



RioTinto

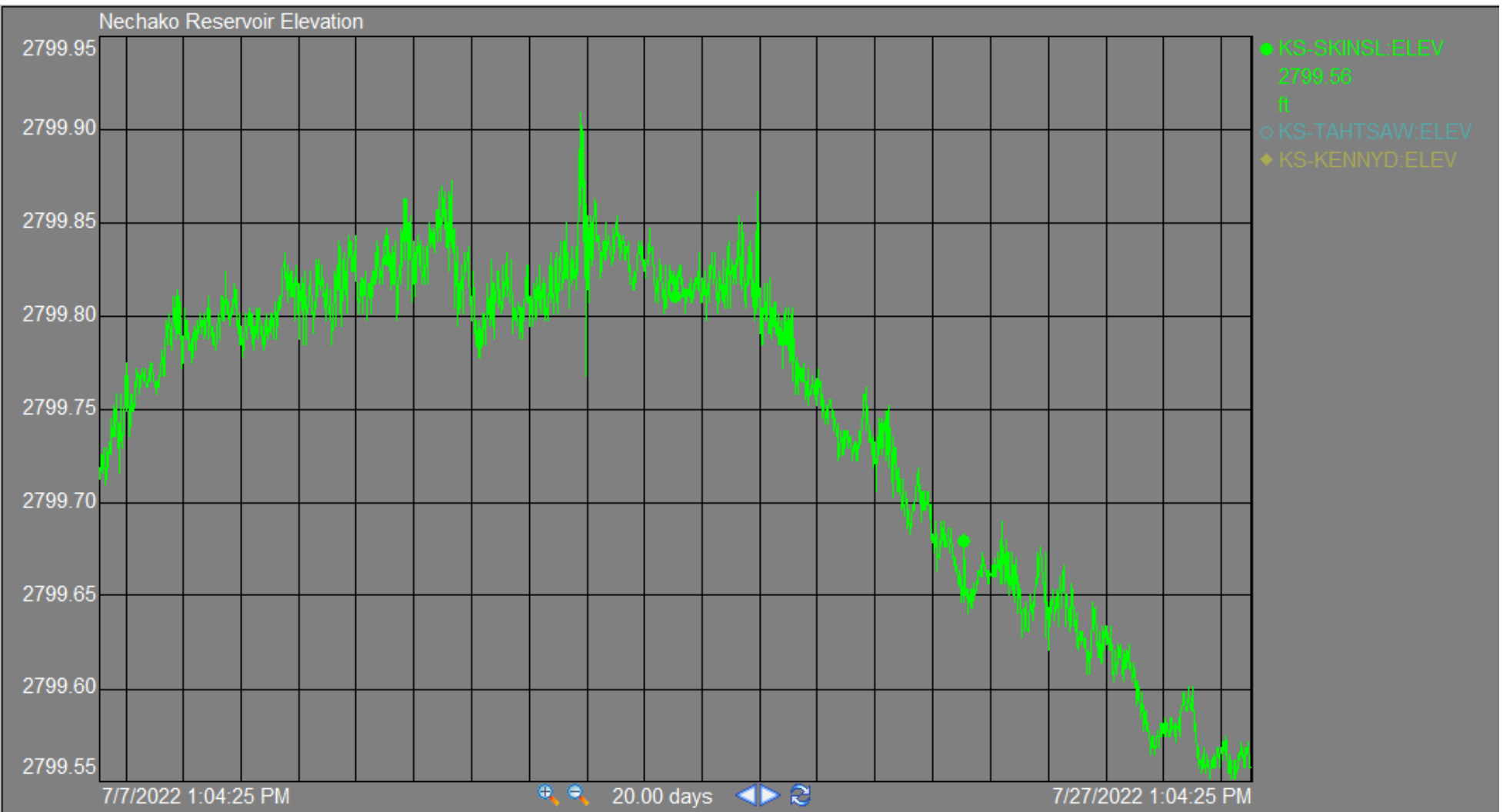
# Nechako Reservoir / River / Freshet Information Sharing – Community Leaders

27 July 2022

Prepared by Alec Mercier & Gabrielle Dallaire

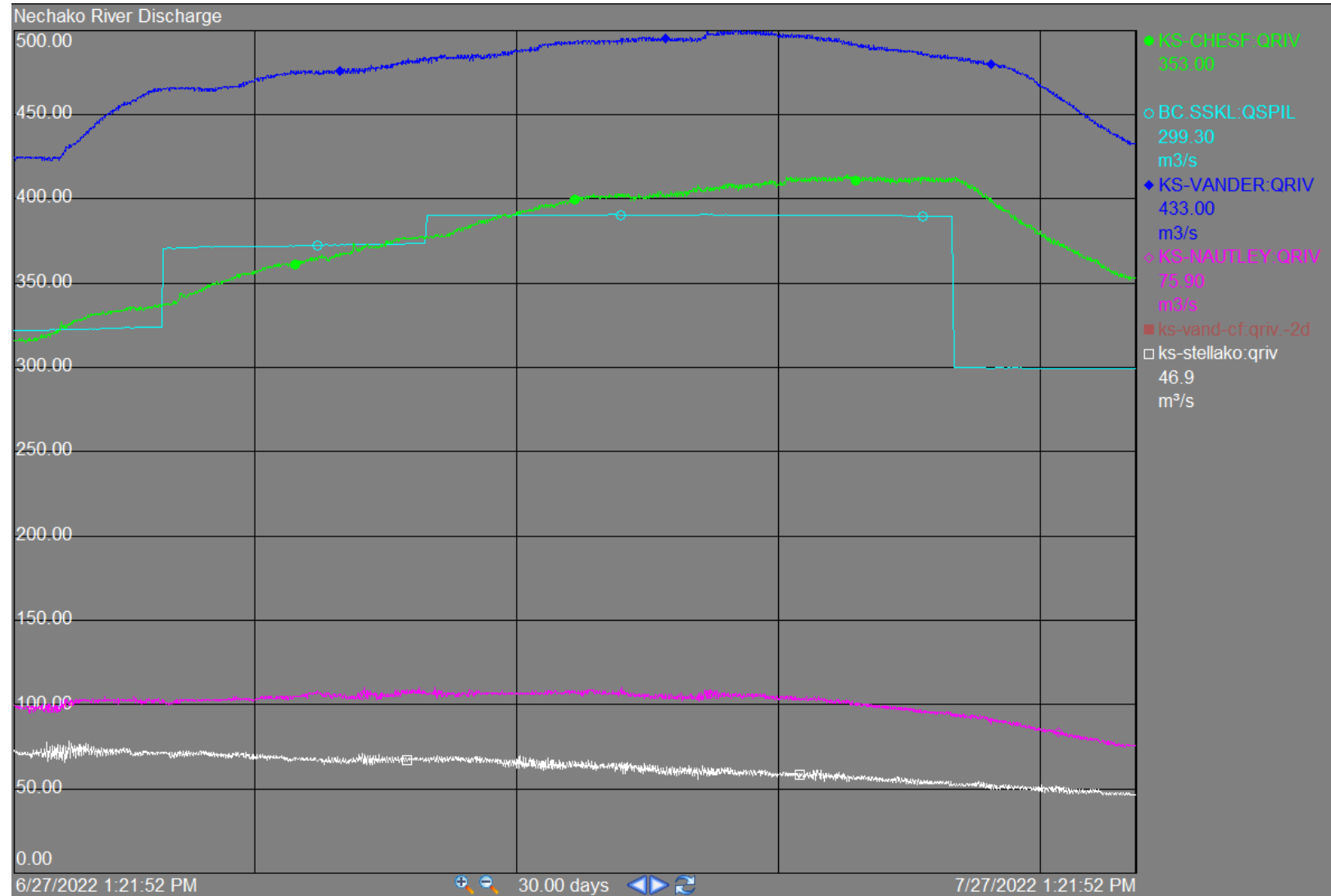
# Reservoir Elevation - Last 20 days

Current reservoir  
level: 2799.56 ft  
Maximum: 2800.0 ft



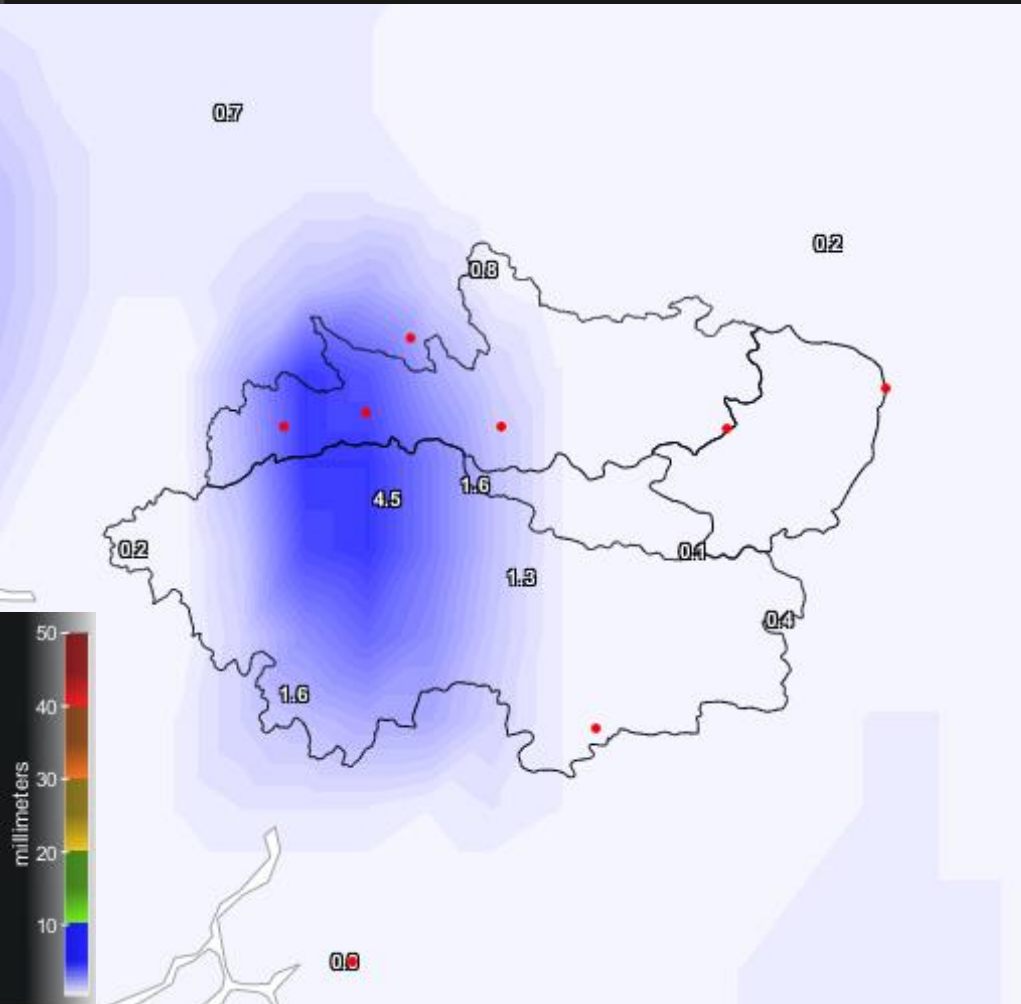
# Flows - Last 30 days

Skins Lake: 299 cms  
Vanderhoof: 433 cms  
Cheslatta Falls: 353 cms  
Nautley: 76 cms  
Stellako: 47 cms

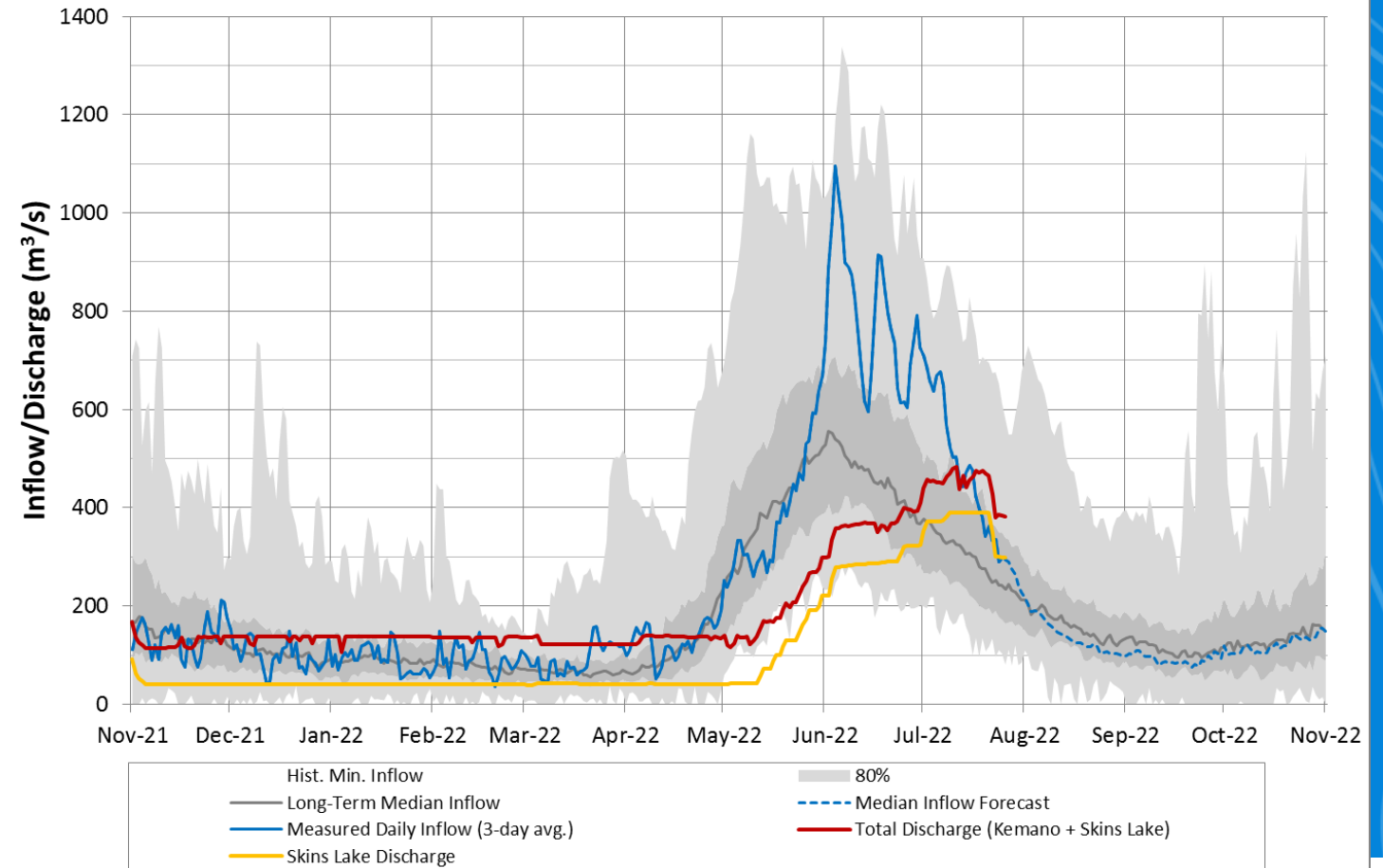


# Observed Precipitation, Inflows vs Historical

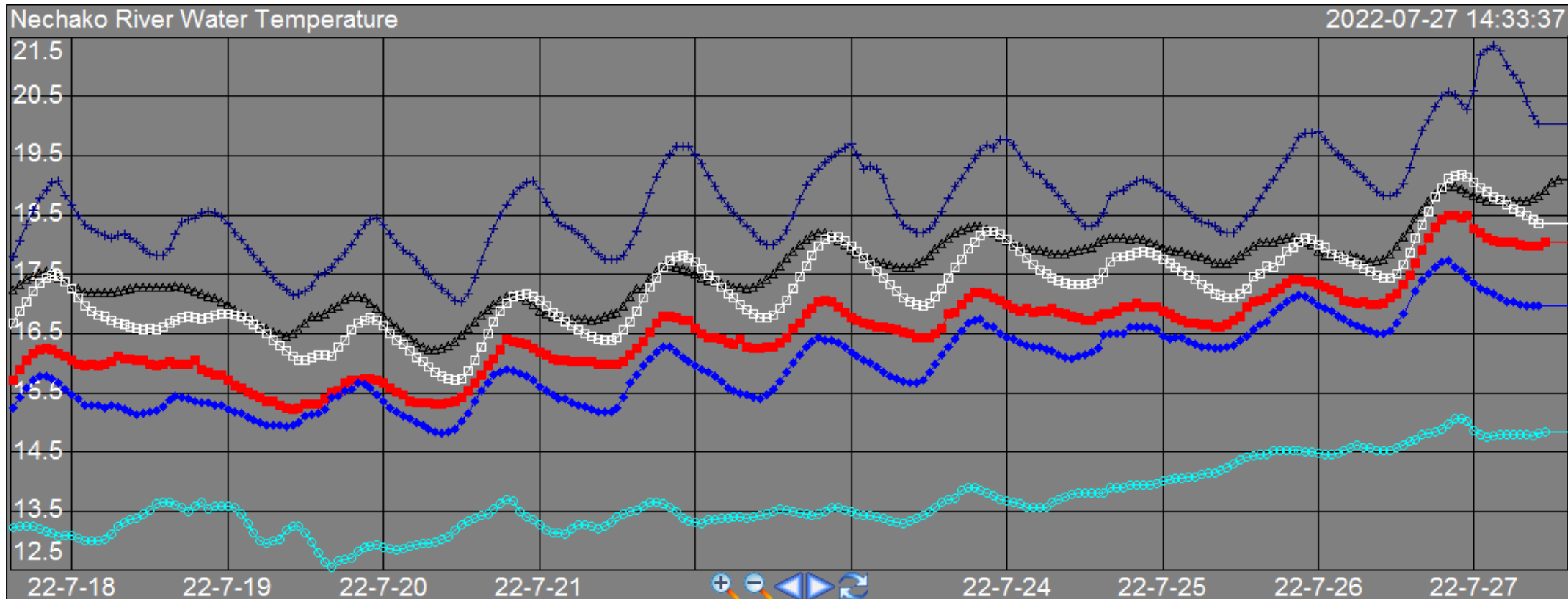
7-day cumulative rainfall



Nechako Reservoir Operation  
Observed Inflow and Discharge 2021-2022



# Observed Water Temperatures



## Current values

14.85

17.0

18.04

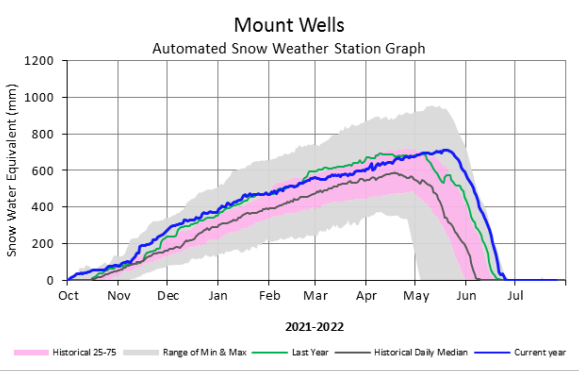
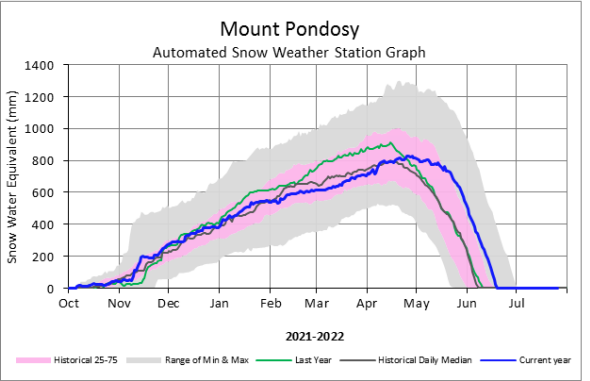
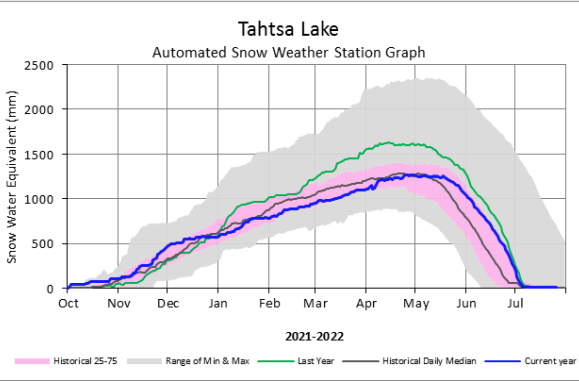
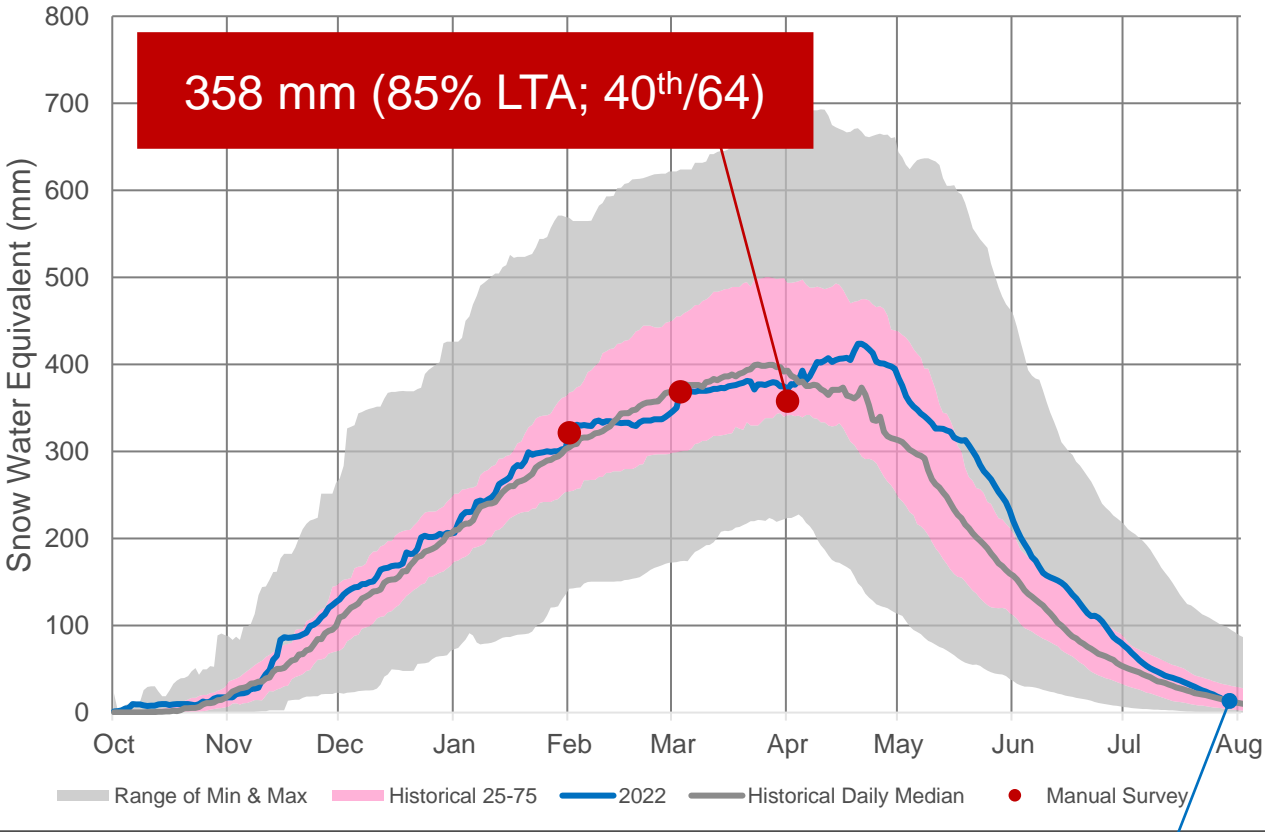
18.4

19.09

20.0

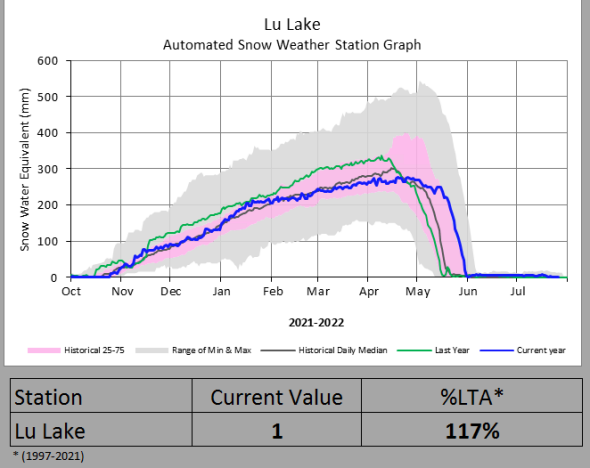
# Current Snowpack

## Nechako Reservoir Snowpack

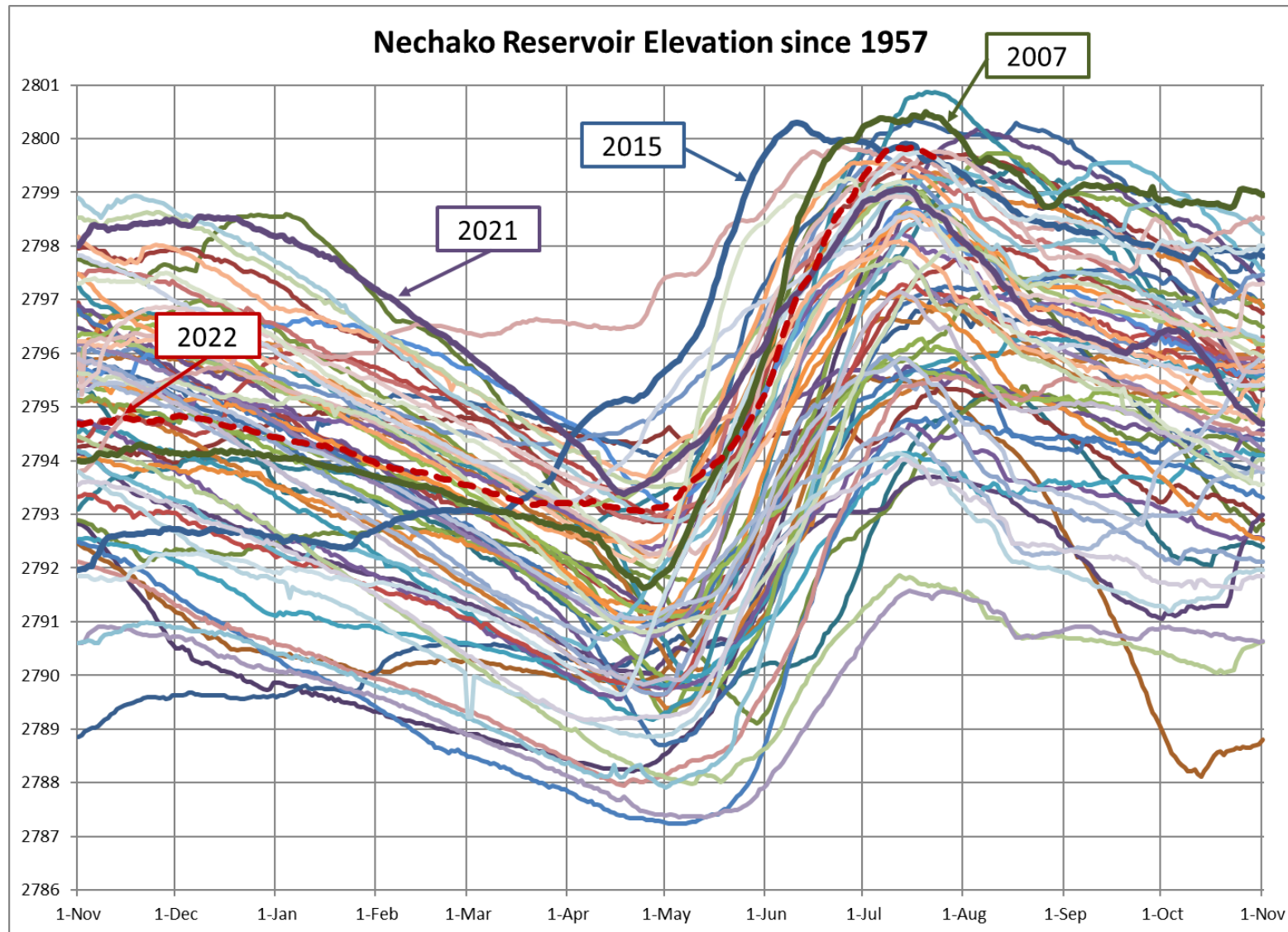


Station	Current Value (mm)	LTA* (mm)	%LTA*	Percentile Rank*
Tahtsa Lake	9	26	35%	85%
Mount Pondosy	0	1	0%	0%
Mount Wells	0	0	0%	0%

\* (1992-2021)

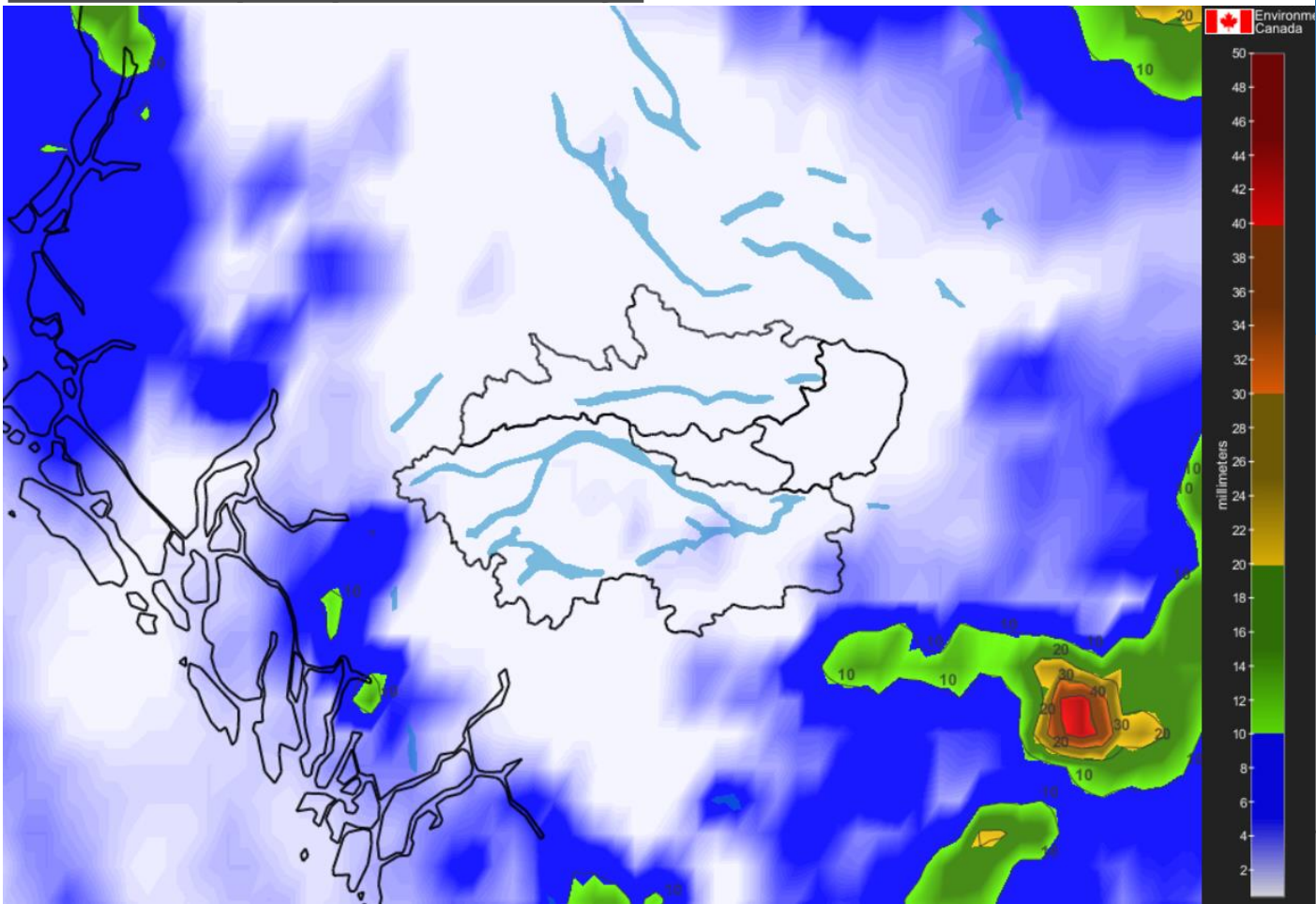


# Historical Reservoir Elevation



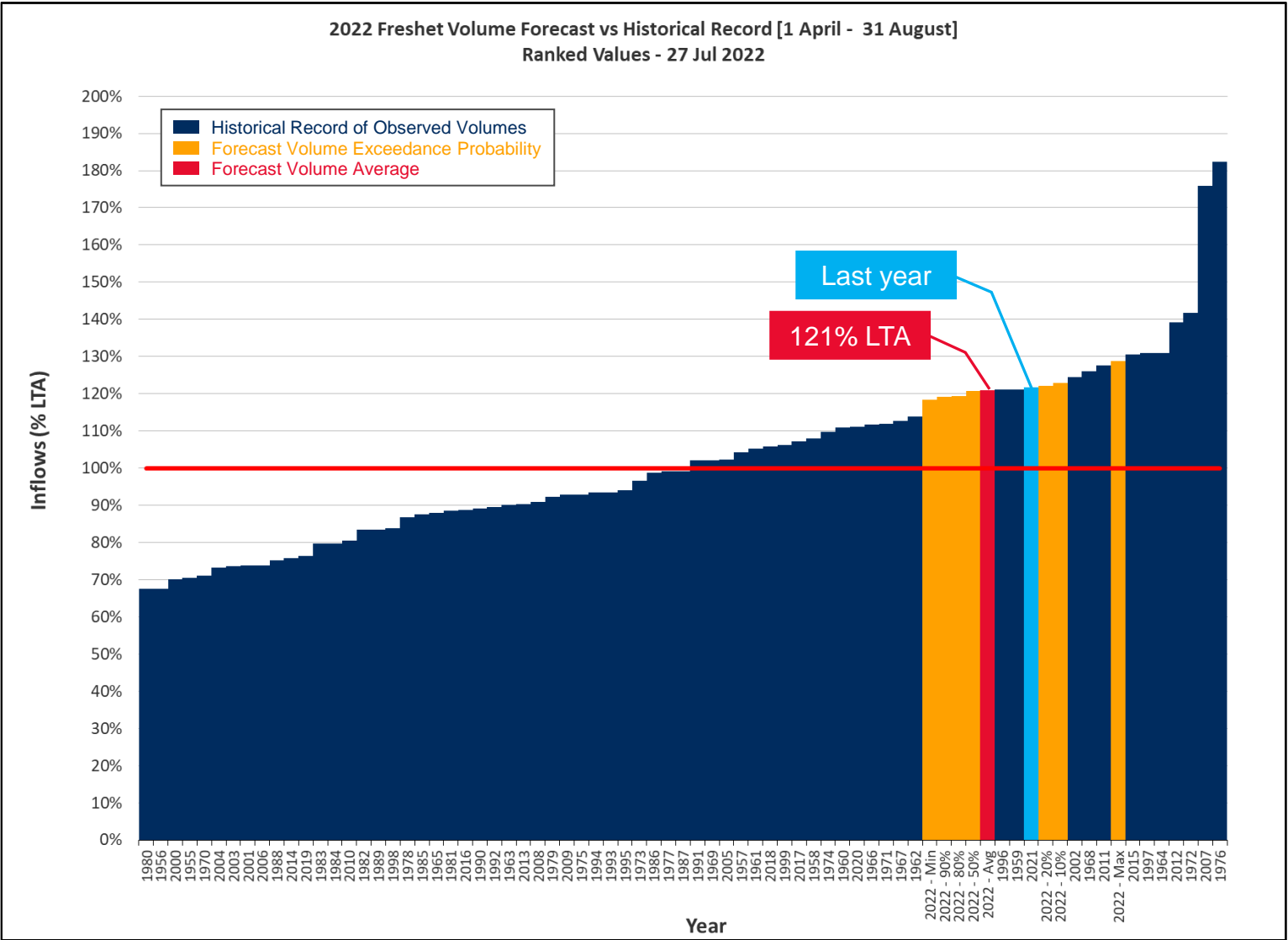
# 7 Day Weather Forecast

Cumulative precipitation – 7 days



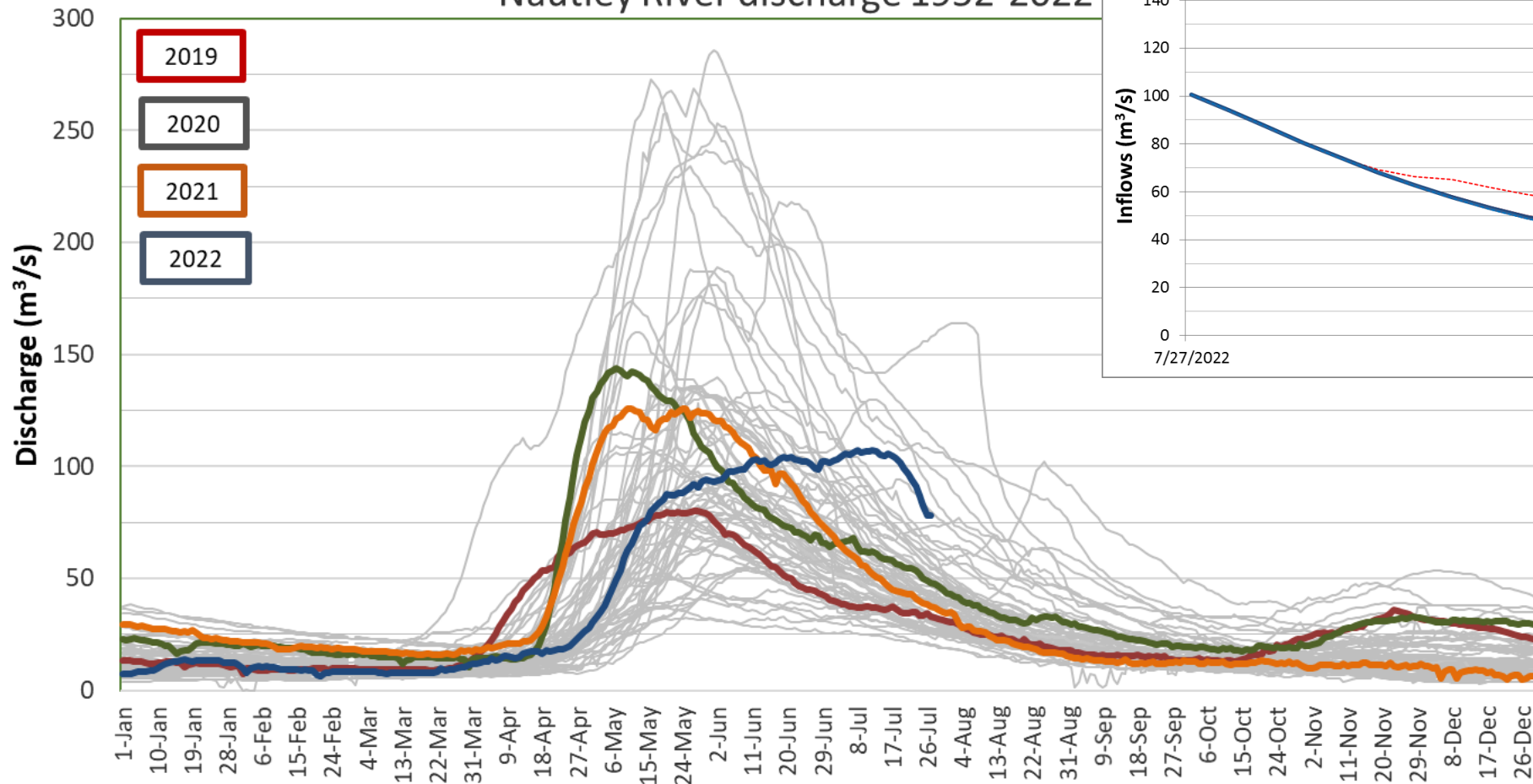
Next 7 Days							Burns Lake Weather							☀️🌧️🌙	
Thu	Fri	Sat	Sun	Mon	Tue	Wed									
07/28	07/29	07/30	07/31	08/01	08/02	08/03									
Sunny	Sunny	Mainly sunny	Chance of a shower	A mix of sun and clouds	Chance of a shower	A mix of sun and clouds									
☀️	☀️	☀️	☀️	☀️	☀️	☀️									
32°	29°	28°	26°	24°	22°	20°									
Feels like	33	31	32	30	24	20									
Night	15°	15°	15°	14°	12°	10°									
POP	0 %	10 %	20 %	40 %	30 %	30 %									
Wind (km/h)	9 w	11 w	10 w	12 w	12 w	10 NW									
Wind gust (km/h)	14	17	15	18	18	15									
Hrs Of Sun	15 h	14 h	12 h	8 h	8 h	6 h									
24 Hr Rain	-	-	-	~1 mm	-	<1 mm									

# Spring Freshet Inflow Forecast

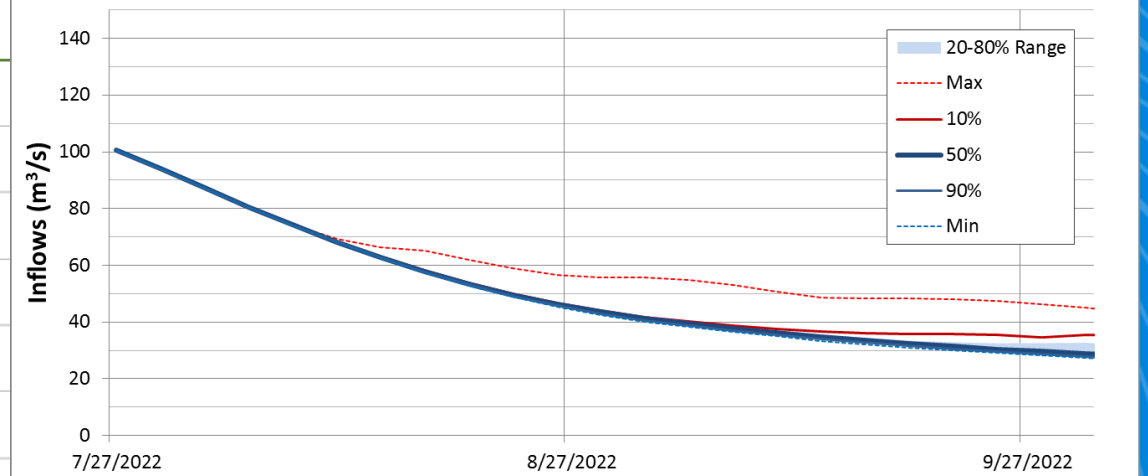


# Nautley River Flows, Forecast

Nautley River discharge 1952-2022



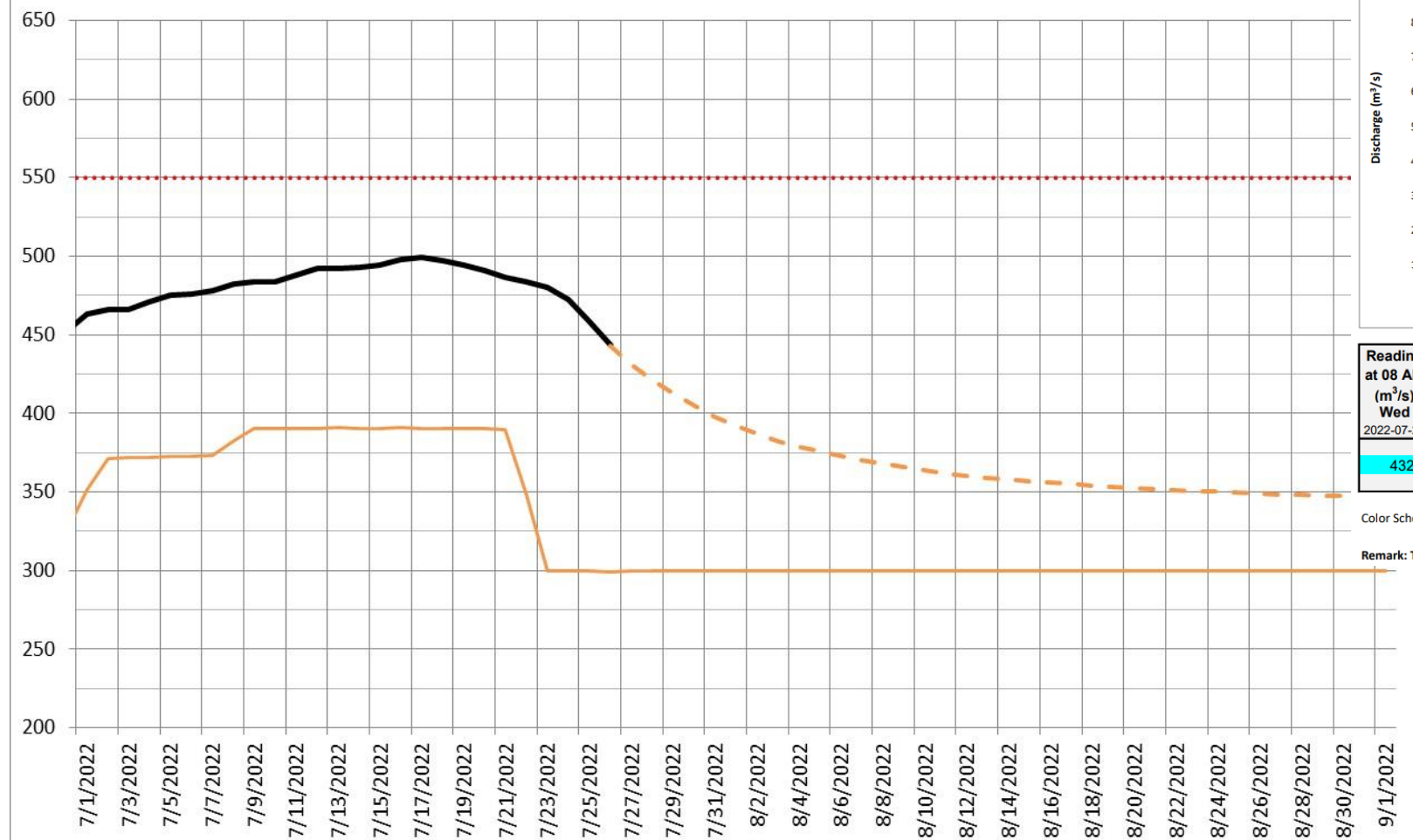
Expected Natural Inflow on Nautley/Nechako Rivers at Vanderhoof  
(excludes discharge from Nechako Reservoir)



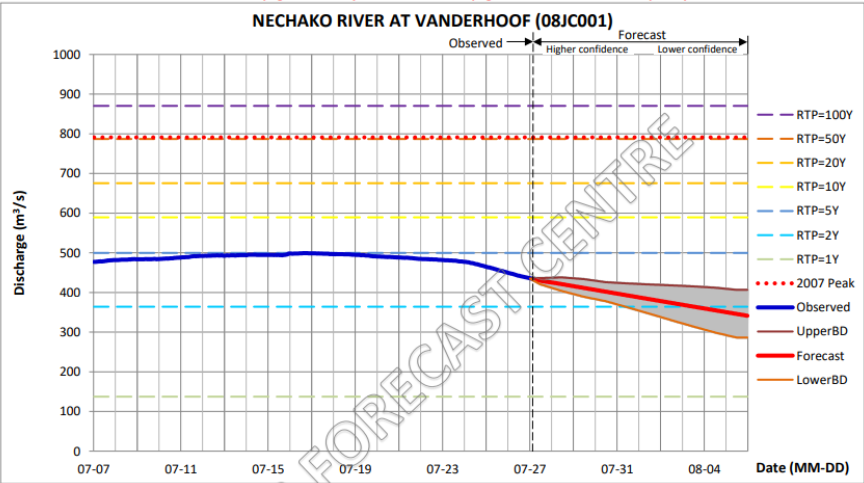
# Forecast – Vanderhoof

Projected Discharge at Vanderhoof

Observed Discharge 300 Corr.

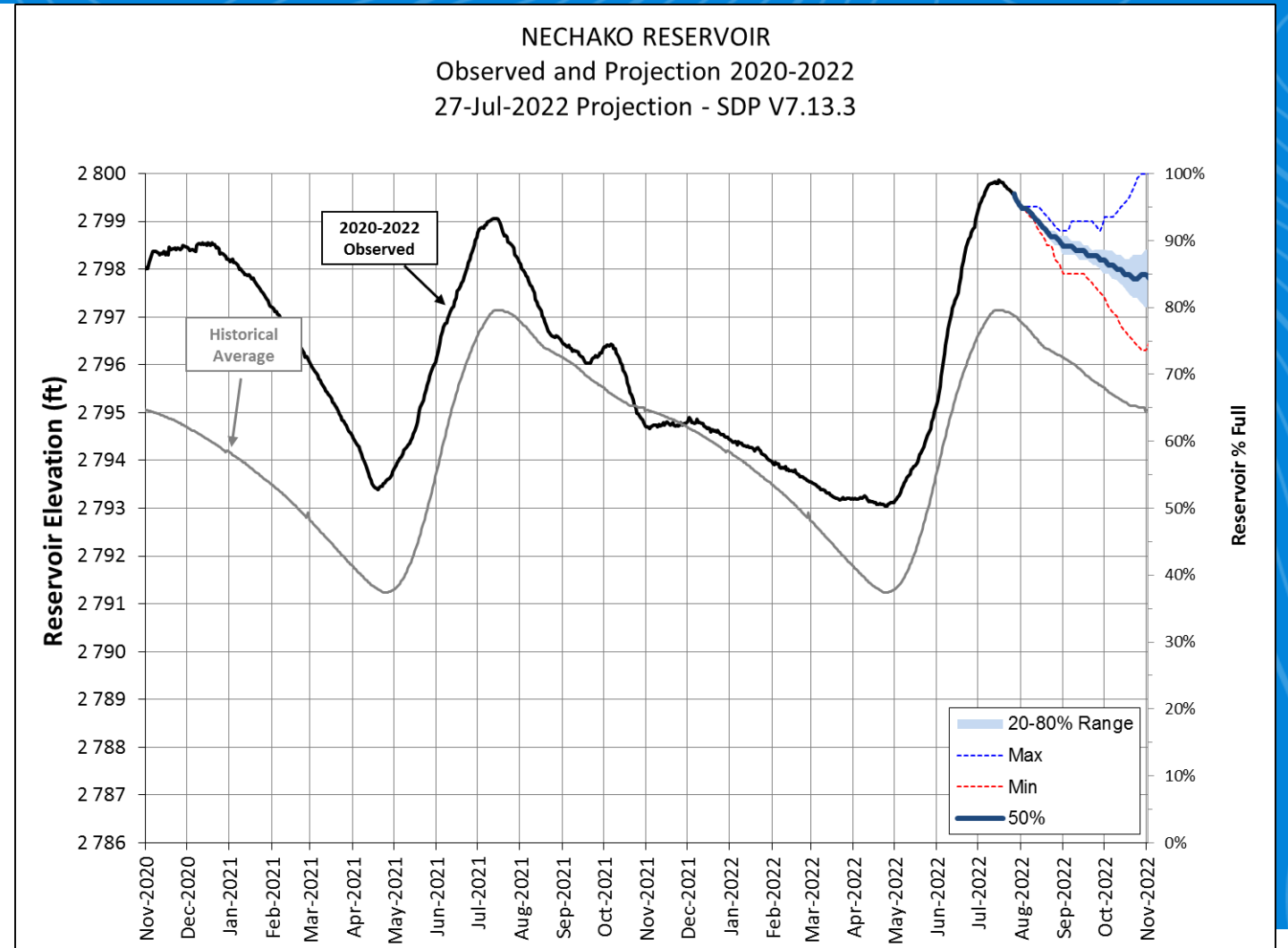


Note: Set "Check for newer version of stored pages" to "Every time I visit the webpage" and refresh browser frequently to view latest forecast.



Reading at 08 AM (m³/s)	Forecast Daily Discharge (m³/s): AVERAGE									
	UPPER BOUND									
	LOWER BOUND									
2022-07-27 Wed	2022-07-27 Wed	2022-07-28 Thu	2022-07-28 Thu	2022-07-29 Fri	2022-07-30 Sat	2022-07-31 Sun	2022-08-01 Mon	2022-08-02 Tue	2022-08-03 Wed	2022-08-04 Thu
432.0	436.2	437.8	433.7	425.9	422.8	420.1	417.9	415.3	412.0	406.6
	428.1	420.7	411.3	401.9	392.5	383.1	373.7	364.4	355.1	345.8
	420.7	403.7	389.3	378.3	362.7	346.8	330.5	314.6	299.4	286.4
Color Scheme for Return Periods:										
RTP=1Y 137.4 RTP=2Y 364.1 RTP=5Y 499.7 RTP=10Y 589.4 RTP=20Y 675.5 RTP=50Y 786.9 RTP=100Y 870.4 2007 Peak 791.0 (m³/s)										
Remark: This station is labeled as "regulated", and the forecast is the sum of natural flows and extended regulated flow from 08JA017.										

# Reservoir Level Projection



# Next Steps – Actions

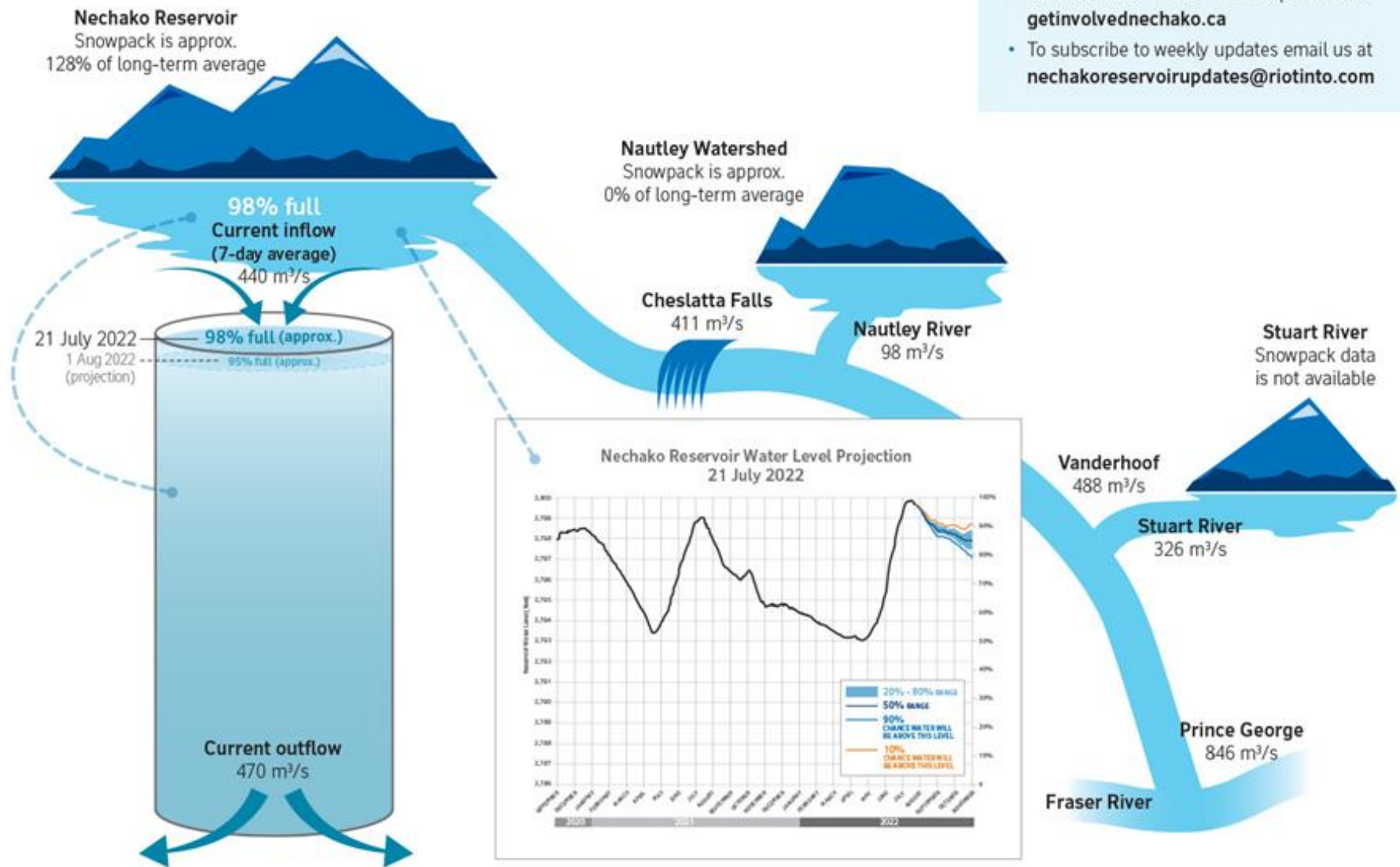


1. Model update and communications.
2. Monitoring work to learn from 2022 release
3. Continue to update on Smelter Re-Start
4. Confirm next meeting date – **03 August**

***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 - 21 July 2022



## Nechako Reservoir operations update

- Skins Lake Spillway discharge is being reduced from 390 m<sup>3</sup>/sec to 300 m<sup>3</sup>/sec on 22 July.
- For real time information and updates visit [getinvolvednechako.ca](https://getinvolvednechako.ca)
- To subscribe to weekly updates email us at [nechakoreservoirupdates@riotinto.com](mailto:nechakoreservoirupdates@riotinto.com)

# Feedback & Reflections

