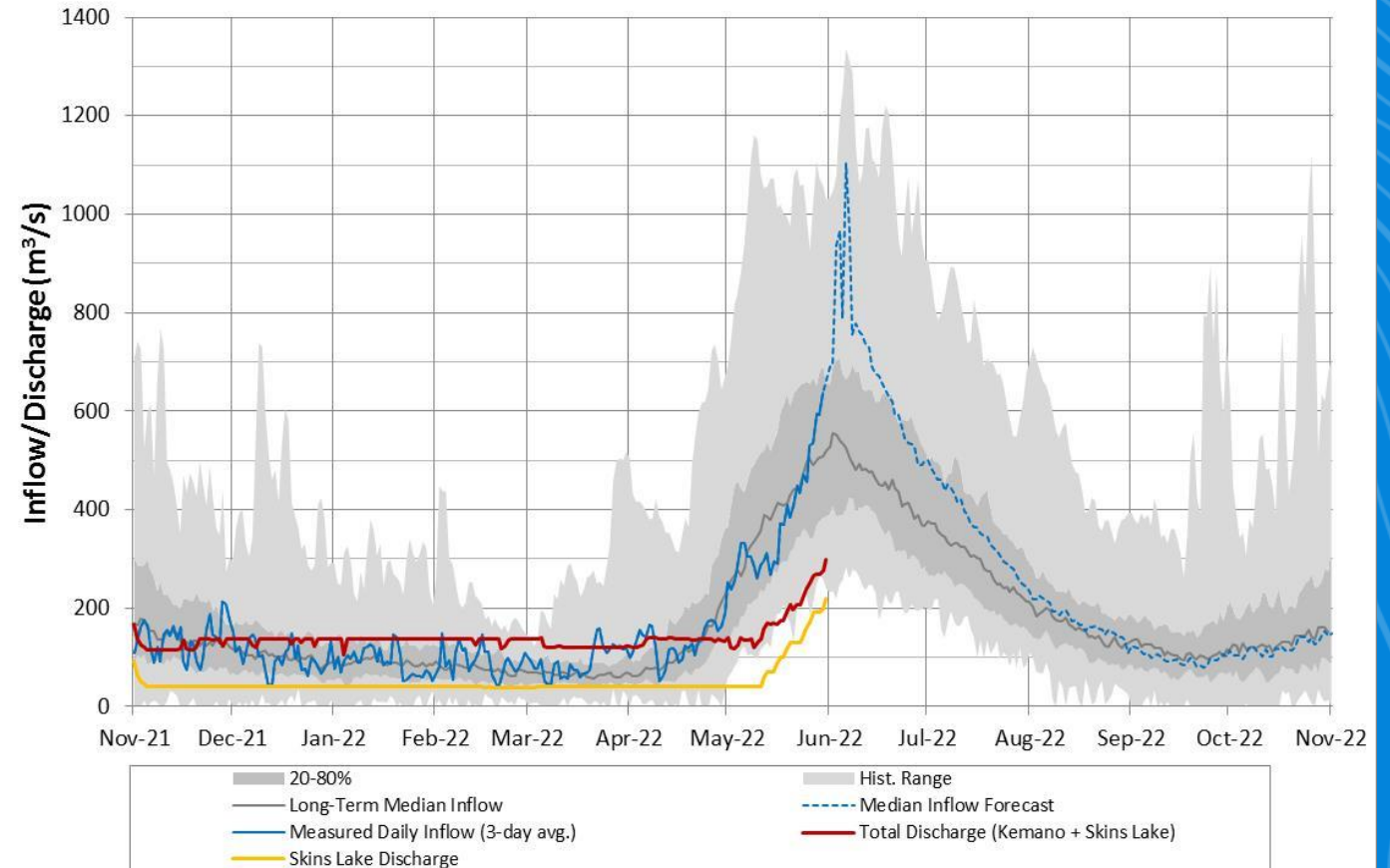


Observed Precipitation, Inflows vs Historical

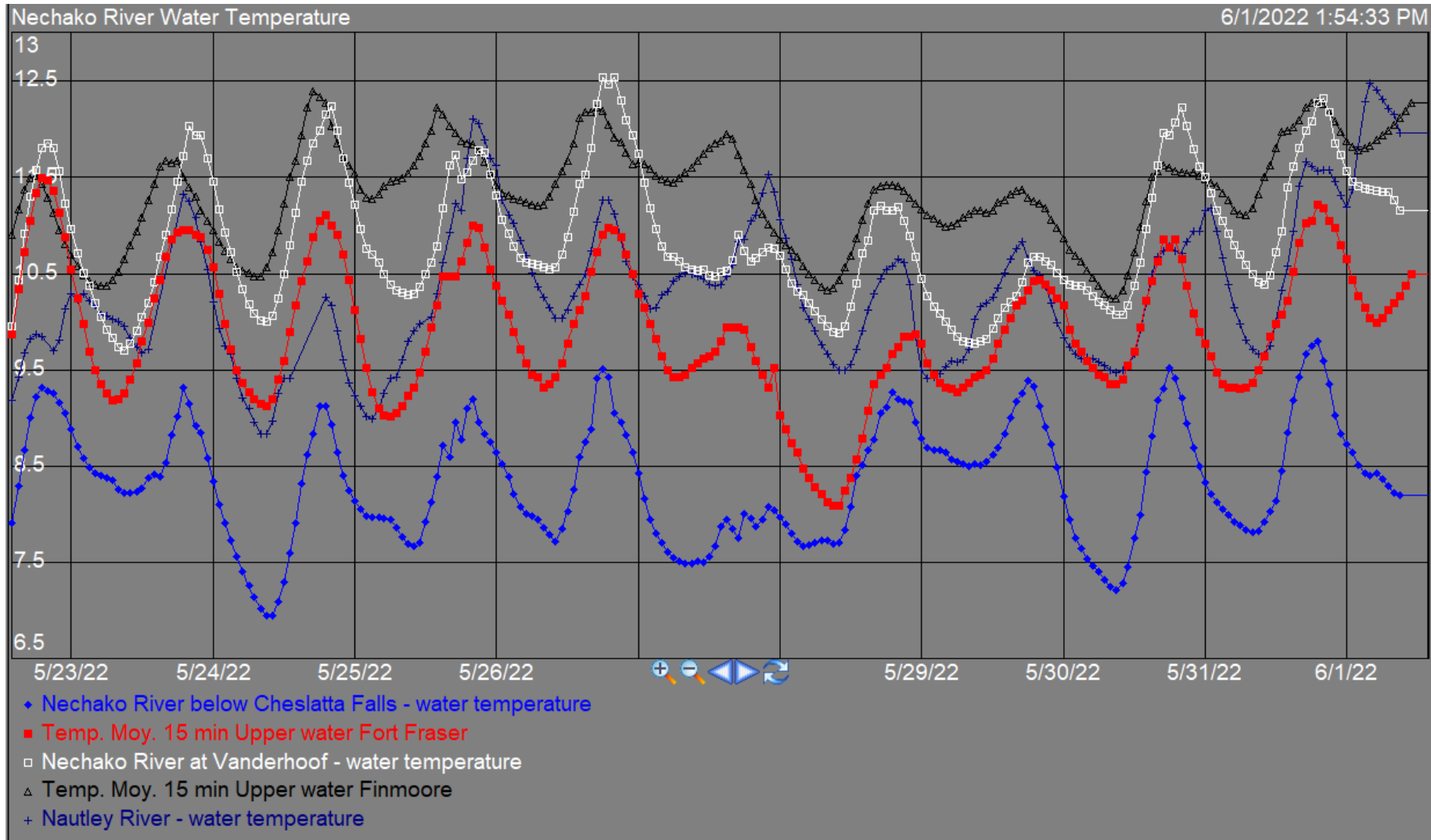
7-day cumulative rainfall



Nechako Reservoir Operation
Observed Inflow and Discharge 2021-2022



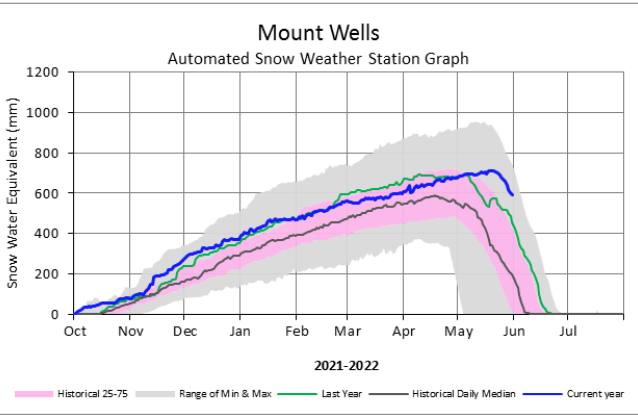
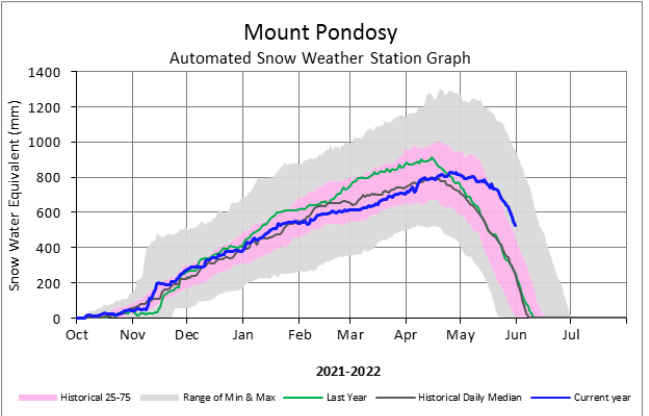
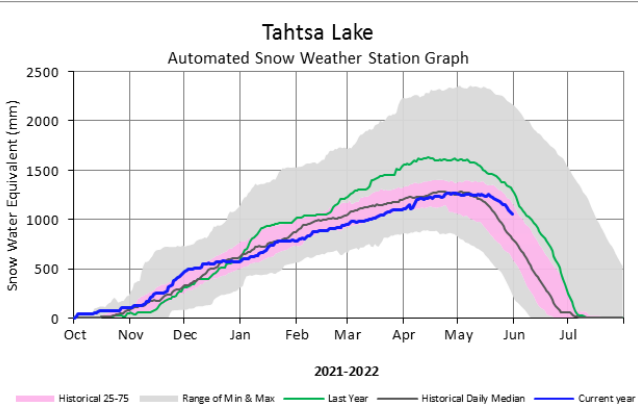
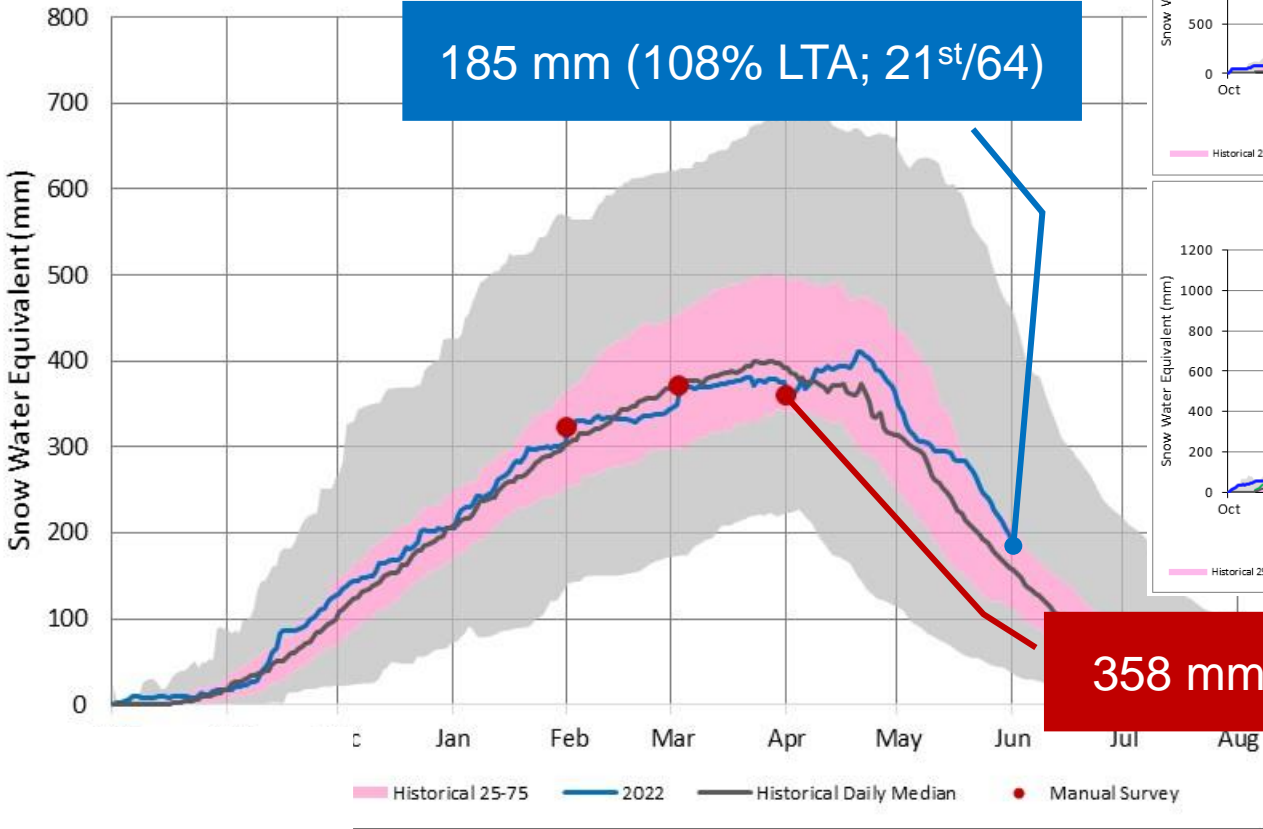
Observed Water Temperatures



Current Snowpack

Nechako Reservoir Snowpack

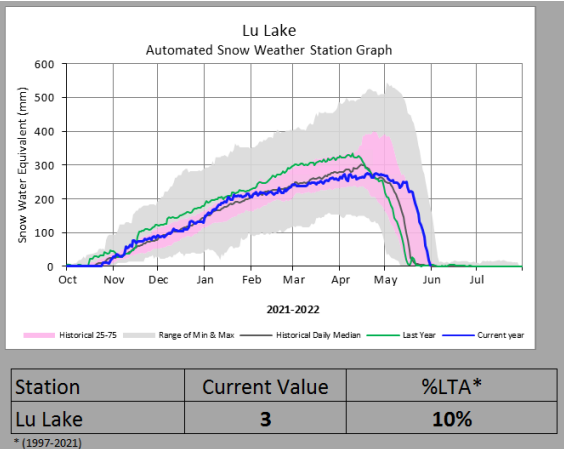
185 mm (108% LTA; 21st/64)



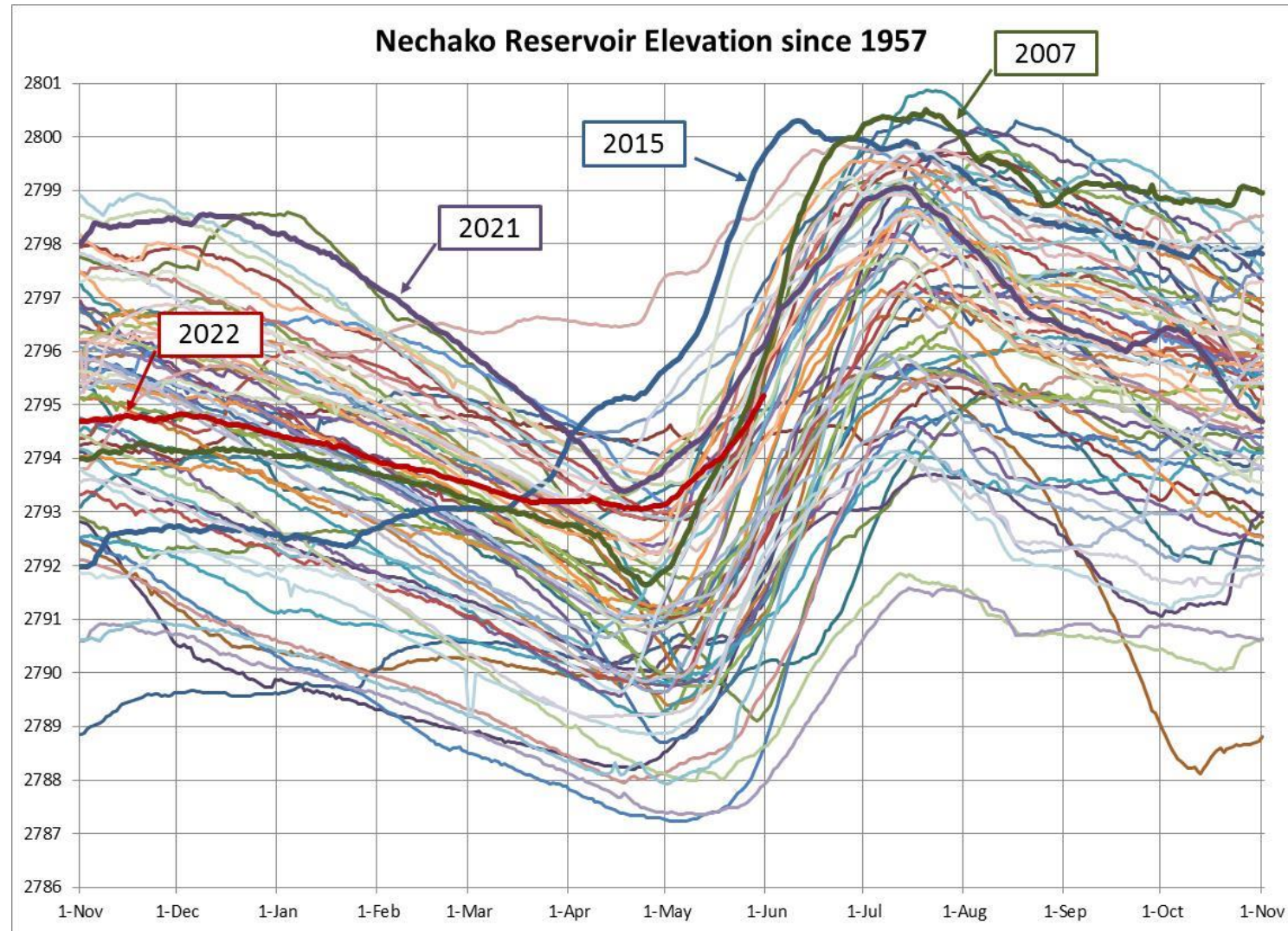
Station	Current Value (mm)	LTA* (mm)	%LTA*	Percentile Rank*
Tahtsa Lake	1059	906	117%	71%
Mount Pondosy	524	282	186%	82%
Mount Wells	590	238	248%	89%

* (1992-2021)

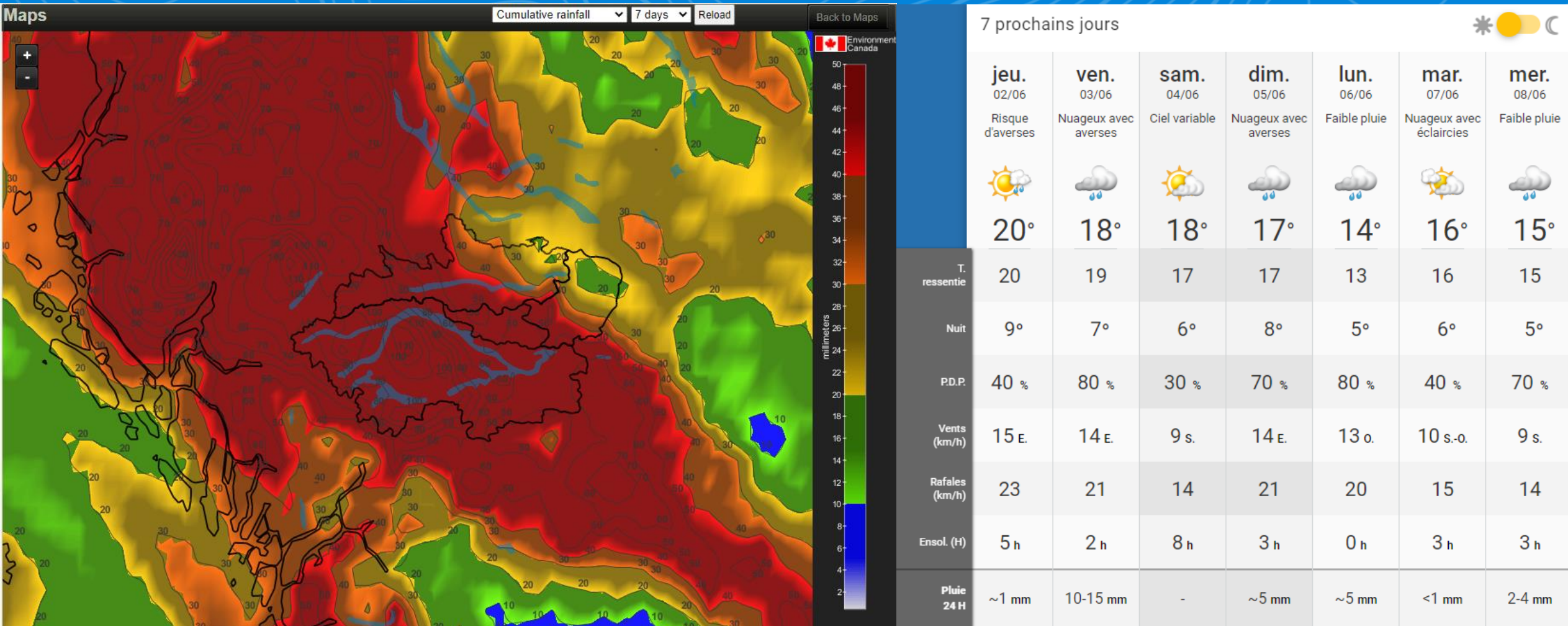
358 mm (85% LTA; 40th/64)



Historical Reservoir Elevation

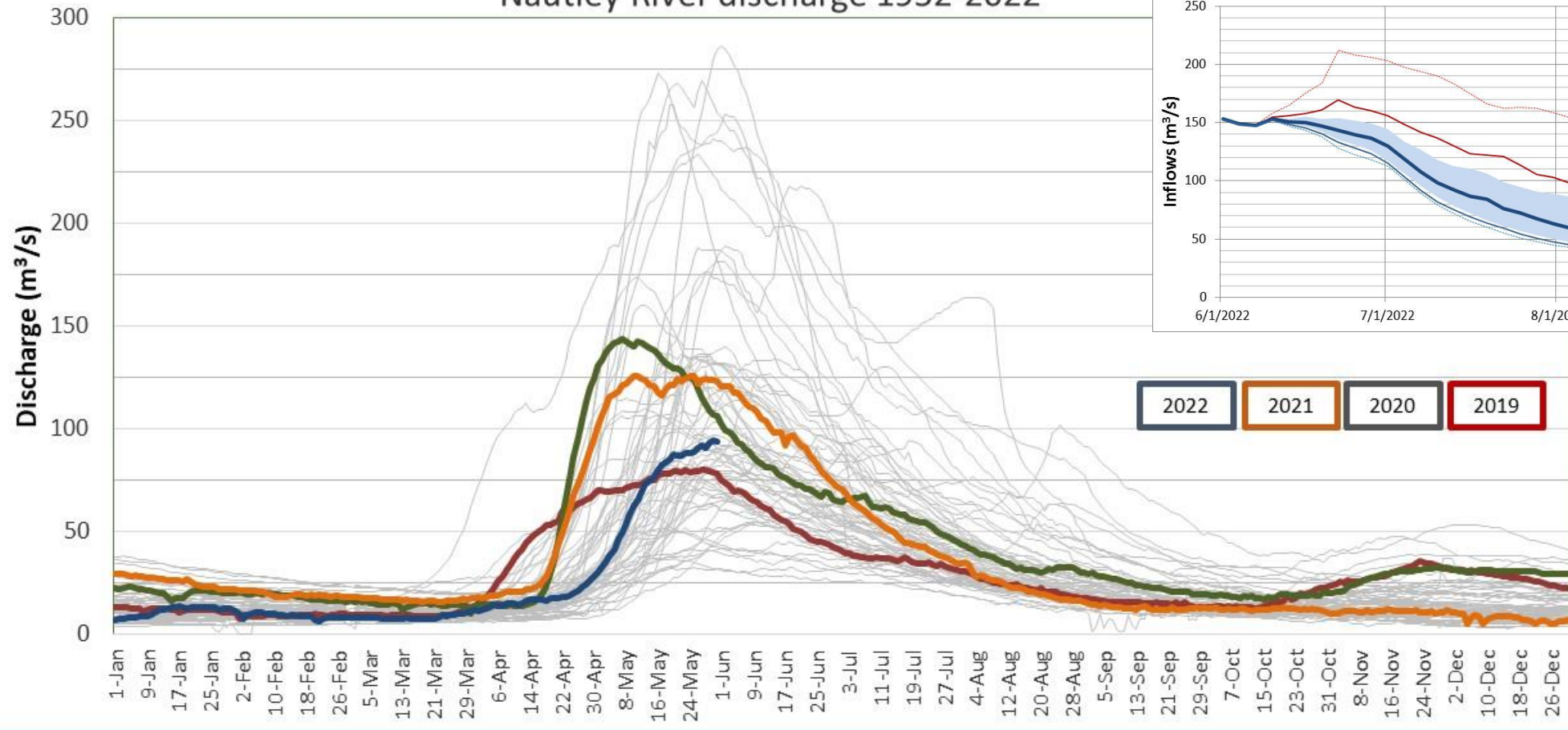


7 Day Weather Forecast

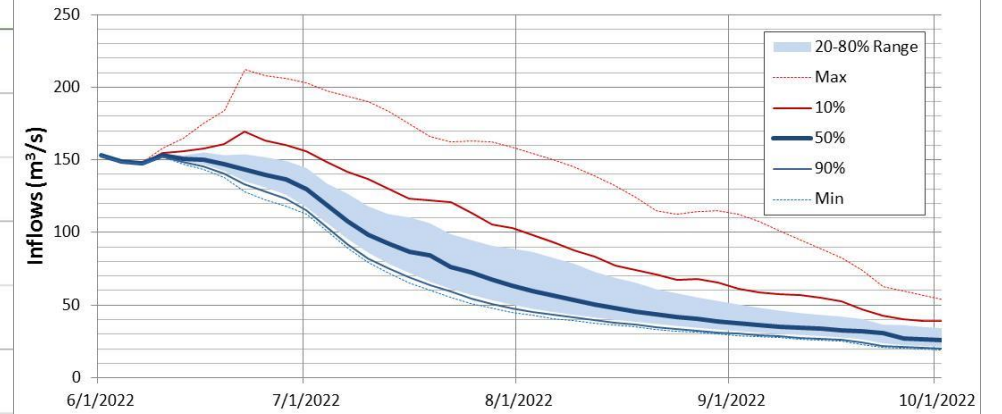


Nautley River Flows, Forecast

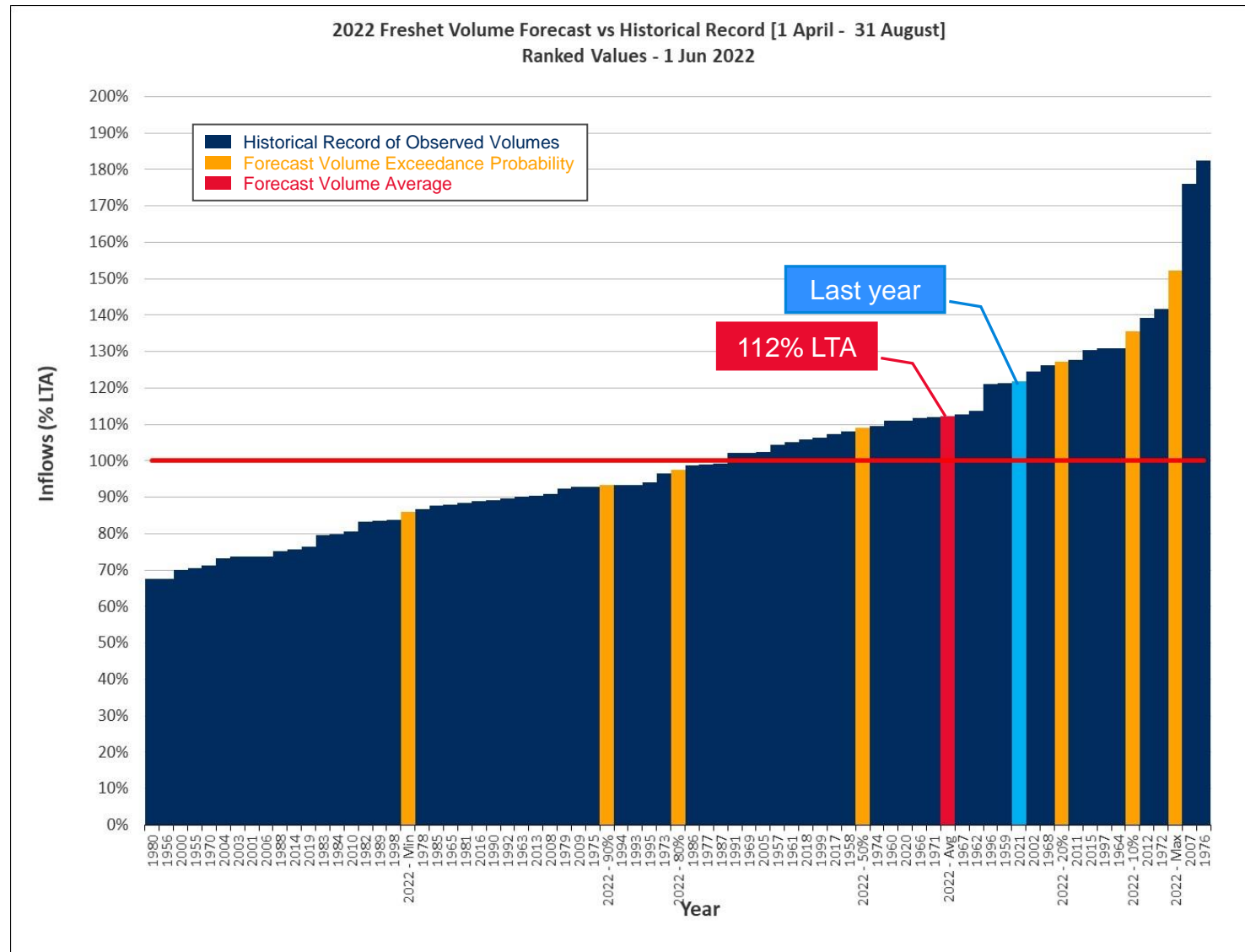
Nautley River discharge 1952-2022



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

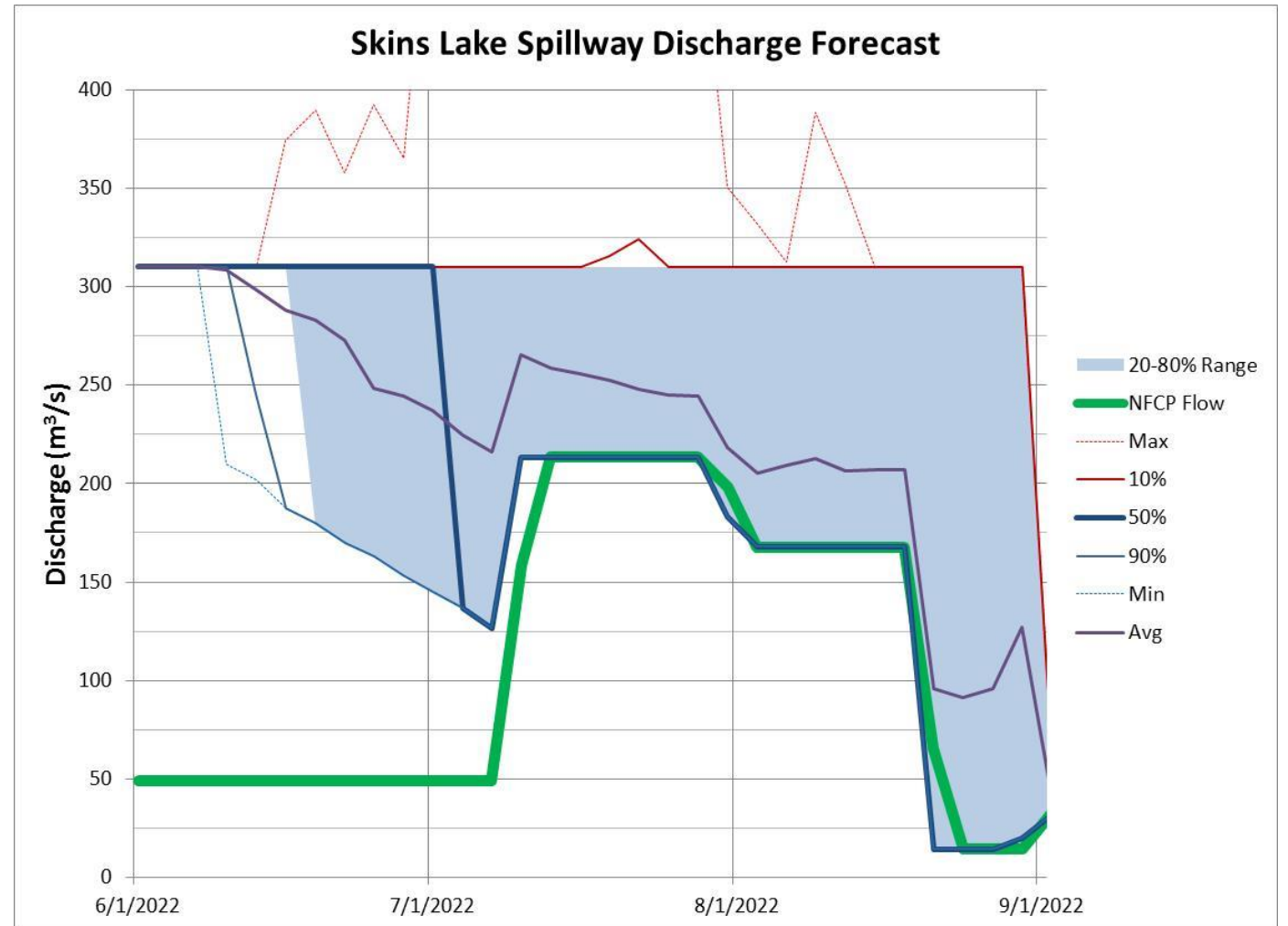


Spring Freshet Inflow Forecast

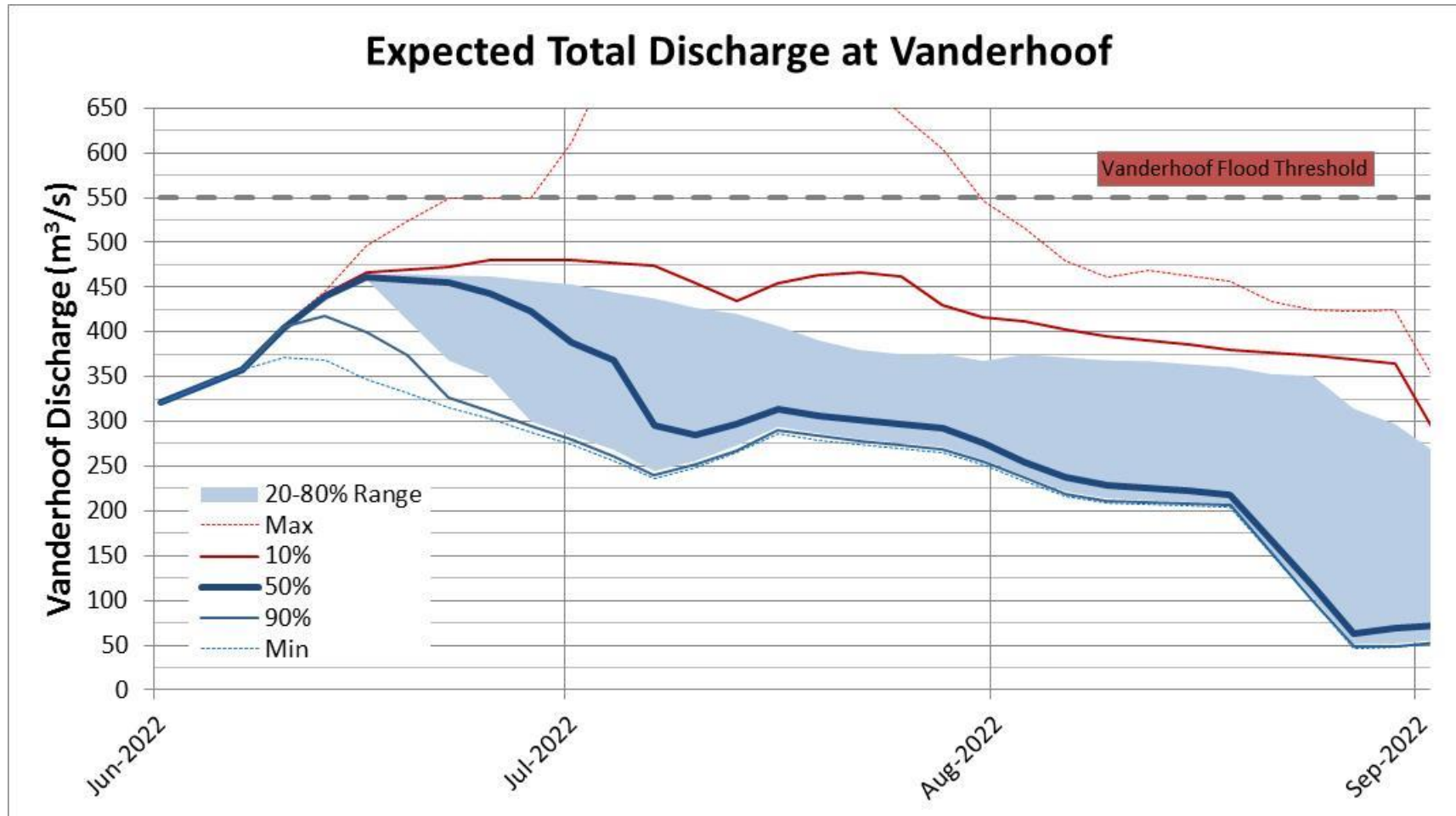


Spillway Management

- SLS discharge is currently at 220 m³/s. Will be increased as soon as possible;
- Smelter Re-Start plan integrated
- Spring Freshet flood risk; Murray Cheslatta System 15% and Vanderhoof 5%

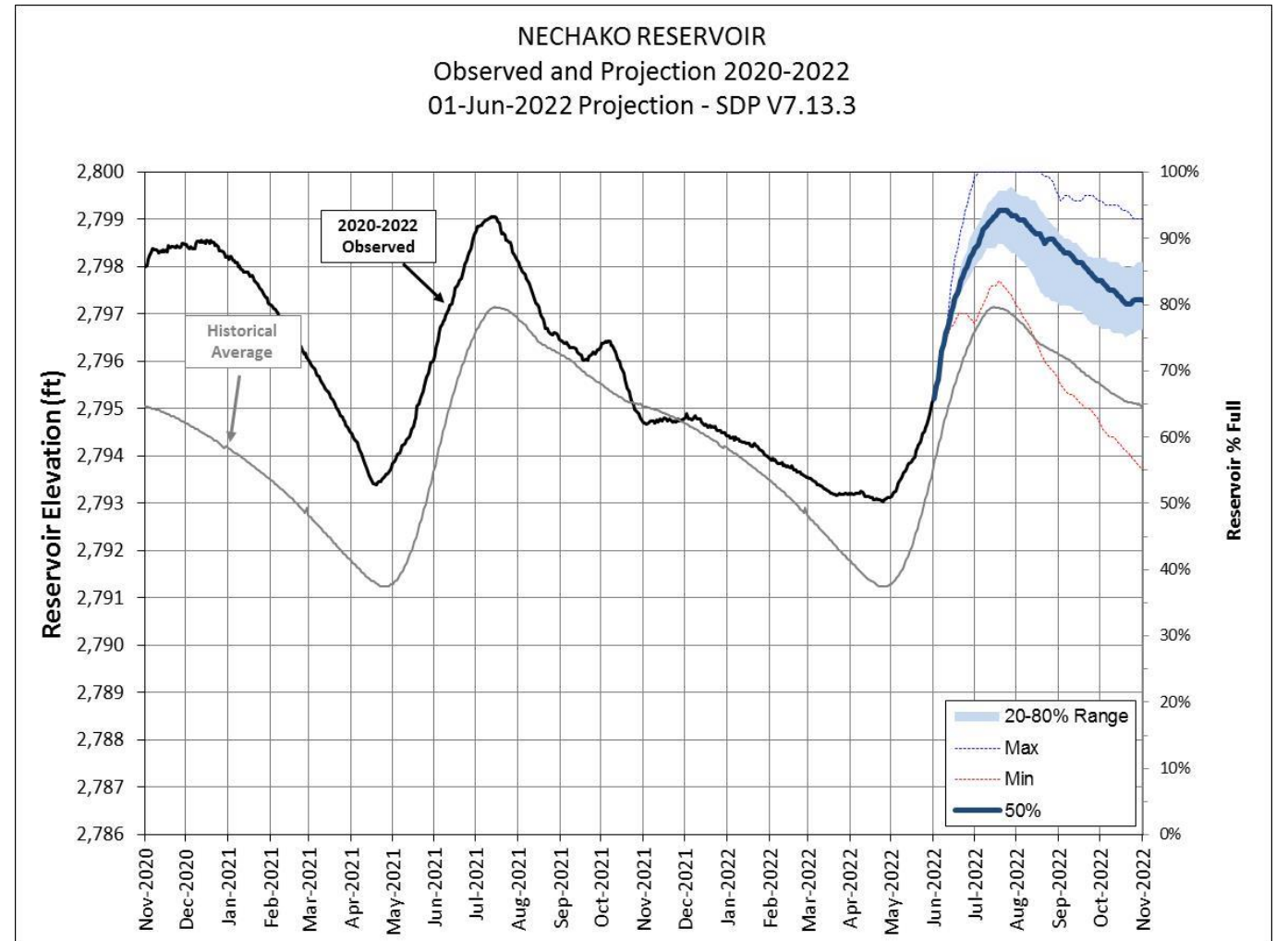


Forecast – Vanderhoof



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



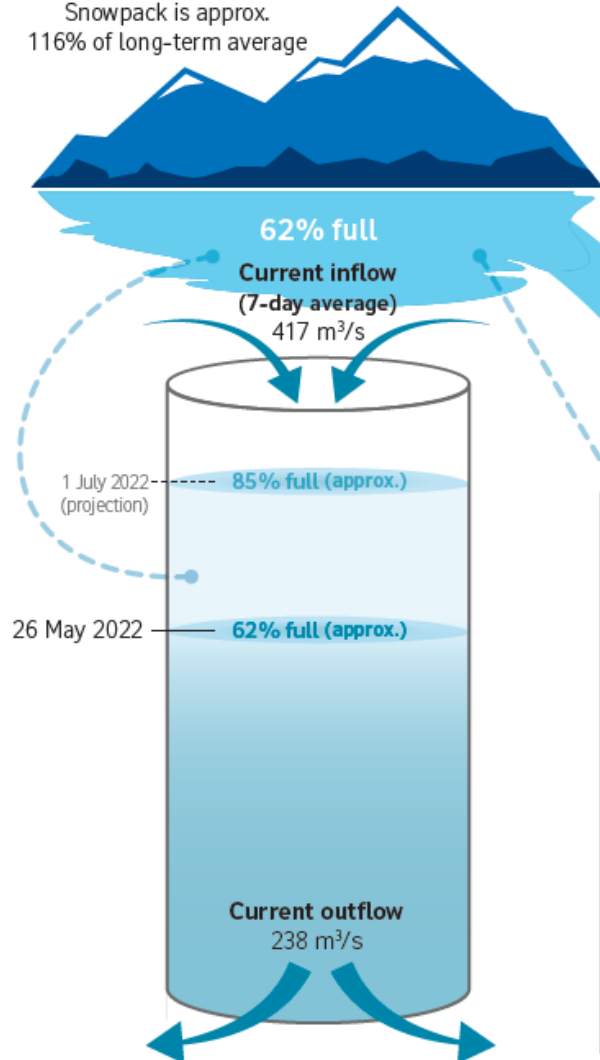
1. Model update and communications.
2. Monitoring work to learn from 2022 release
3. Continue to update on Smelter Re-Start
4. Confirm next meeting date – **15 June**

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

Photo: Avison

Current Conditions - 26 May 2022

Nechako Reservoir
Snowpack is approx.
116% of long-term average



Nautley Watershed
Snowpack is approx.
175% of long-term average

Cheslatta Falls
122 m³/s

Nautley River
91 m³/s

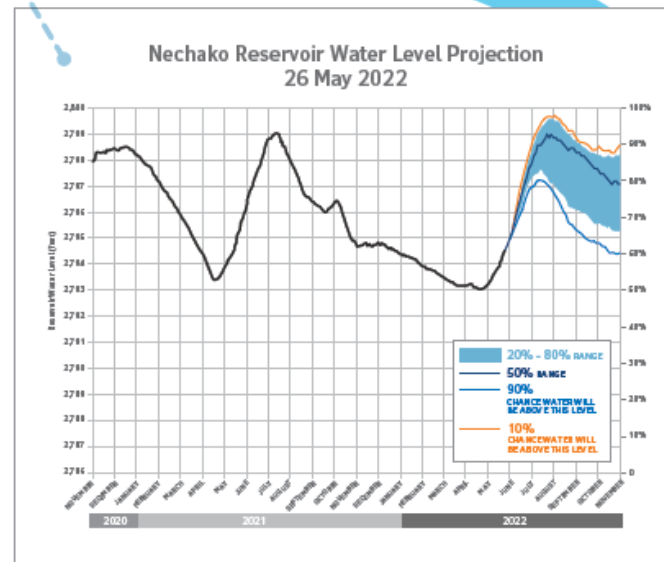
Stuart River
Snowpack data
is not available

Vanderhoof
239 m³/s

Stuart River
147 m³/s

Prince George
408 m³/s

Fraser River



Nechako Reservoir operations update

- Skins Lake Spillway discharge will be increased today to 190 m³/sec to control the rise of the reservoir level with the ongoing Spring freshet.
- For real time information and updates visit getinvolvednechako.ca
- To subscribe to weekly updates email us at nechakoreservoirupdates@riotinto.com

Feedback & Reflections

