



RioTinto

Nechako Reservoir / River / Freshet Information Sharing – Community Leaders

08 June 2022

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Mercier

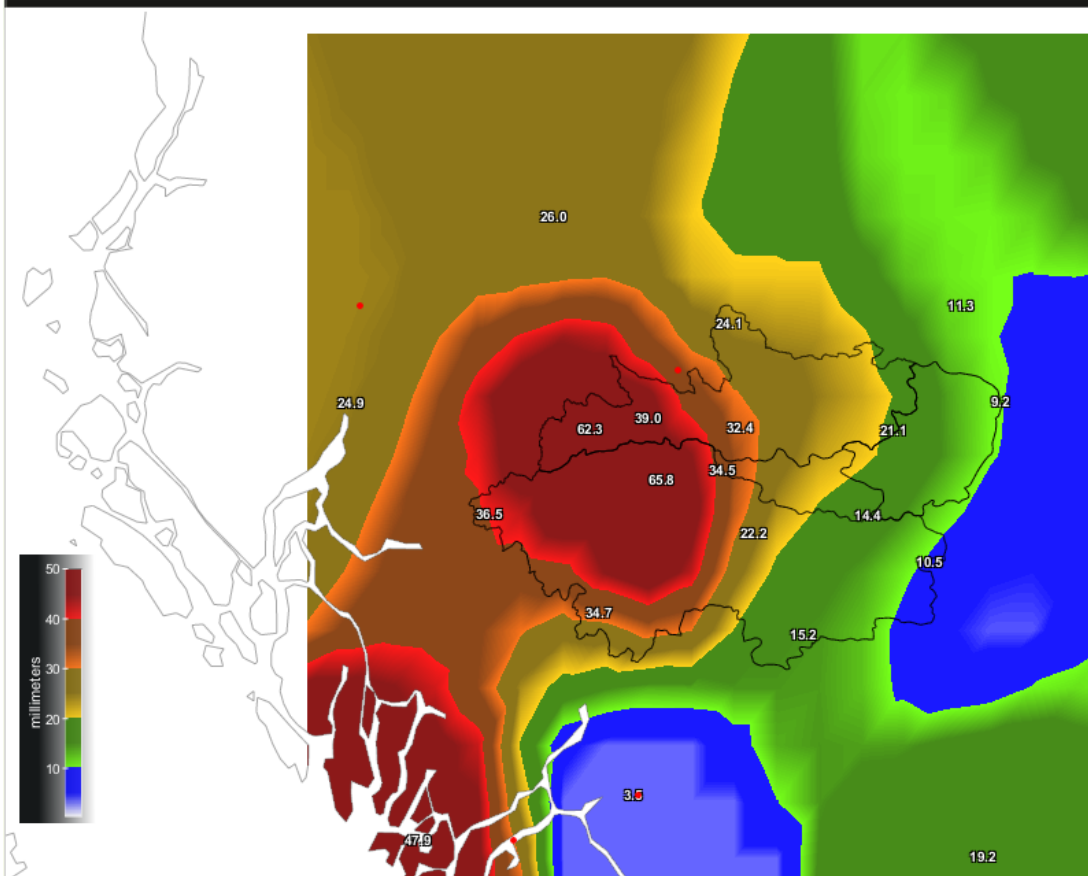
Key Focus

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

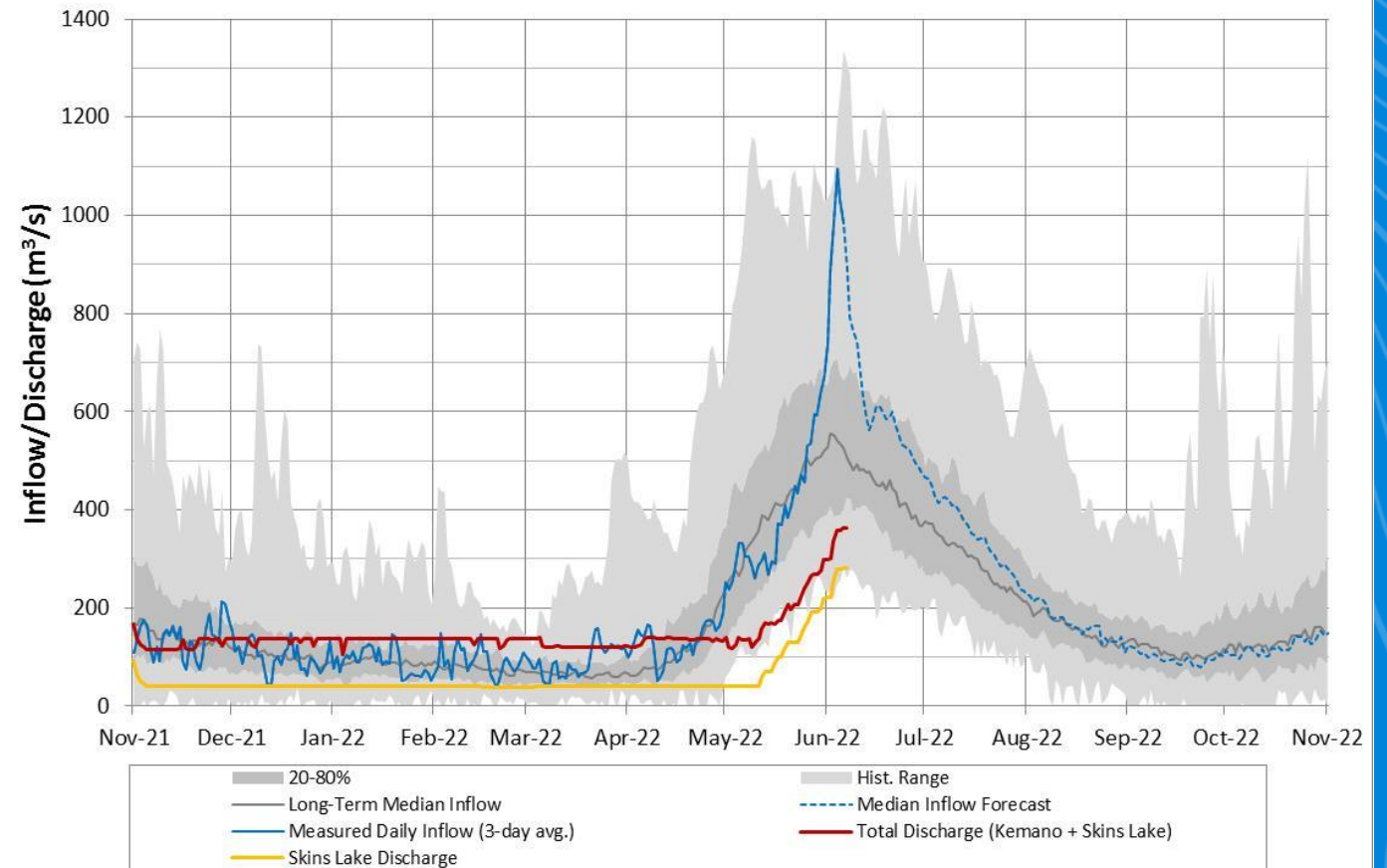


Observed Precipitation, Inflows vs Historical

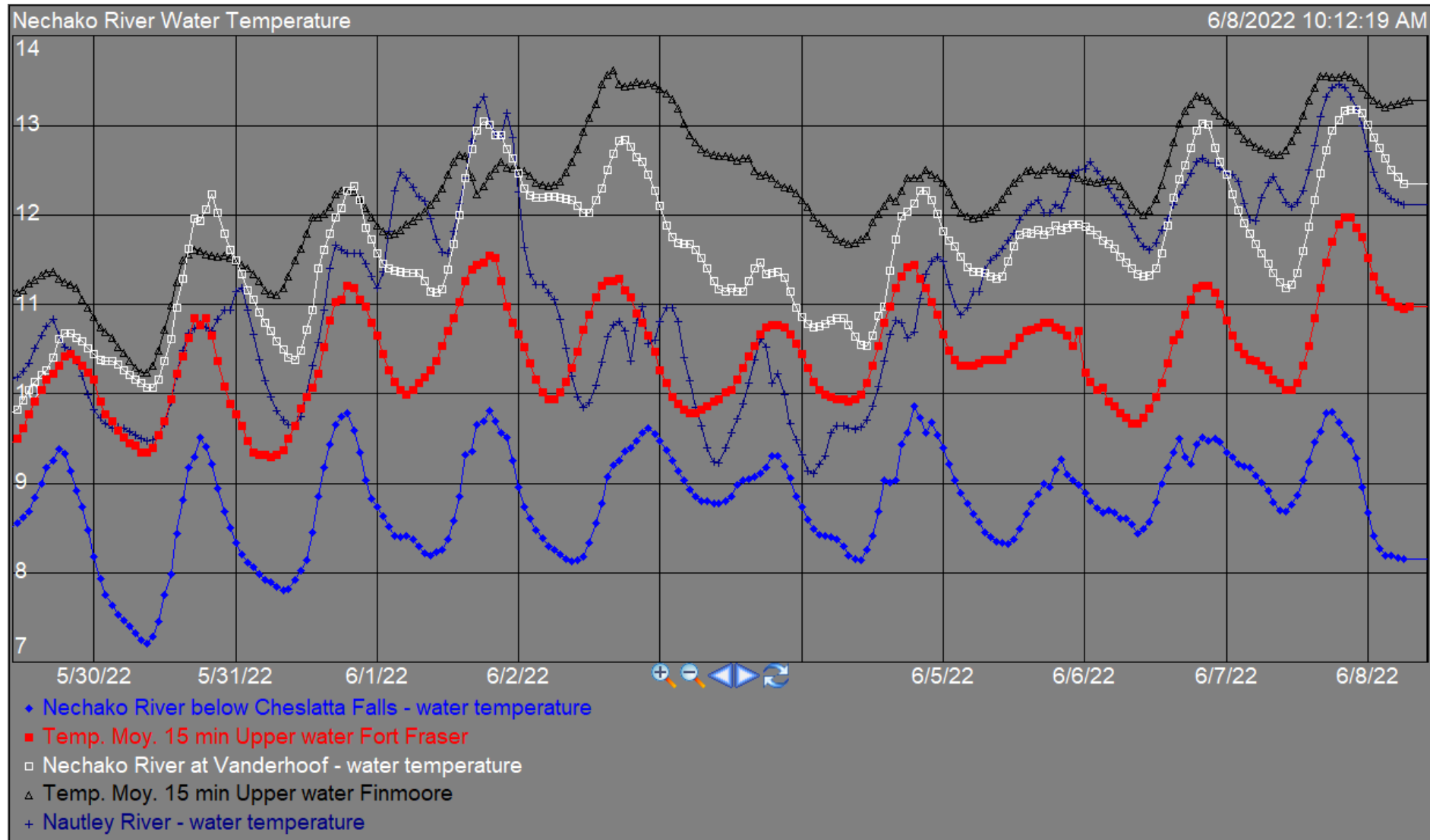
7-day cumulative rainfall



Nechako Reservoir Operation
Observed Inflow and Discharge 2021-2022

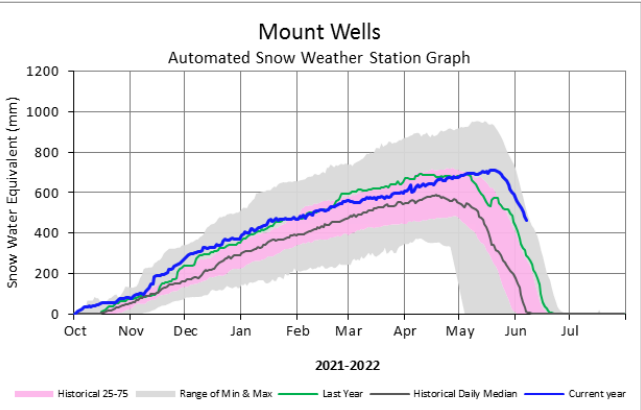
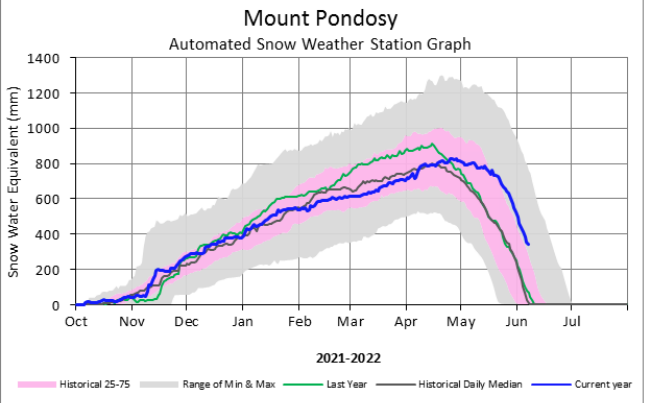
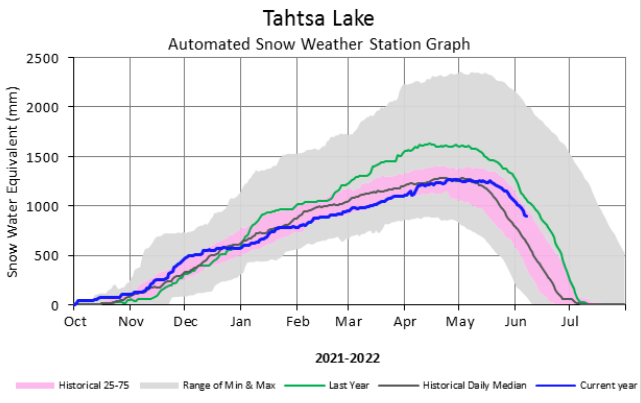
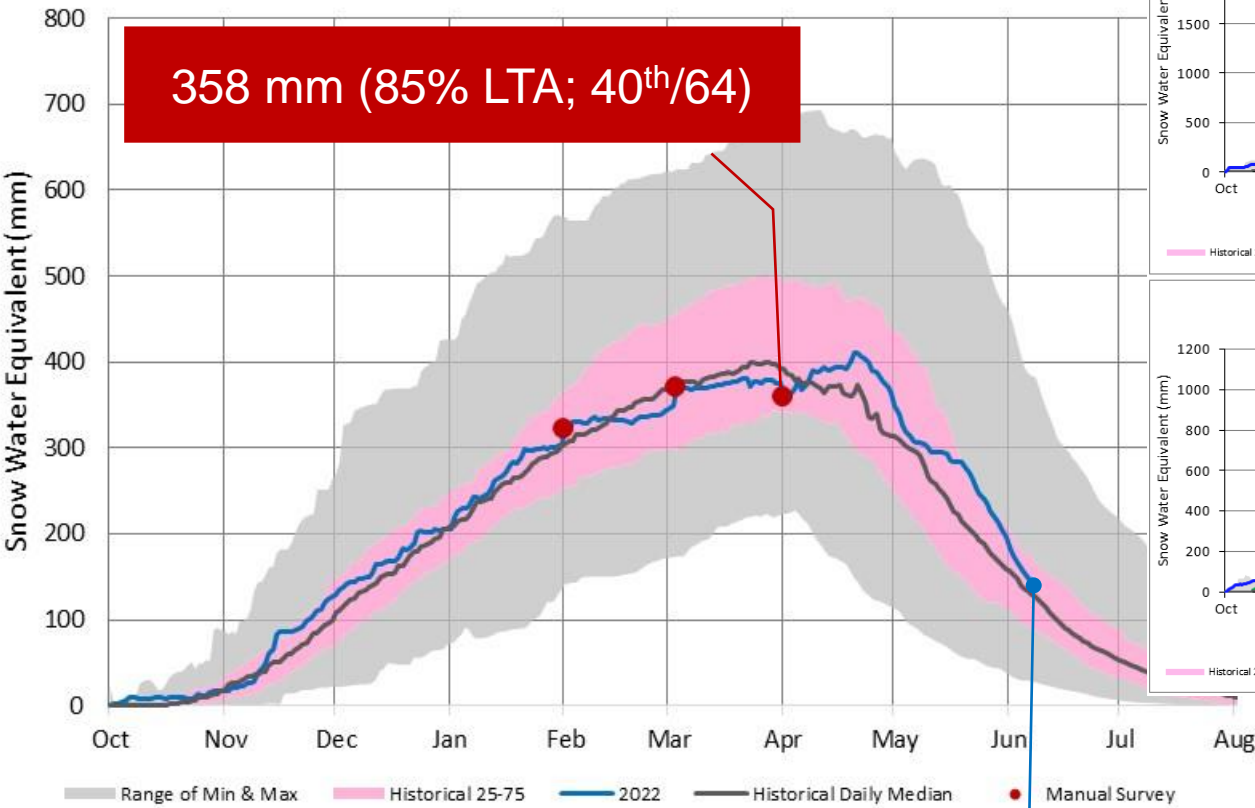


Observed Water Temperatures



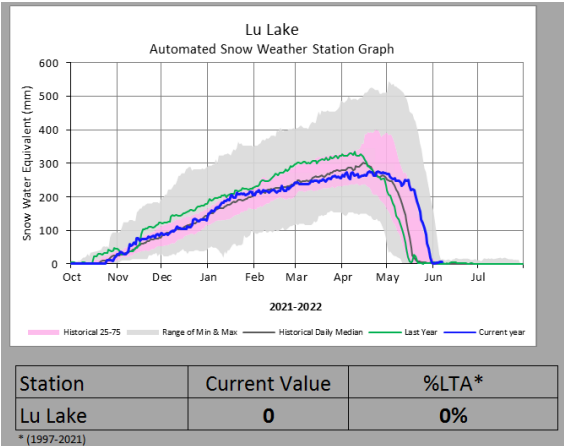
Current Snowpack

Nechako Reservoir Snowpack



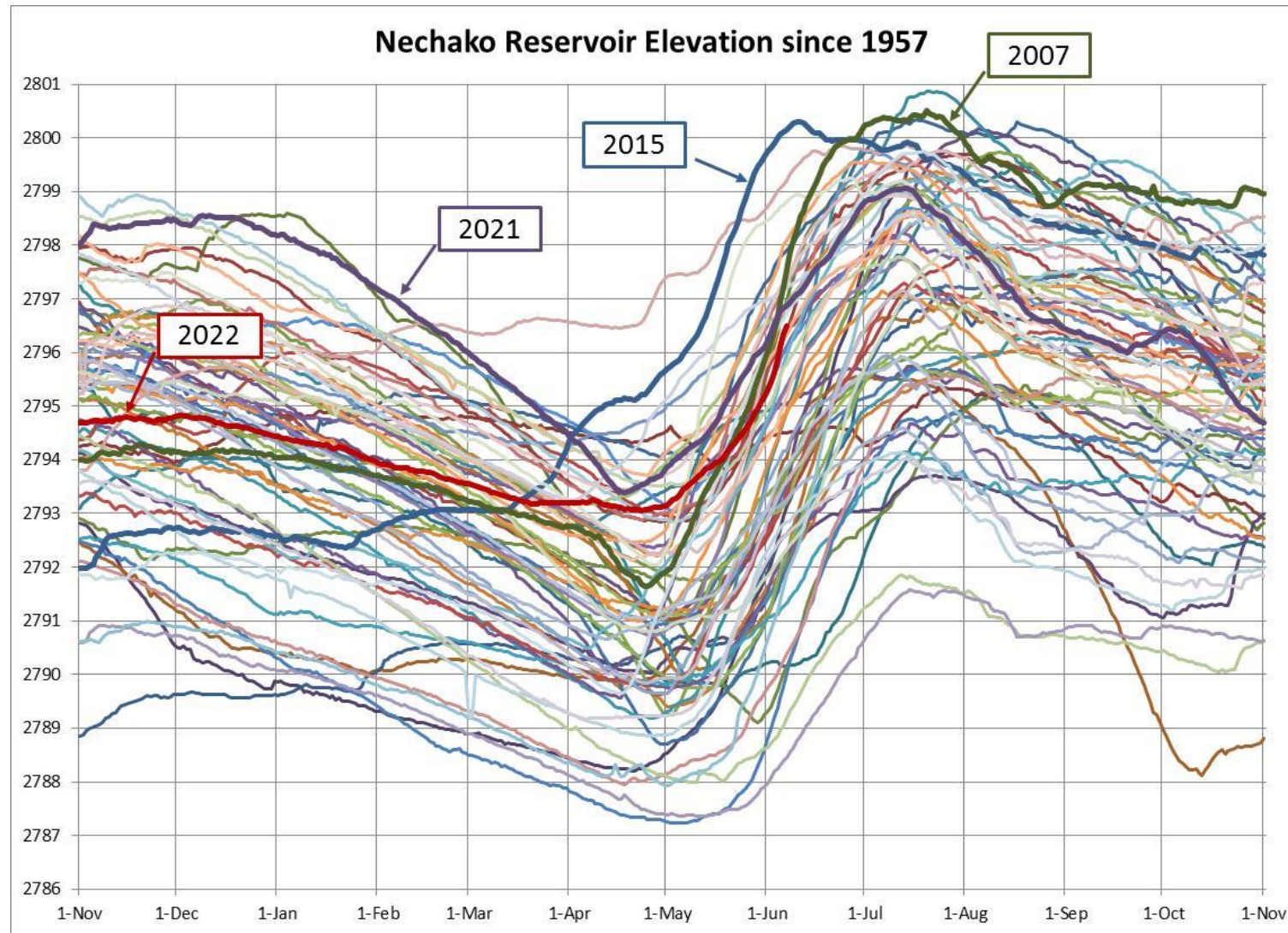
Station	Current Value (mm)	LTA* (mm)	%LTA*	Percentile Rank*
Tahtsa Lake	896	731	123%	71%
Mount Pondosy	344	151	228%	85%
Mount Wells	463	141	327%	89%

* (1992-2021)

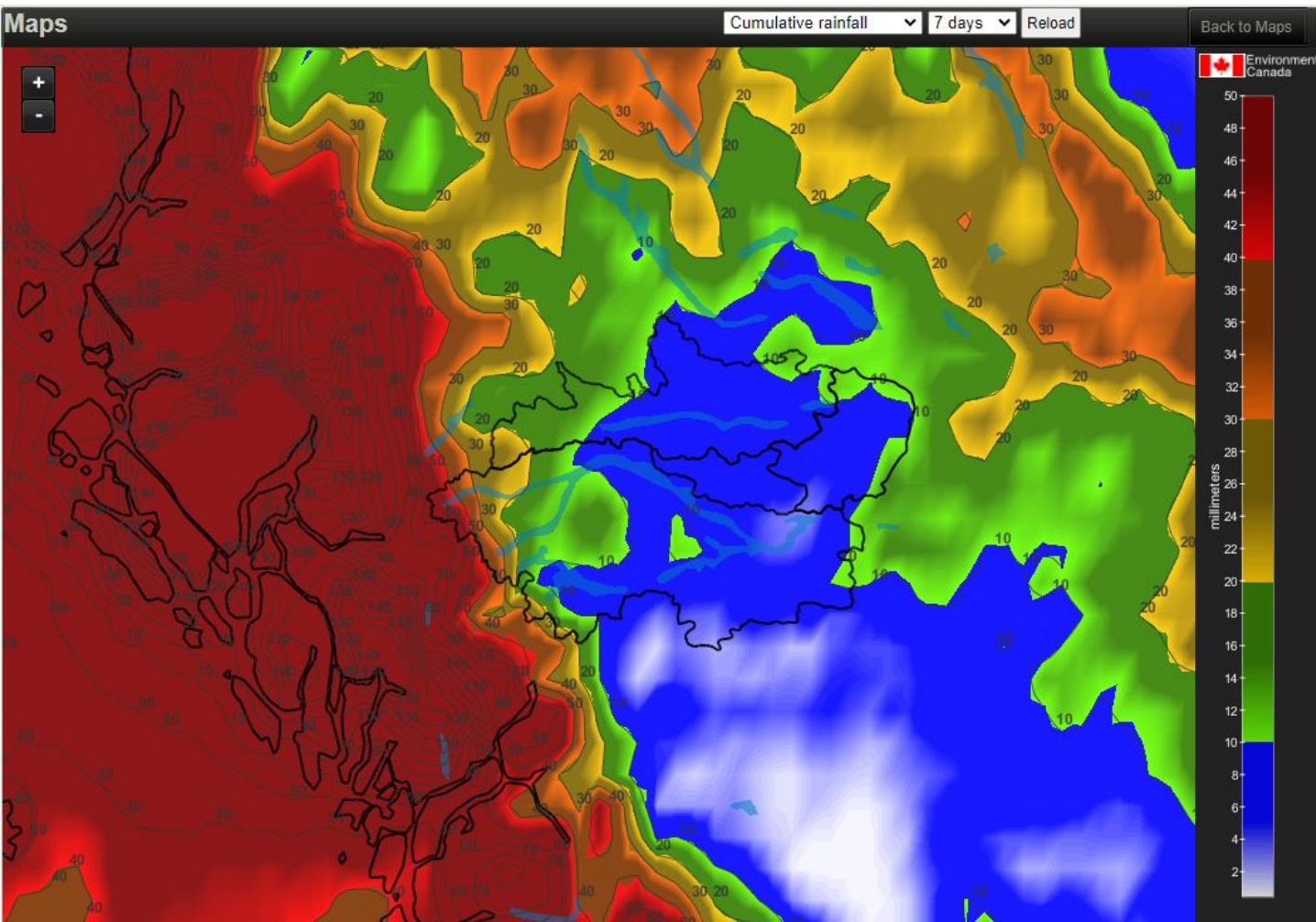


139 mm (100% LTA; 24th/64)

Historical Reservoir Elevation



7 Day Weather Forecast

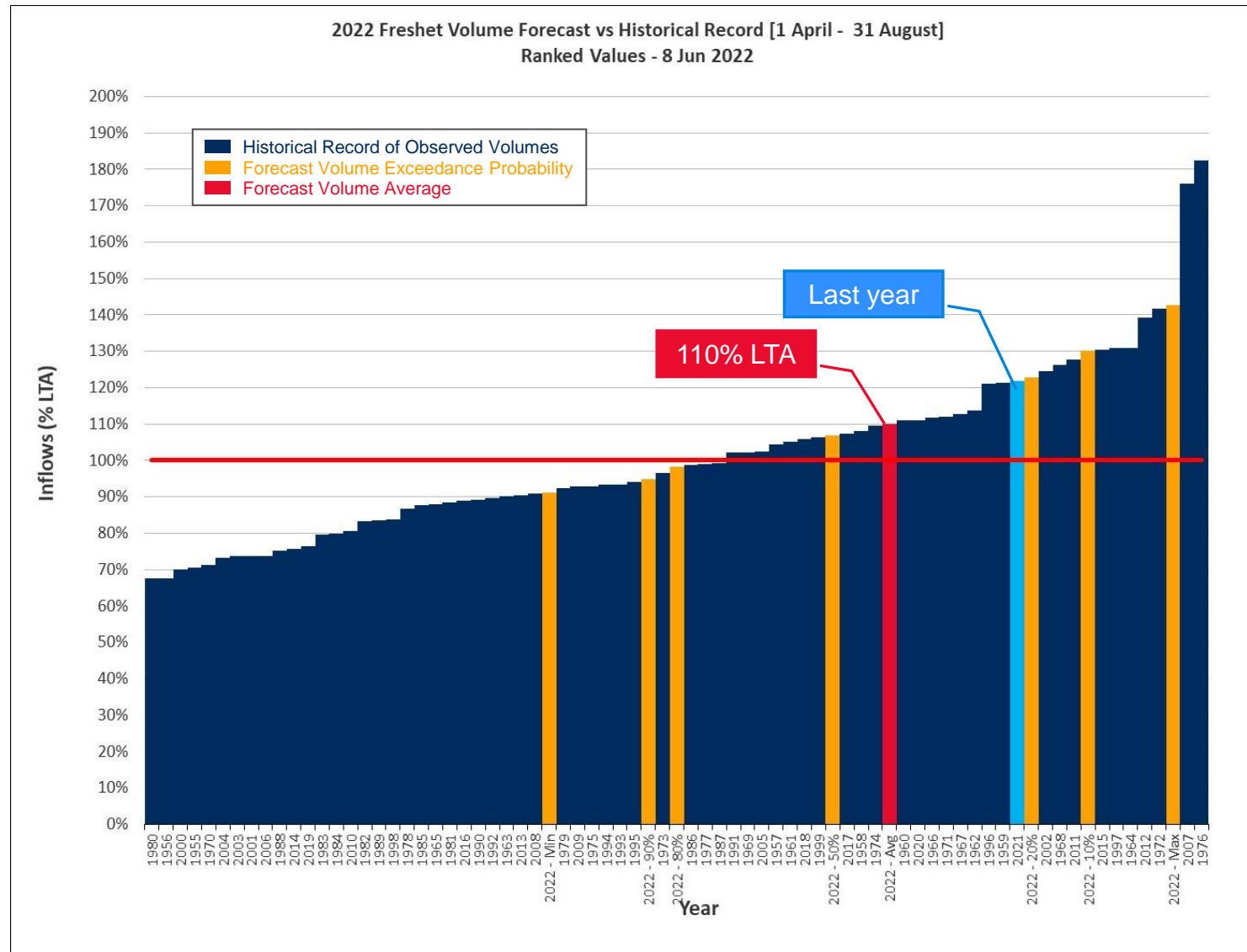


Next 7 Days



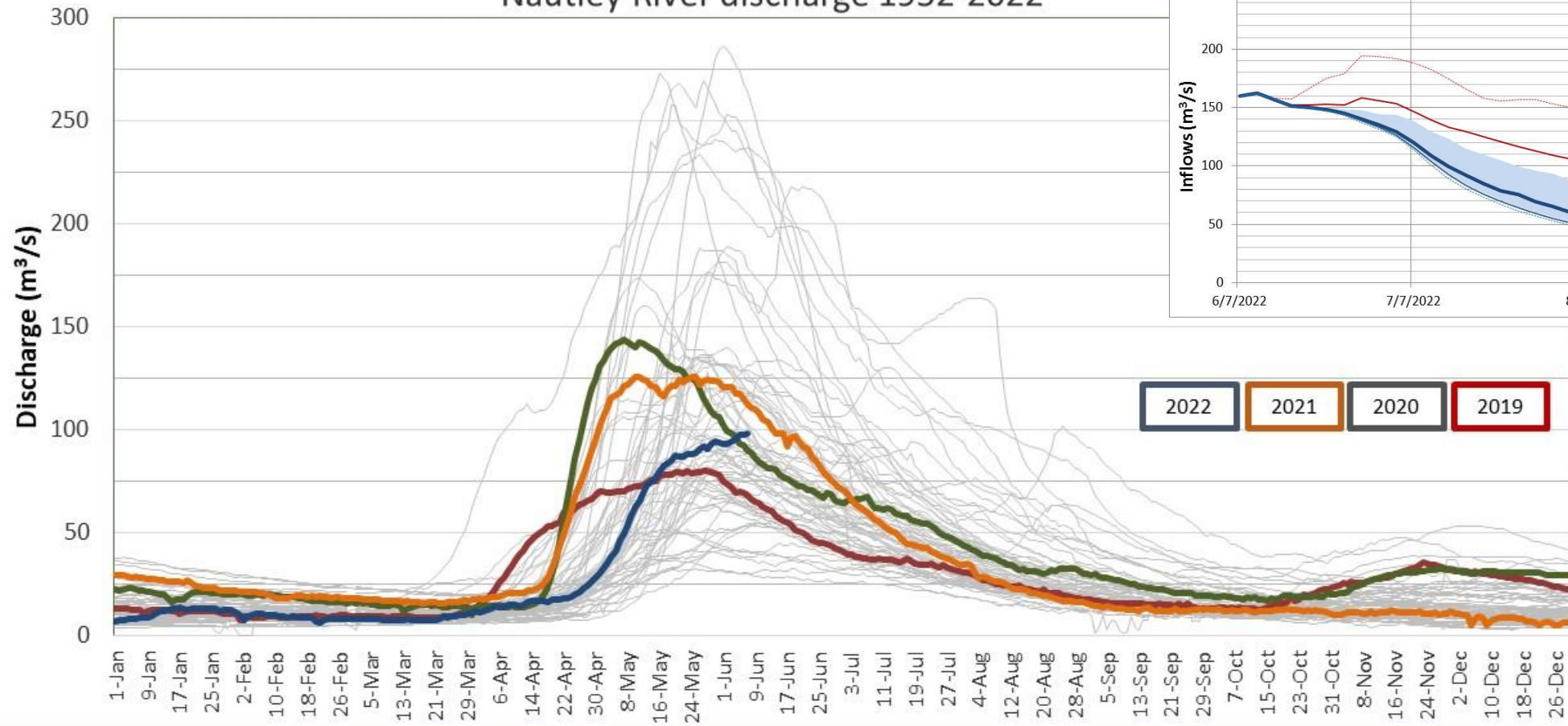
	Thu 06/09	Fri 06/10	Sat 06/11	Sun 06/12	Mon 06/13	Tue 06/14	Wed 06/15
	Cloudy with showers	Chance of a shower	Mainly sunny	A mix of sun and clouds	Chance of a shower	Mainly sunny	A Few showers
	16°	16°	14°	14°	14°	14°	15°
Feels like	15	15	13	13	14	13	15
Night	7°	7°	4°	4°	4°	4°	5°
POP	40 %	30 %	40 %	30 %	40 %	20 %	60 %
Wind (km/h)	18 SE	16 s	15 s	13 w	13 sw	12 sw	9 s
Wind gust (km/h)	27	24	23	20	20	18	14
Hrs Of Sun	2 h	7 h	10 h	6 h	12 h	9 h	4 h
24 Hr Rain	~5 mm	<1 mm	~1 mm	-	~1 mm	-	~5 mm

Spring Freshet Inflow Forecast

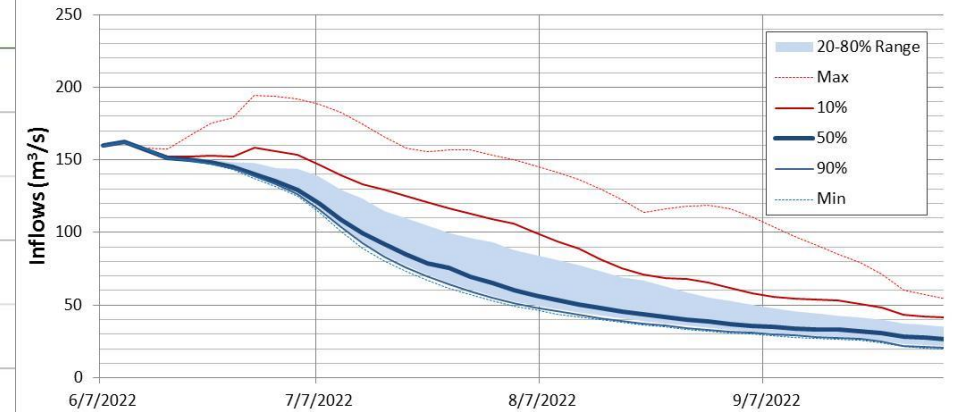


Nautley River Flows, Forecast

Nautley River discharge 1952-2022

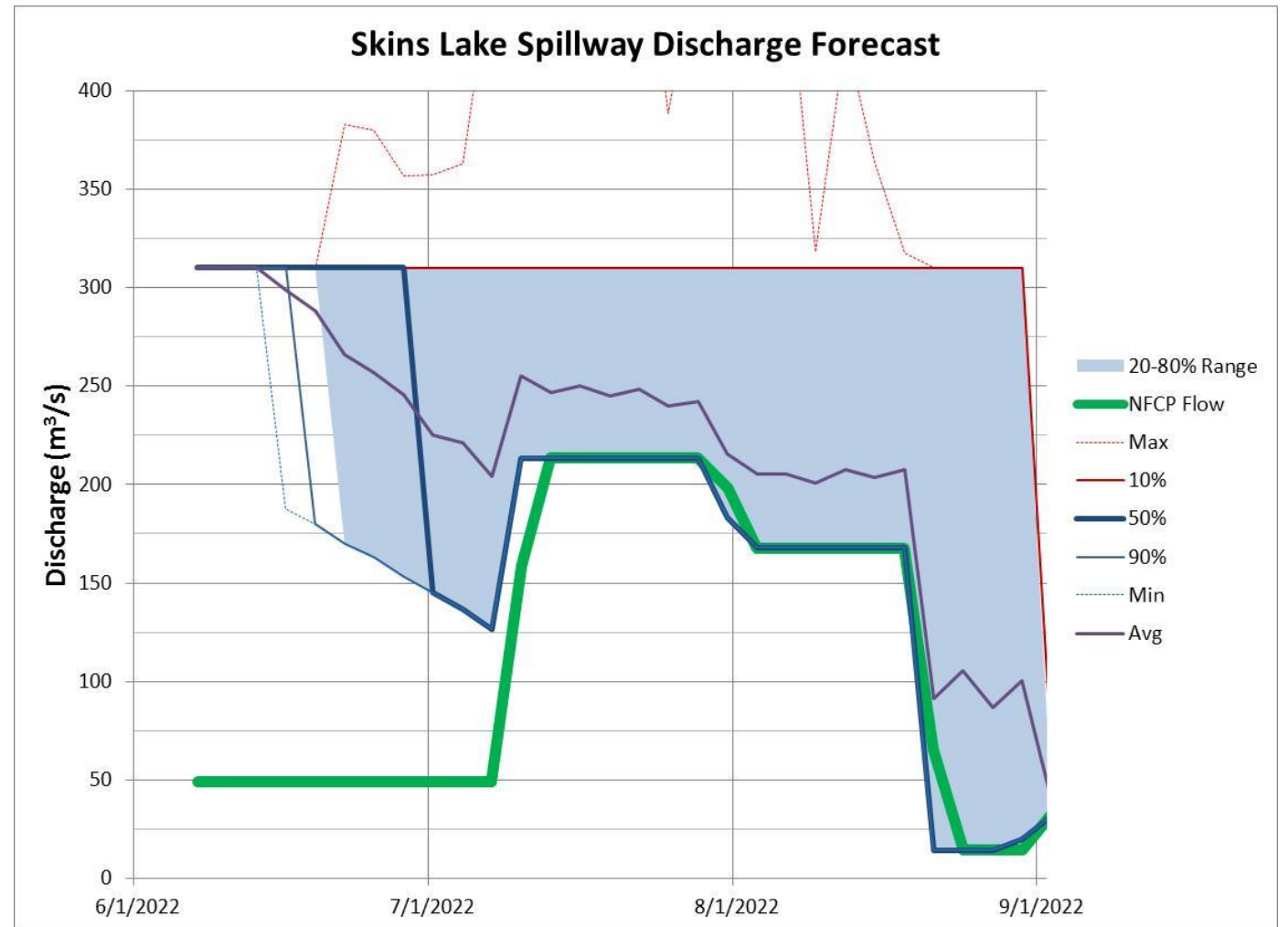


Expected Natural Inflow on Nautley/Nechako Rivers at Vanderhoof
(excludes discharge from Nechako Reservoir)

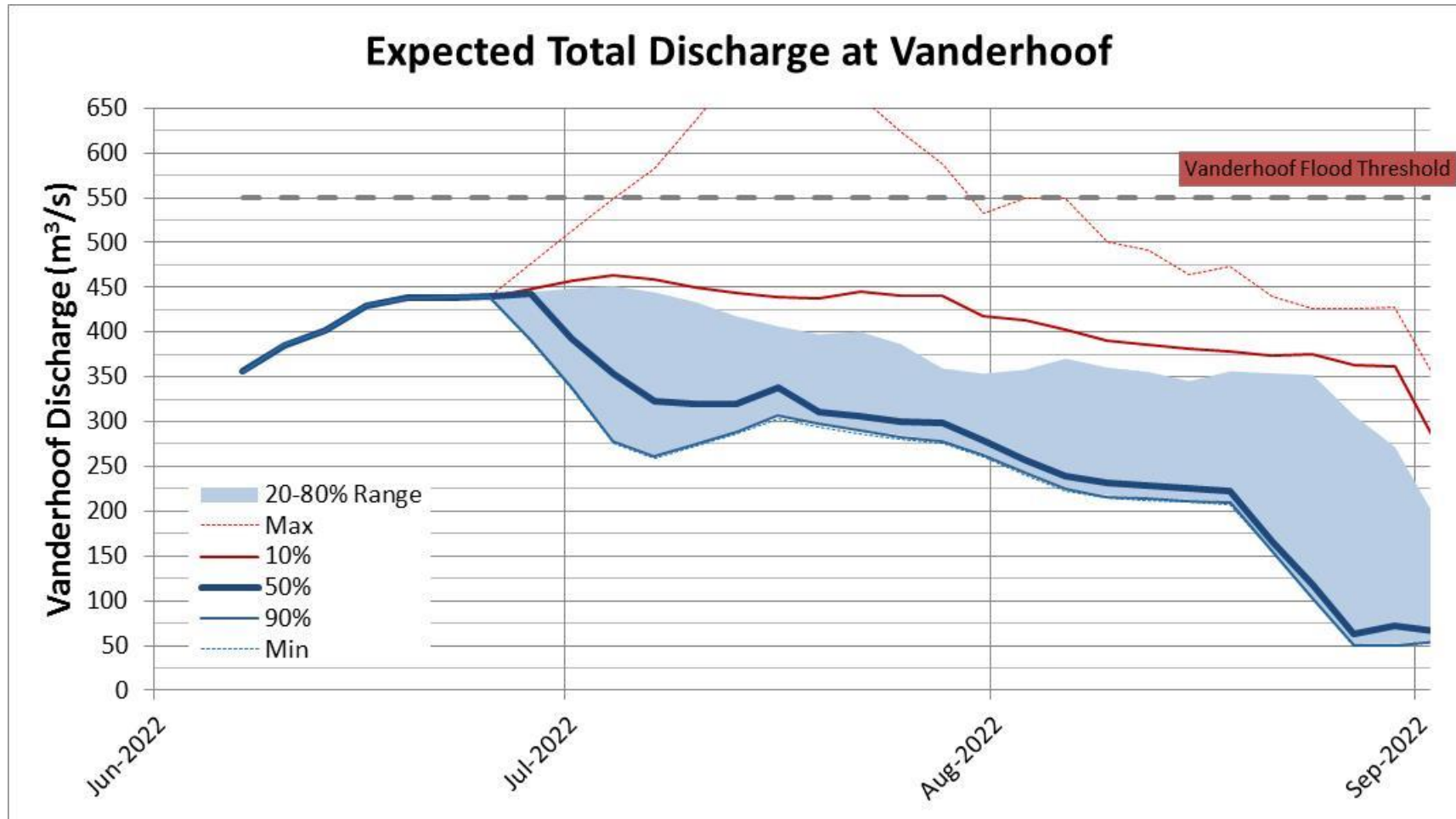


Spillway Management

- SLS discharge is currently at 280 m³/s
- Smelter Re-Start plan integrated
- Flood risk; Murray Cheslatta System 10-15% and Vanderhoof 5%

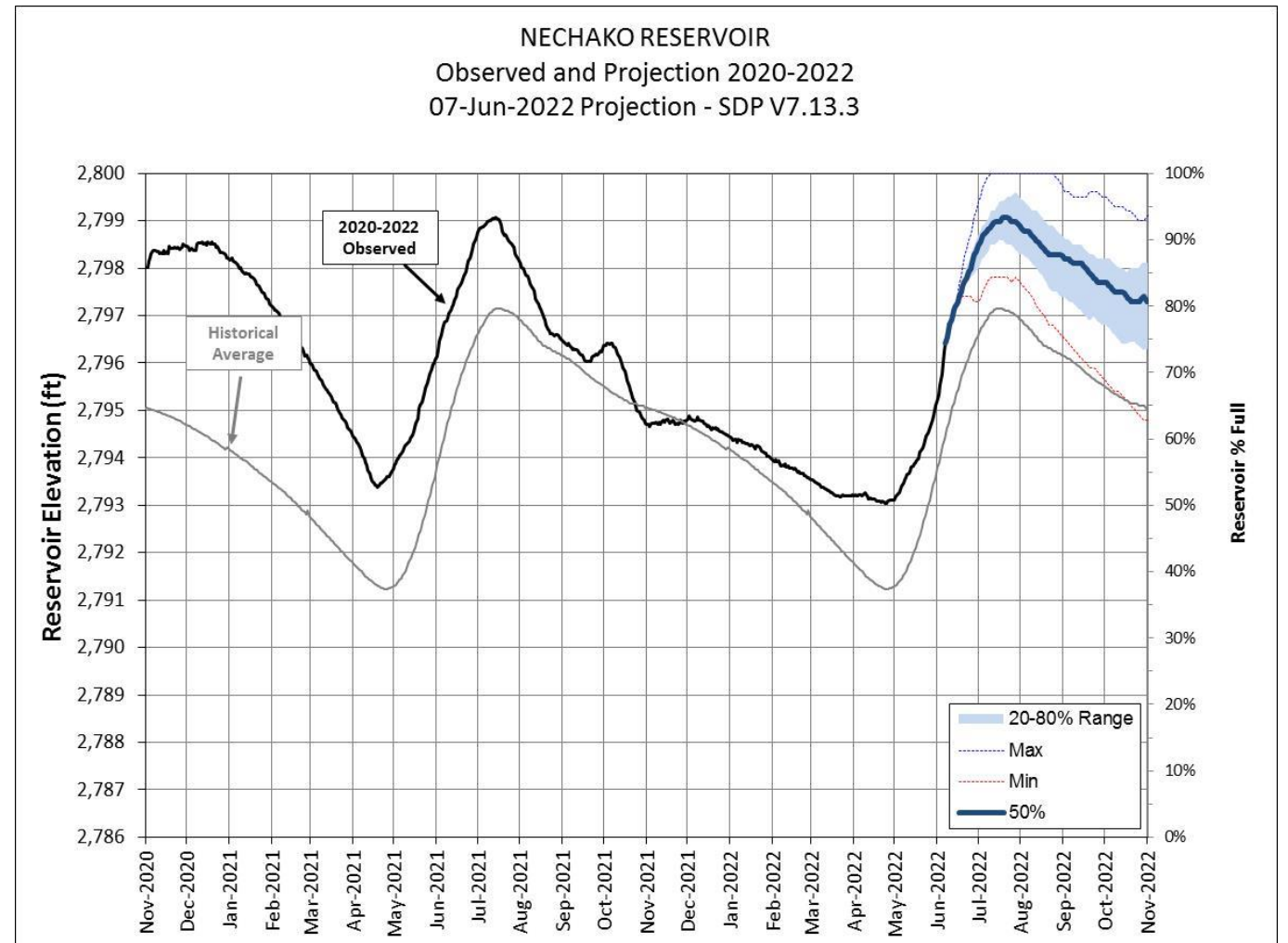


Forecast – Vanderhoof

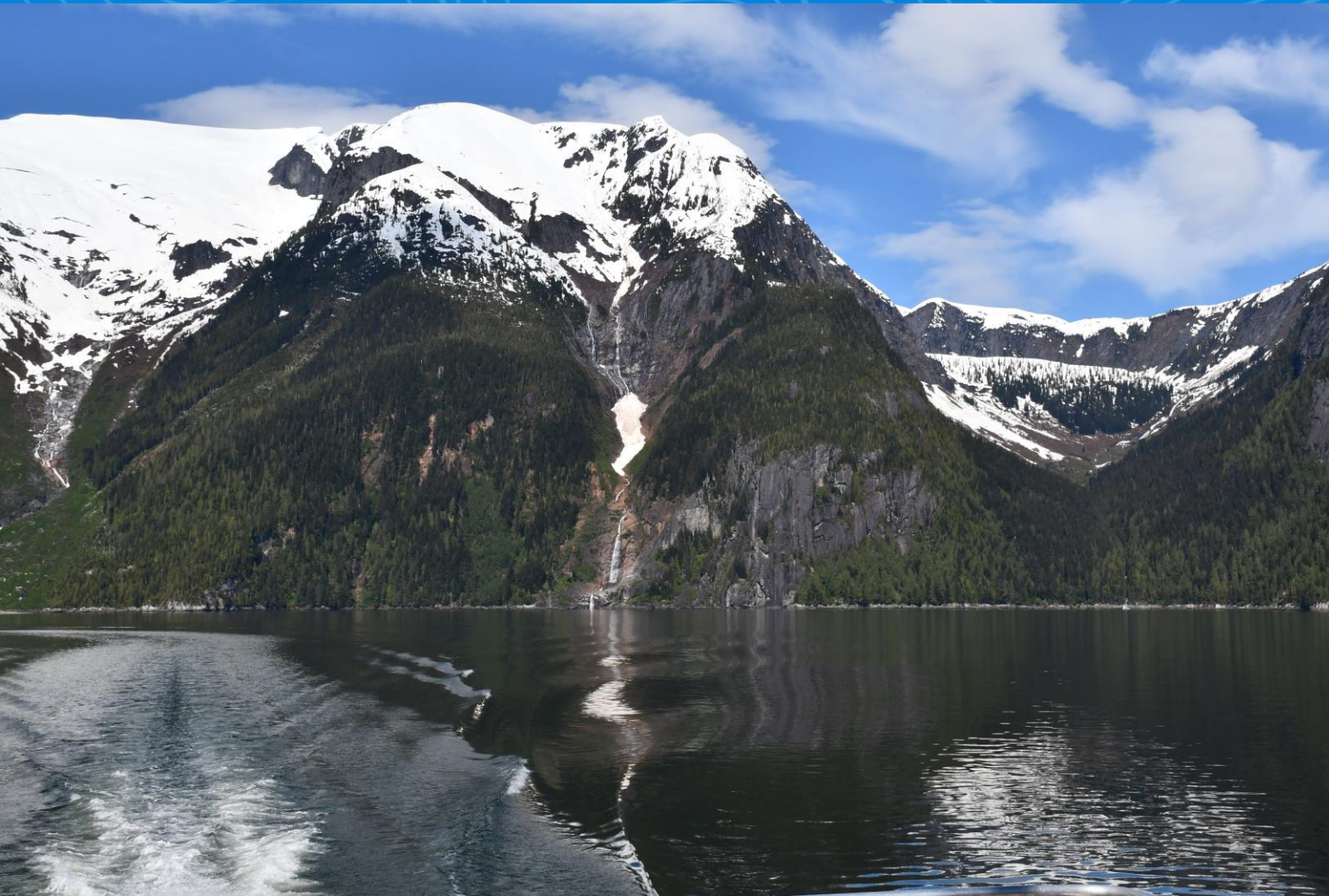


Reservoir Level Projection

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



Next Steps – Actions

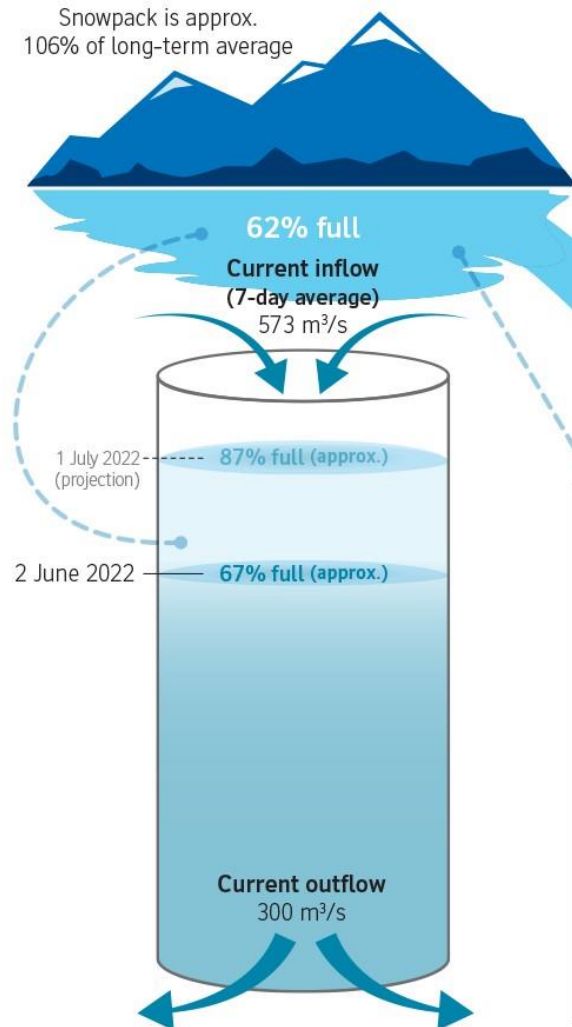


1. Model update and communications.
2. Monitoring work to learn from 2022 release
3. Continue to update on Smelter Re-Start
4. Confirm next meeting date – **15 June or 22 June**

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 - 2 June 2022

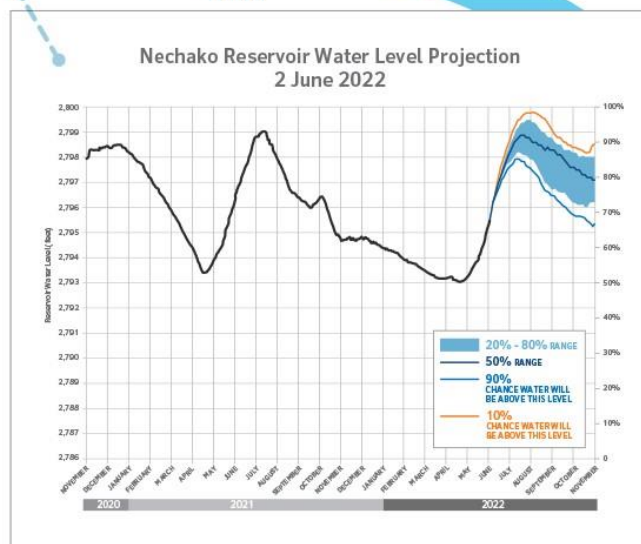
Nechako Reservoir
Snowpack is approx.
106% of long-term average



Nautley Watershed
Snowpack is approx.
0% of long-term average

Cheslatta Falls
178 m³/s

Nautley River
93 m³/s



Nechako Reservoir operations update

- Skins Lake Spillway discharge will be increased tomorrow to 275 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

Stuart River
Snowpack data
is not available

Vanderhoof
296 m³/s

Stuart River
177 m³/s

Prince George
484 m³/s

Fraser River

Feedback & Reflections

