

The background of the slide is a photograph of a steep, forested hillside. The hill is covered in a dense forest of tall, thin evergreen trees. At the base of the hill, there is a rocky shoreline with some exposed rock faces. In the foreground, there is a body of water, likely a reservoir or river, with a dark blue surface and some small whitecaps. The sky is visible at the top right, showing a clear blue color with some light clouds.

RioTinto

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

29 June 2022

Prepared by Simon Matte

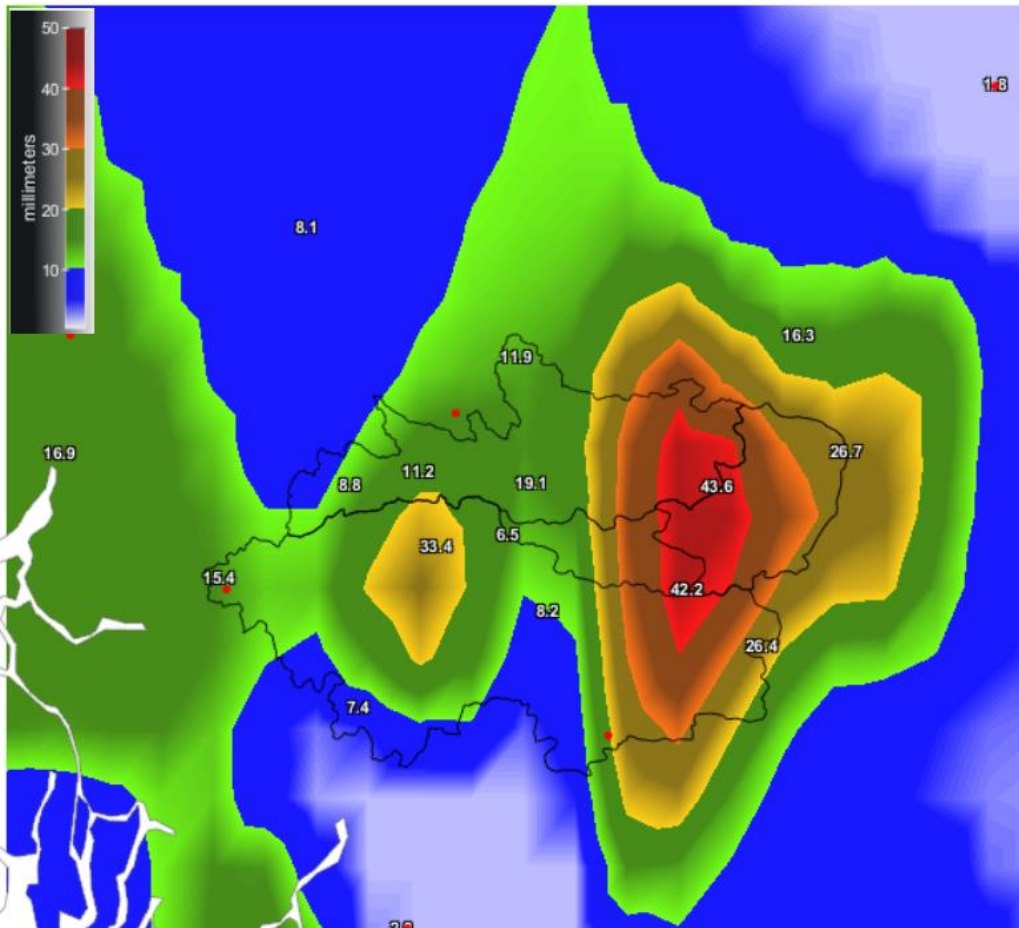
# Key Focus

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

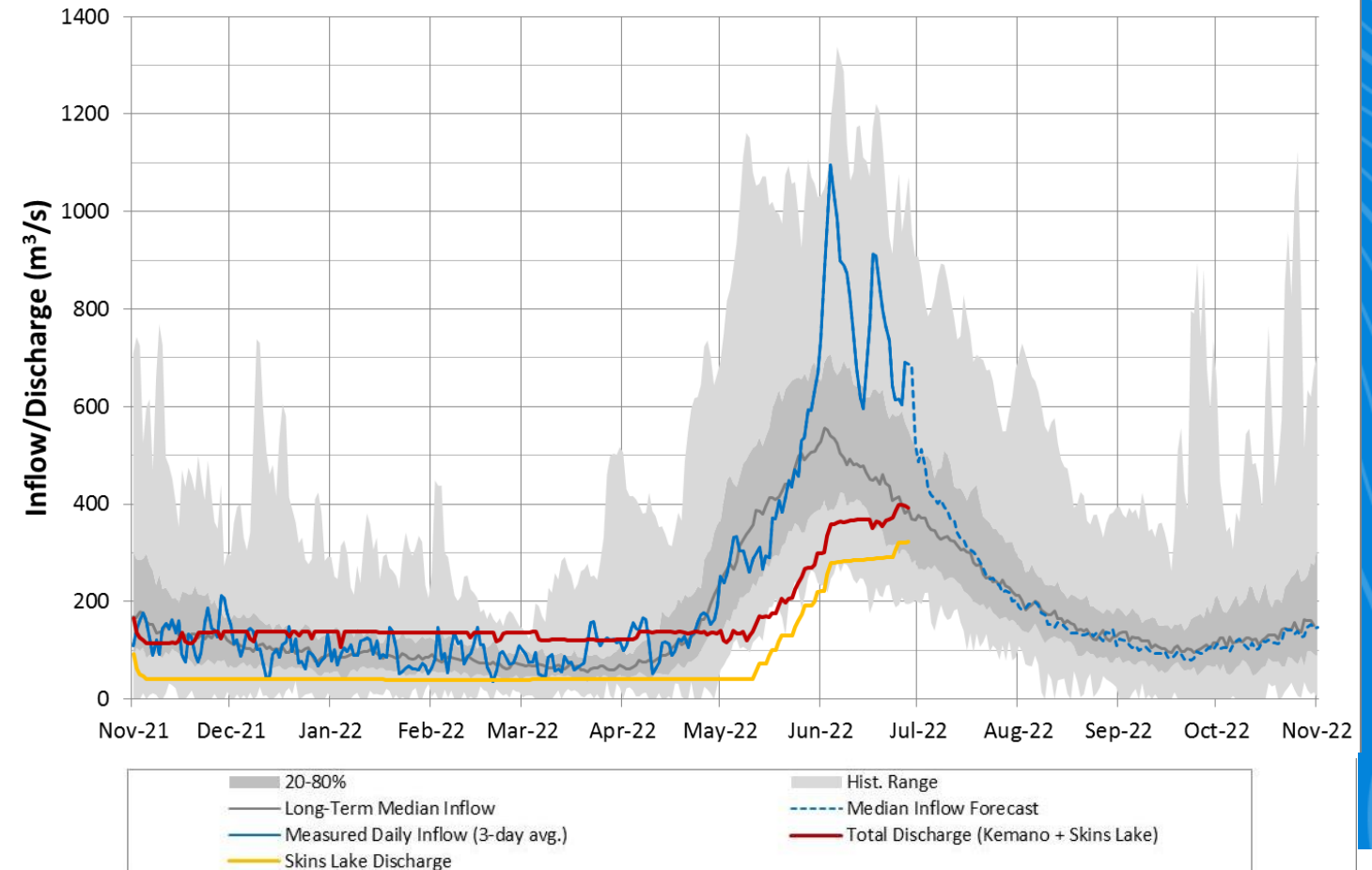


# Observed Precipitation, Inflows vs Historical

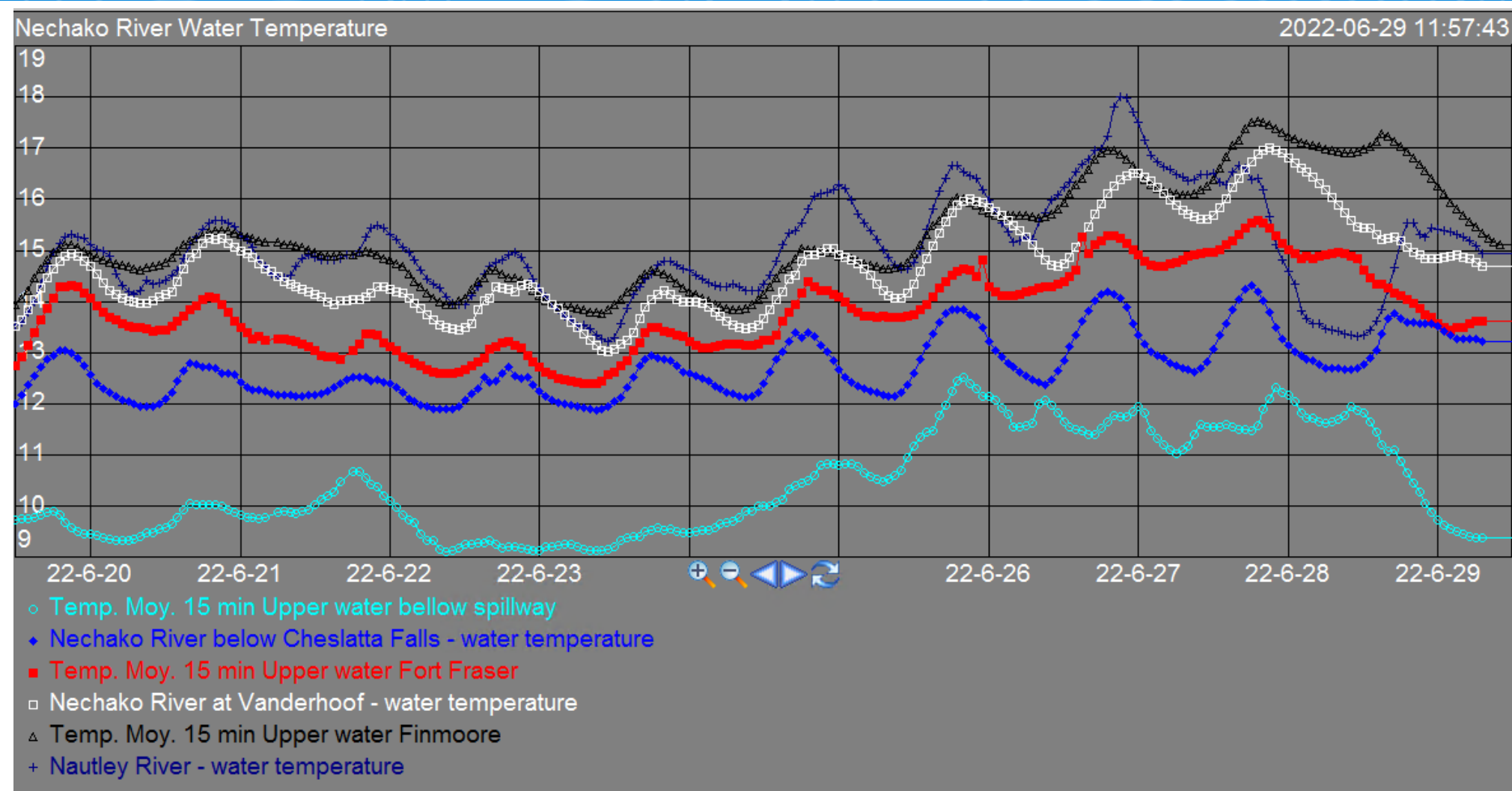
7-day cumulative rainfall



Nechako Reservoir Operation  
Observed Inflow and Discharge 2021-2022

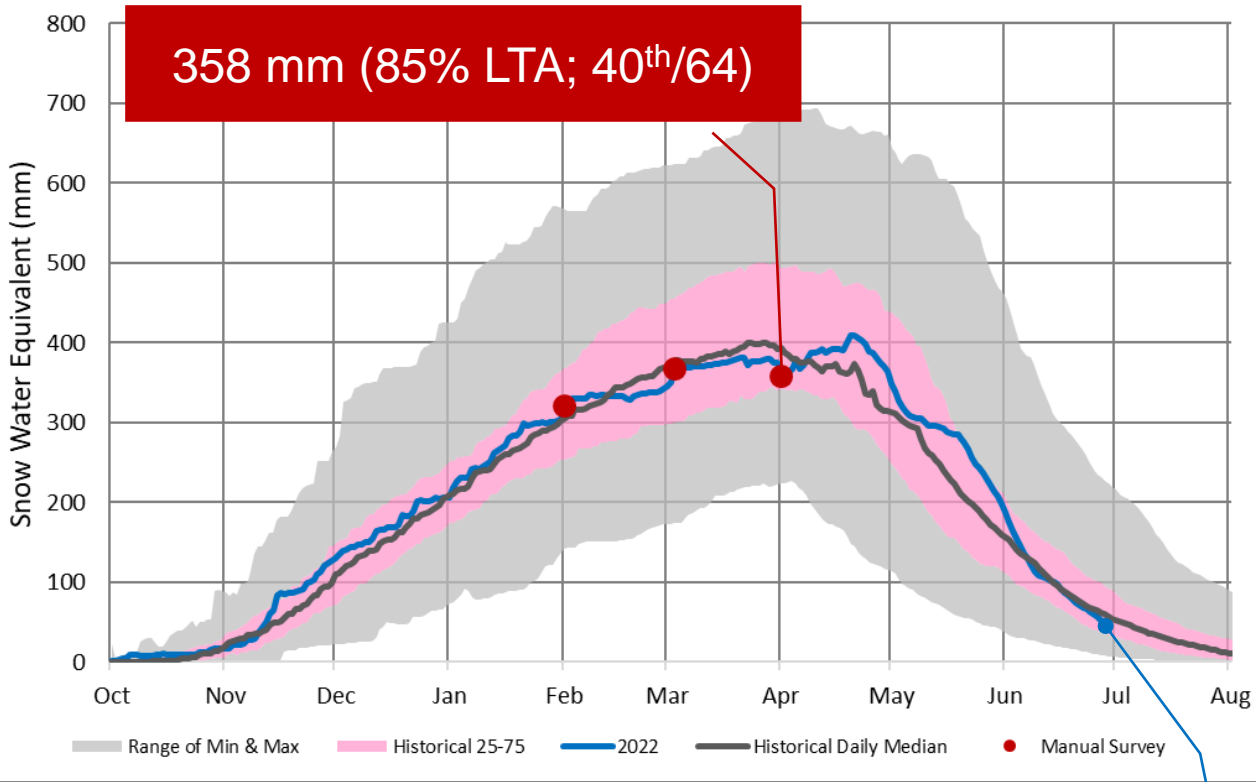


# Observed Water Temperatures

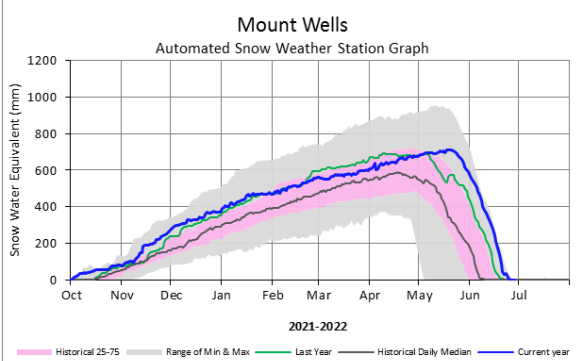
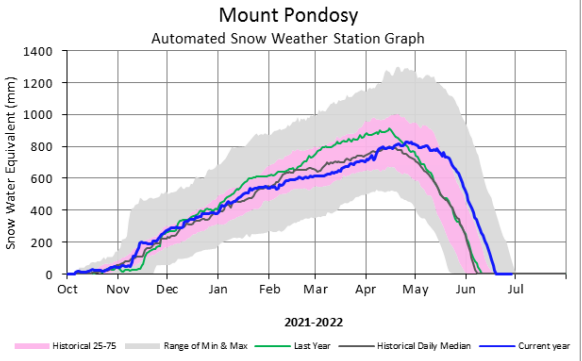
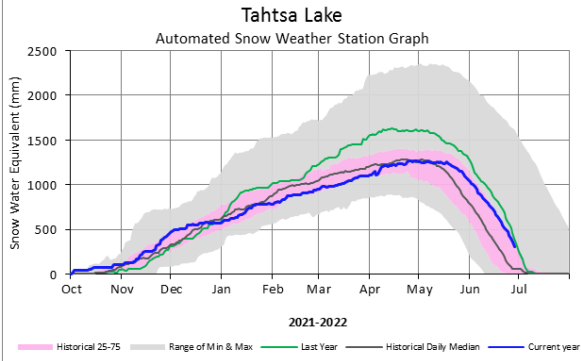


# Current Snowpack

Nechako Reservoir Snowpack

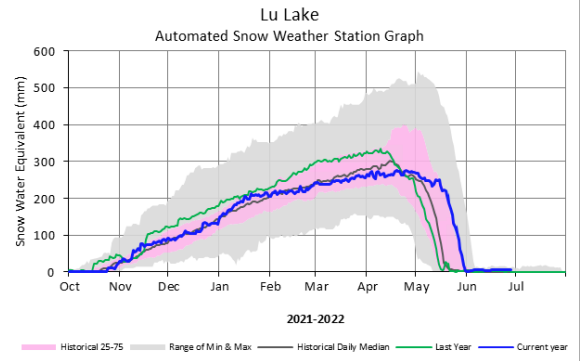


47 mm (91% LTA; 37<sup>th</sup>/64)



Station	Current Value (mm)	LTA* (mm)	%LTA*	Percentile Rank*
Tahtsa Lake	303	263	115%	68%
Mount Pondosy	0	7	0%	0%
Mount Wells	0	1	0%	0%

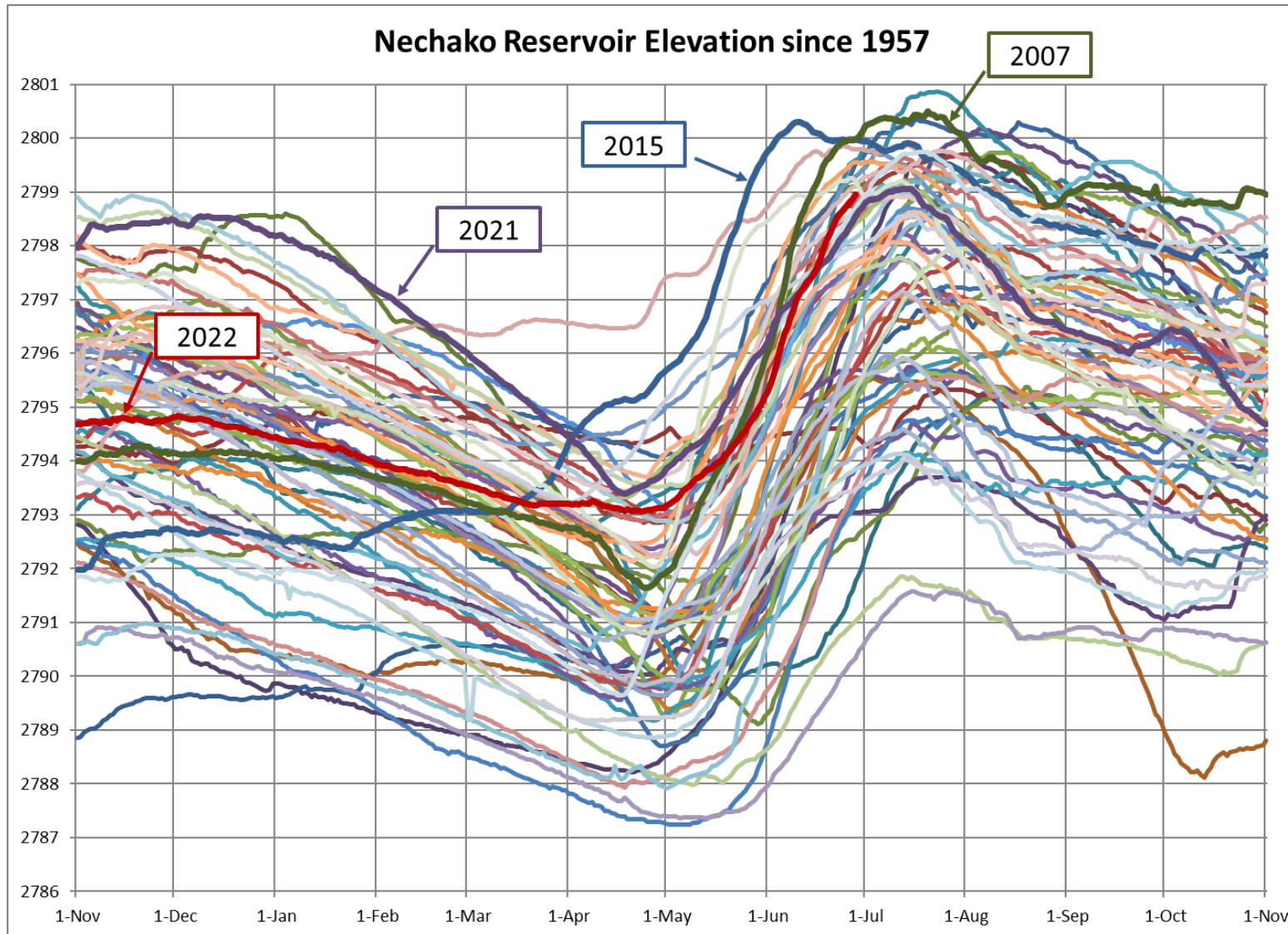
\* (1992-2021)



Station	Current Value	%LTA*
Lu Lake	0	0%

\* (1997-2021)

# Historical Reservoir Elevation

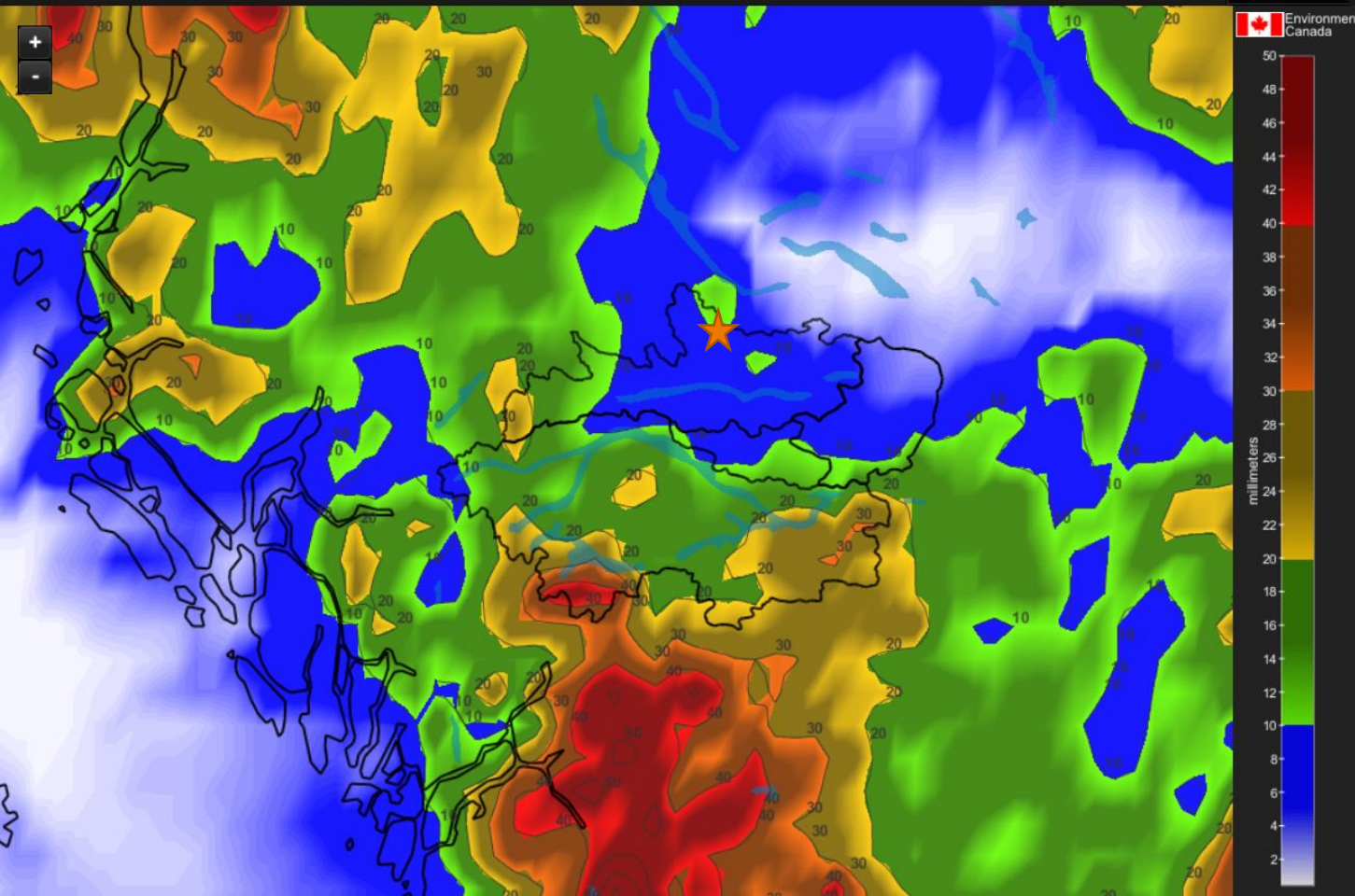


# 7 Day Weather Forecast

Maps

Cumulative rainfall 7 days Reload

Back to Maps

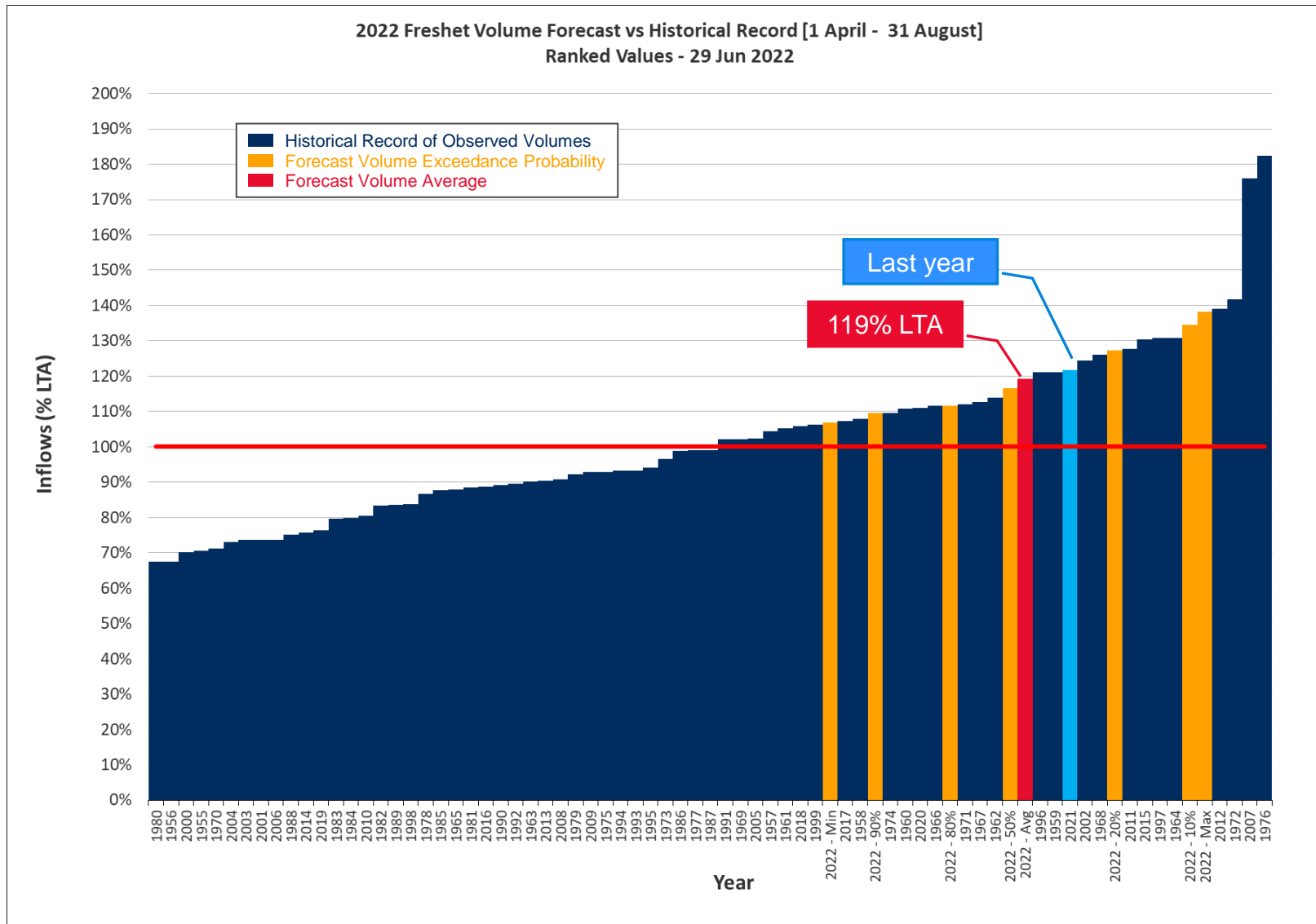


Next 7 Days



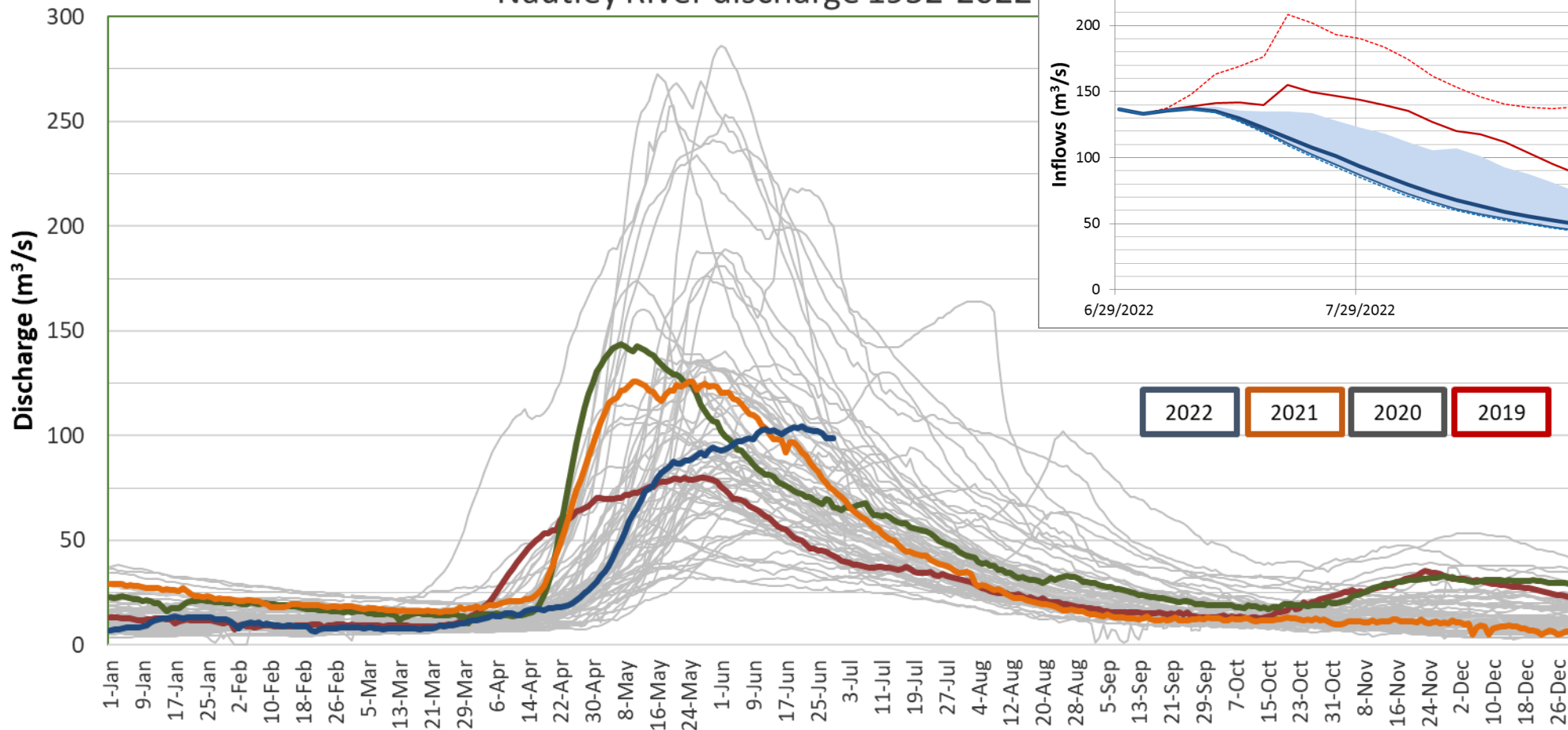
	Thu 06/30 Risk of a thunderstorm	Fri 07/01 Risk of a thunderstorm	Sat 07/02 A mix of sun and clouds	Sun 07/03 Mainly sunny	Mon 07/04 Rain	Tue 07/05 Cloudy with showers	Wed 07/06 Cloudy with sunny breaks
	24°	23°	23°	25°	18°	19°	20°
Feels like	26	26	24	25	21	19	20
Night	14°	13°	10°	14°	10°	10°	10°
POP	40 %	40 %	30 %	20 %	70 %	40 %	30 %
Wind (km/h)	6 W	8 NW	7 NE	10 NE	10 NE	9 W	9 W
Wind gust (km/h)	9	12	11	15	15	14	14
Hrs Of Sun	13 h	9 h	7 h	12 h	2 h	4 h	3 h
24 Hr Rain	<1 mm	1-3 mm	-	~1 mm	~15 mm	~1 mm	-

# Spring Freshet Inflow Forecast

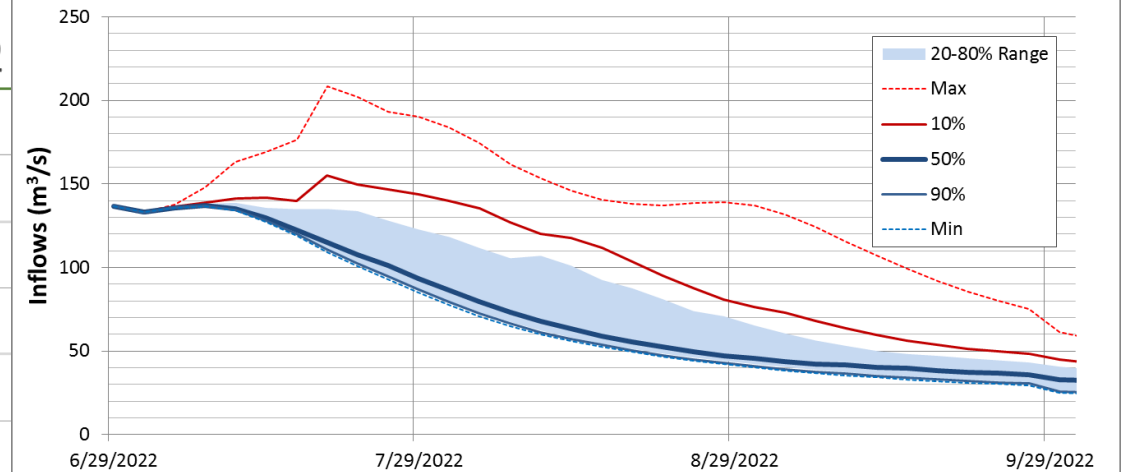


# Nautley River Flows, Forecast

Nautley River discharge 1952-2022

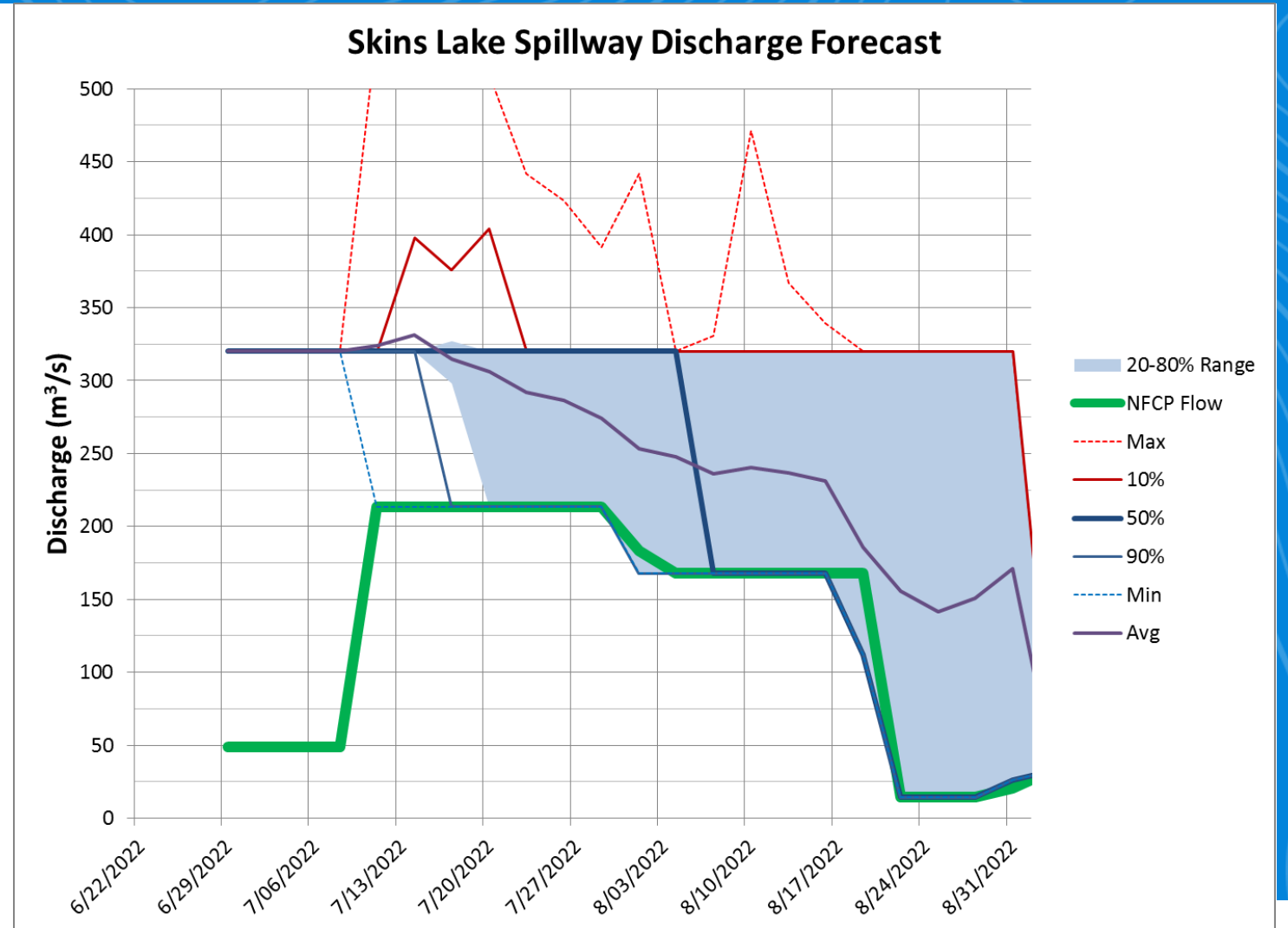


Expected Natural Inflow on Nautley/Nechako Rivers at Vanderhoof  
(excludes discharge from Nechako Reservoir)

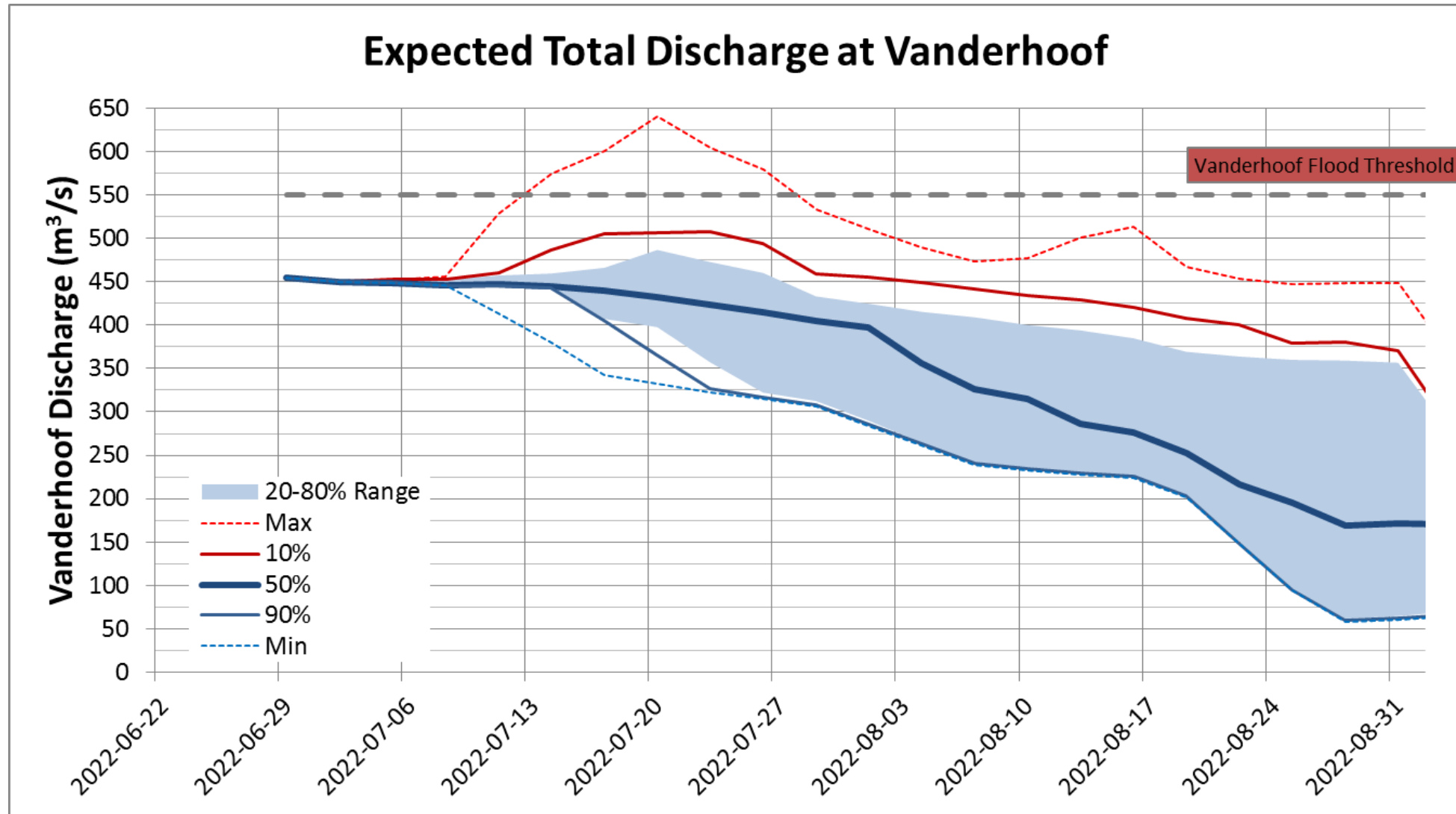


# Spillway Management

- SLS discharge is currently at 320 m<sup>3</sup>/s
- Smelter Re-Start plan integrated
- Flood risk; Murray Cheslatta System 20-25% and Vanderhoof 10-15%

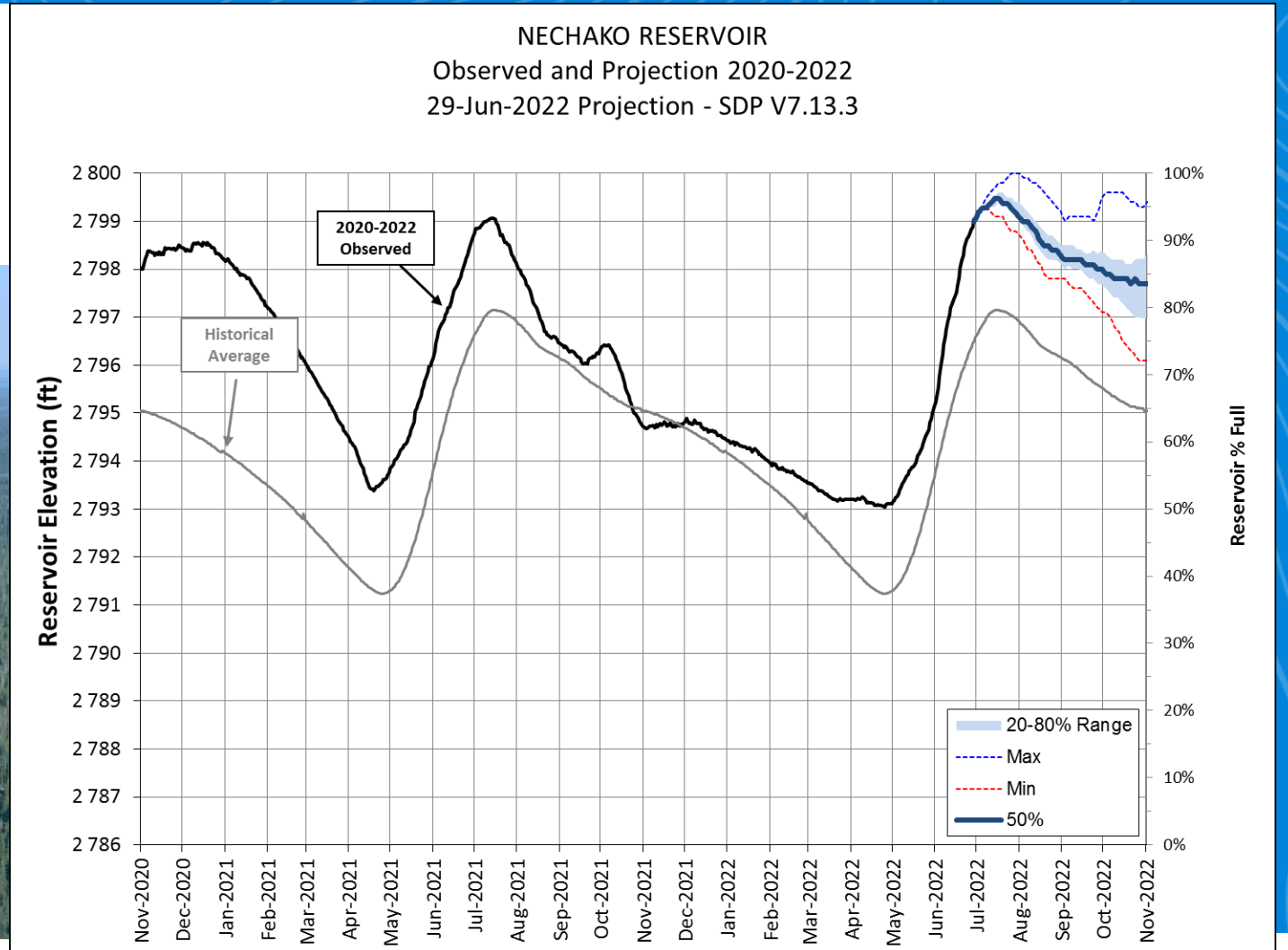


# Forecast – Vanderhoof



# 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

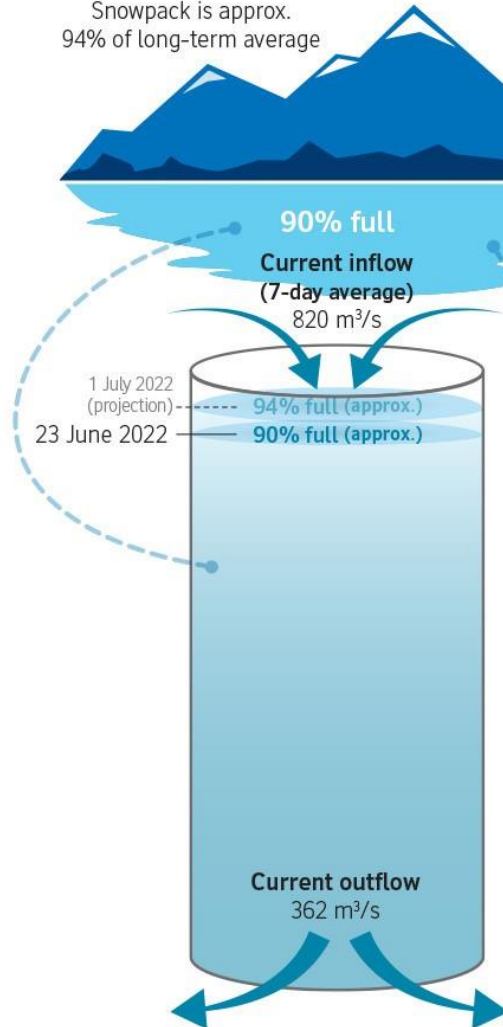


1. Model update and communications.
2. Monitoring work to learn from 2022 release
3. Continue to update on Smelter Re-Start
4. Confirm next meeting date – **06 July**

*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 - 24 June 2022

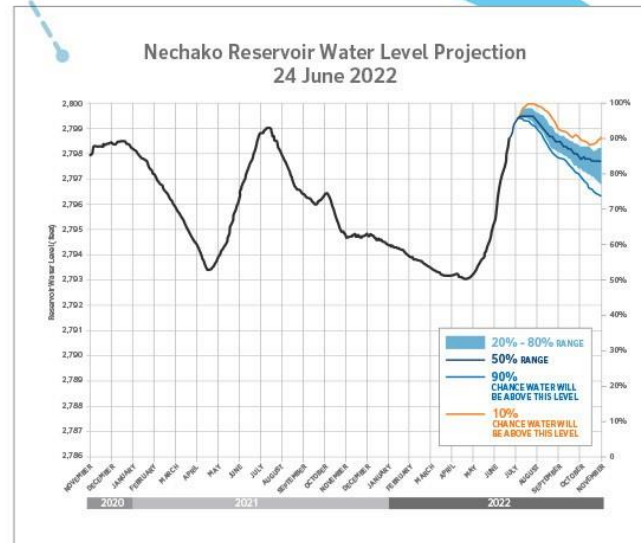
**Nechako Reservoir**  
Snowpack is approx.  
94% of long-term average



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

**Cheslatta Falls**  
303 m³/s

**Nautley River**  
103 m³/s



## Nechako Reservoir operations update

- Skins Lake Spillway is scheduled to be increased to 320 m³/s later today, where it will be maintained for at least a week.
- 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)

**Stuart River**  
Snowpack data  
is not available

**Vanderhoof**  
439 m³/s

**Stuart River**  
305 m³/s

**Prince George**  
740 m³/s

**Fraser River**

# Feedback & Reflections

