

An aerial photograph of a rugged mountain landscape. In the upper right, a large, irregularly shaped reservoir is visible, surrounded by rocky terrain. A small, simple building with a gabled roof sits on a rocky outcrop in the middle ground. A suspension bridge with several cables spans across a deep, rocky gorge in the lower right. Several people are visible on the bridge. In the background, steep, rocky mountains rise, with some snow patches. A tall metal tower structure is visible on the left side of the image.

RioTinto

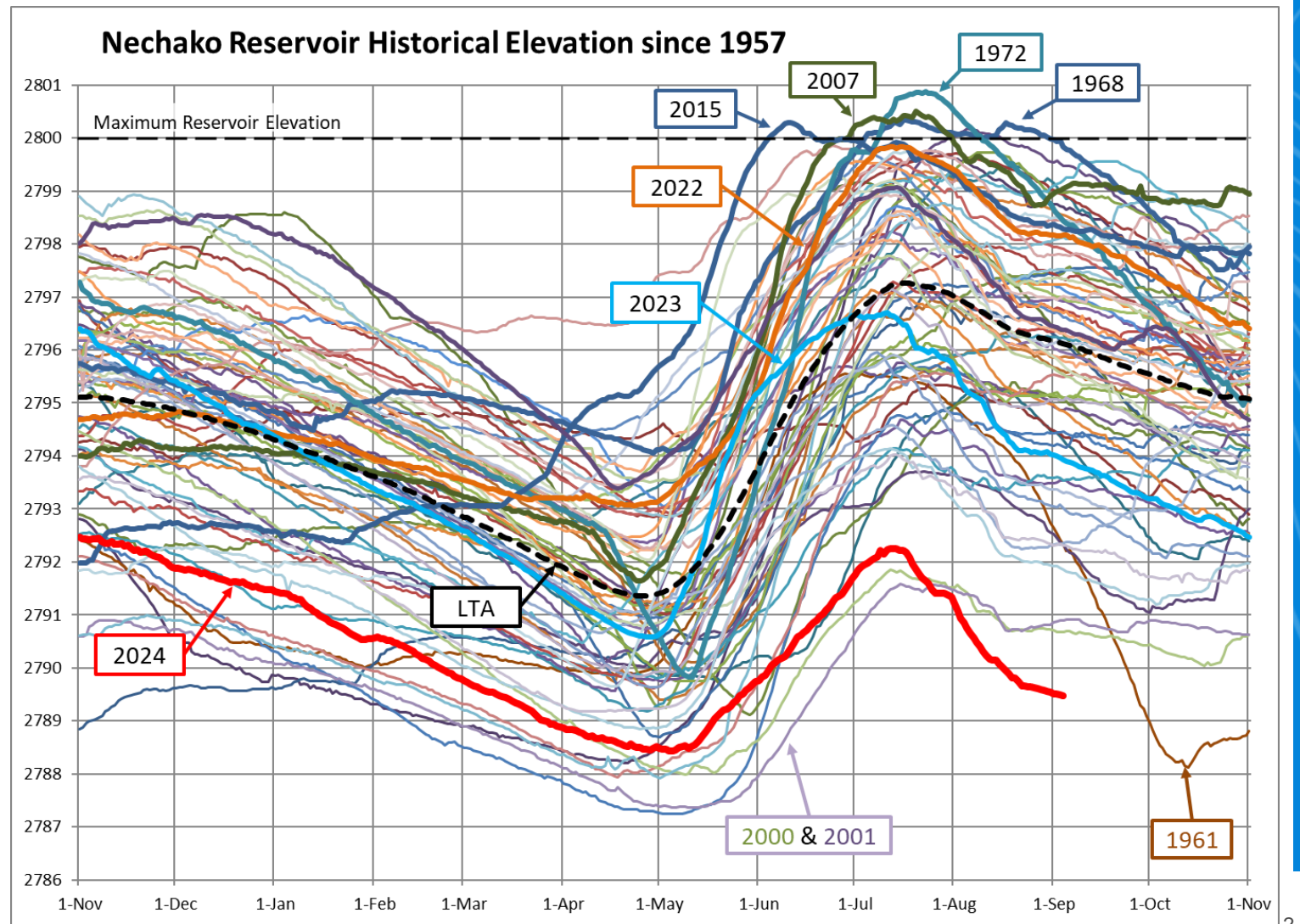
# Nechako Reservoir / River / Freshet Information Sharing – Community Leaders

04<sup>th</sup> September 2024

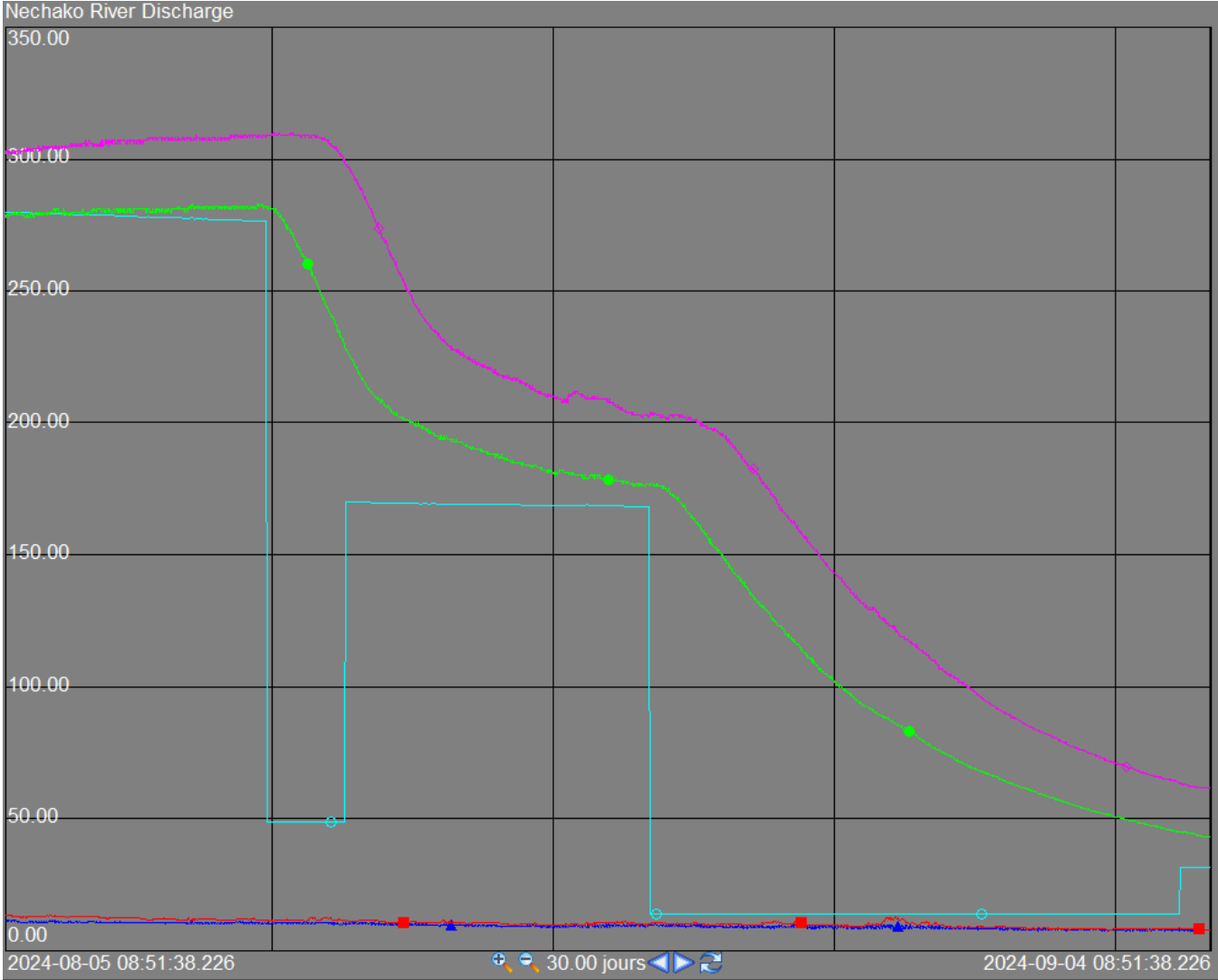
Prepared by Kenjy Demeester

# Reservoir Elevation - Last 20 days

Current reservoir level  
**2789.46 ft (Approx)**

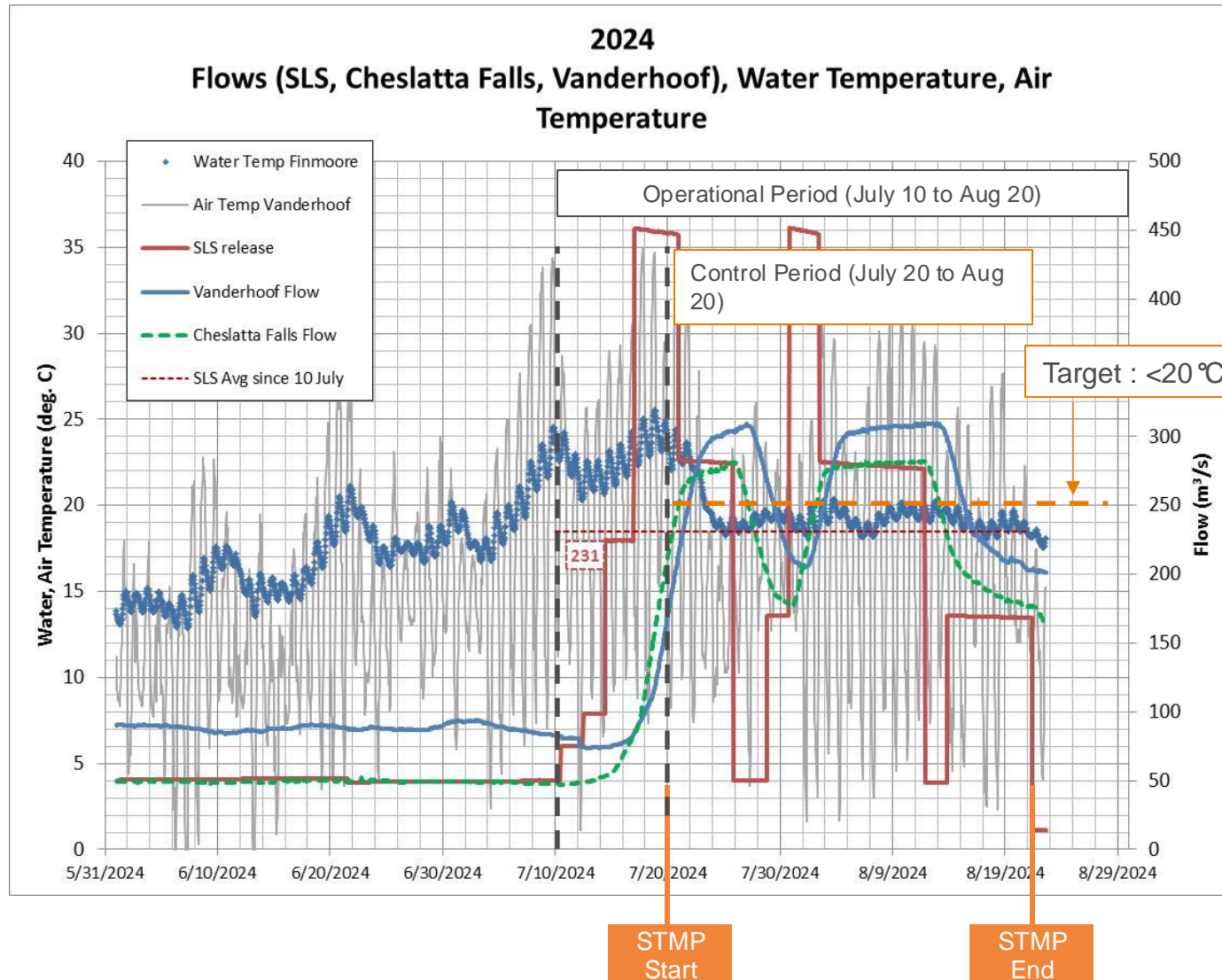


# Flows - Last 30 days



<b>Current values (m³/s)</b>	
<i>Vanderhoof</i>	<b>61</b>
<i>Skins Lake</i>	<b>32</b>
<i>Cheslatta Falls</i>	<b>43</b>
<i>Nautley</i>	<b>8</b>
<i>Stellako</i>	<b>8</b>

# STMP update

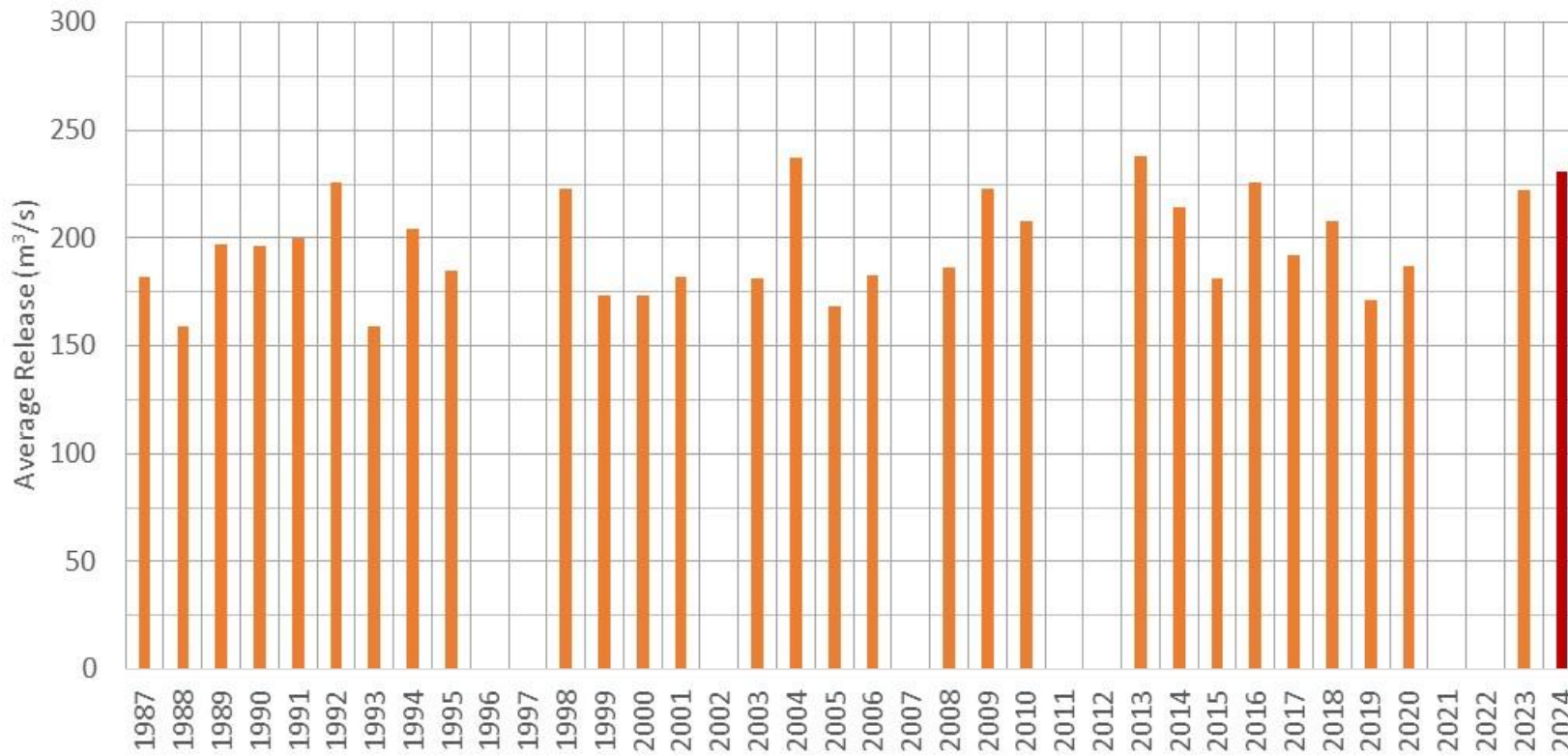


## Aug 20th

- 231 cms on average between July 10-Aug 20

# STMP update

Average STMP Releases since 1987 (10 July-20 Aug)

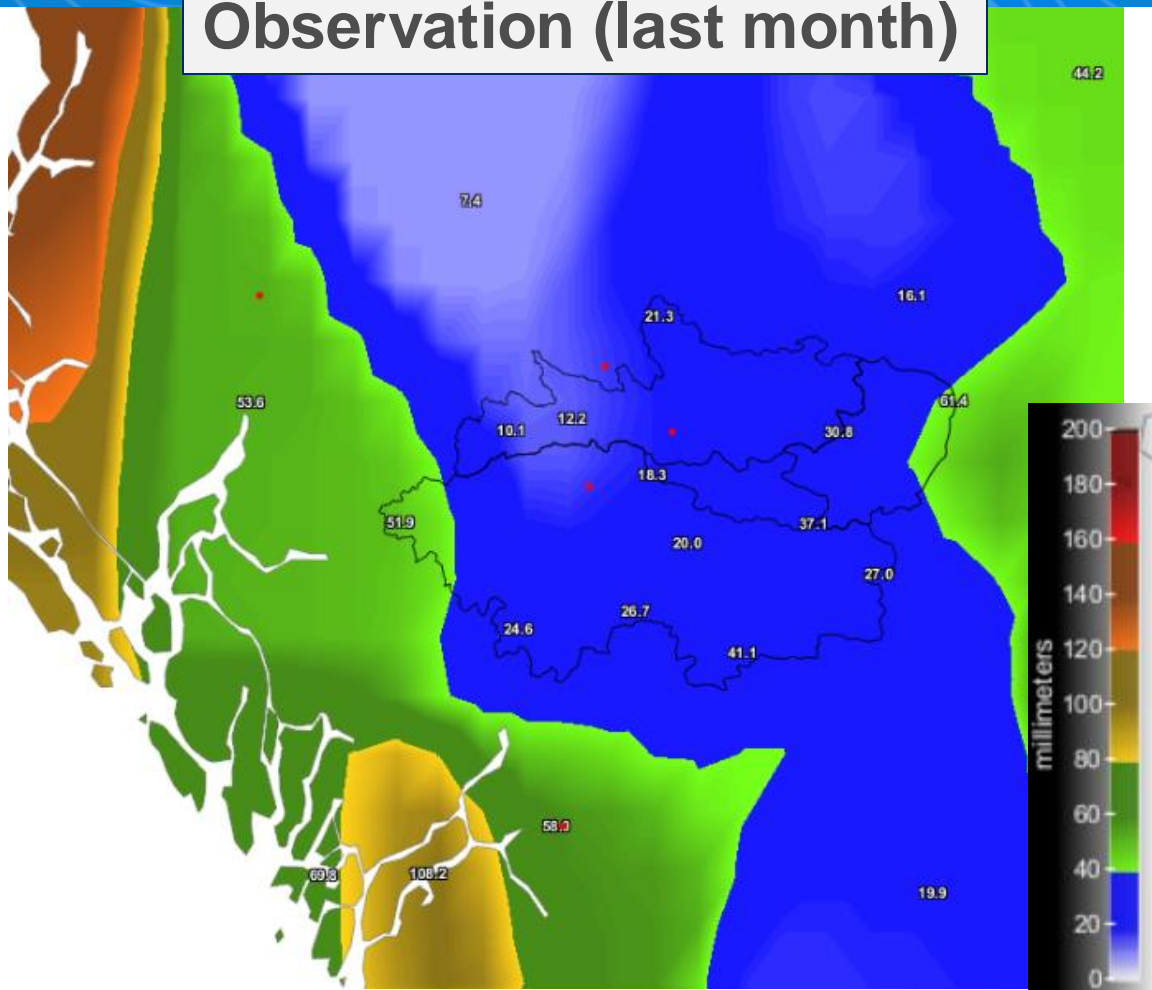


## Historical record

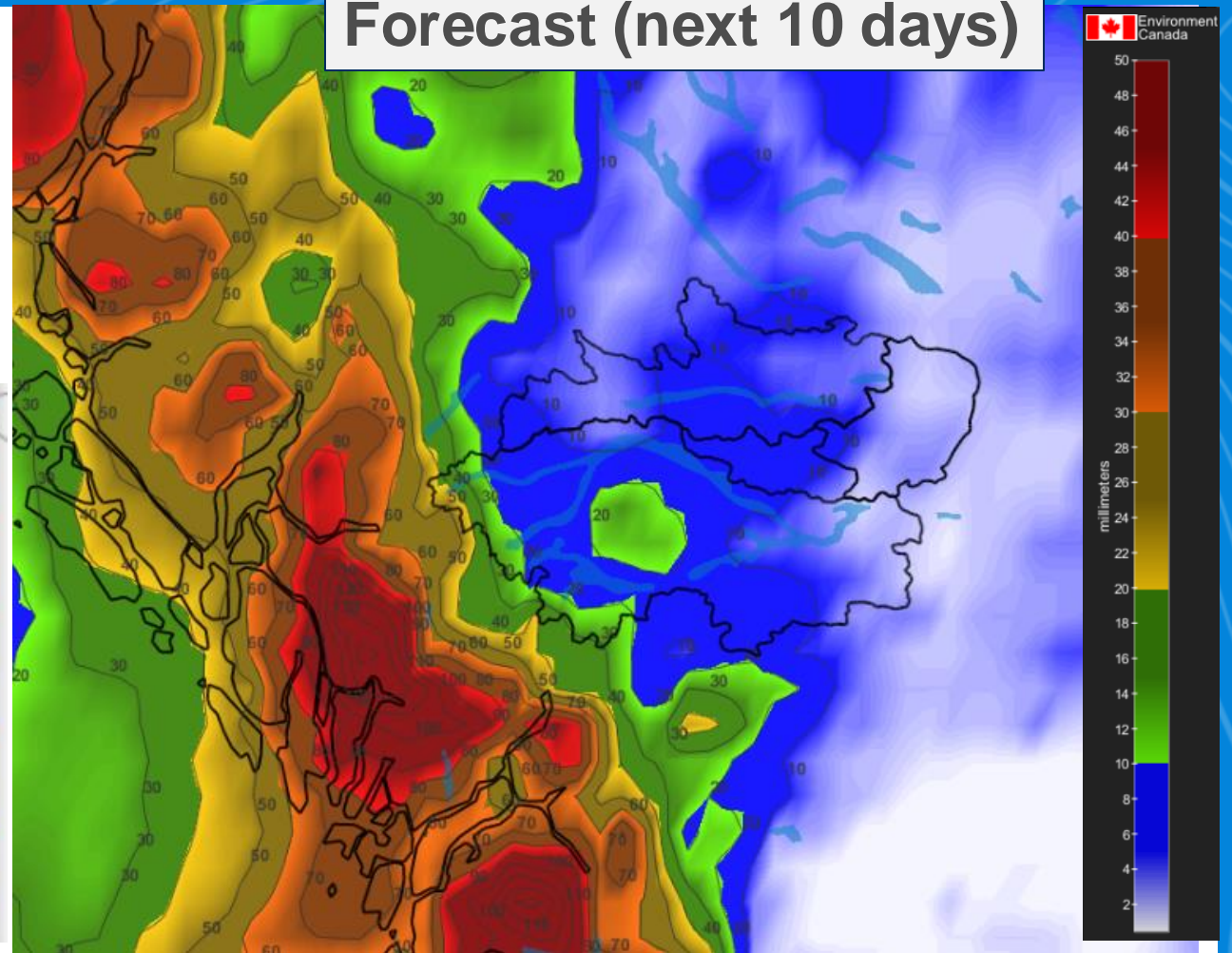
- Blank years are when reservoir control spills superseded STMP releases
- 2024 totals 231 m<sup>3</sup>/s, +18% LTA
- 2024 is 3<sup>rd</sup> highest on record

# Past & Future total precipitation

Observation (last month)



Forecast (next 10 days)

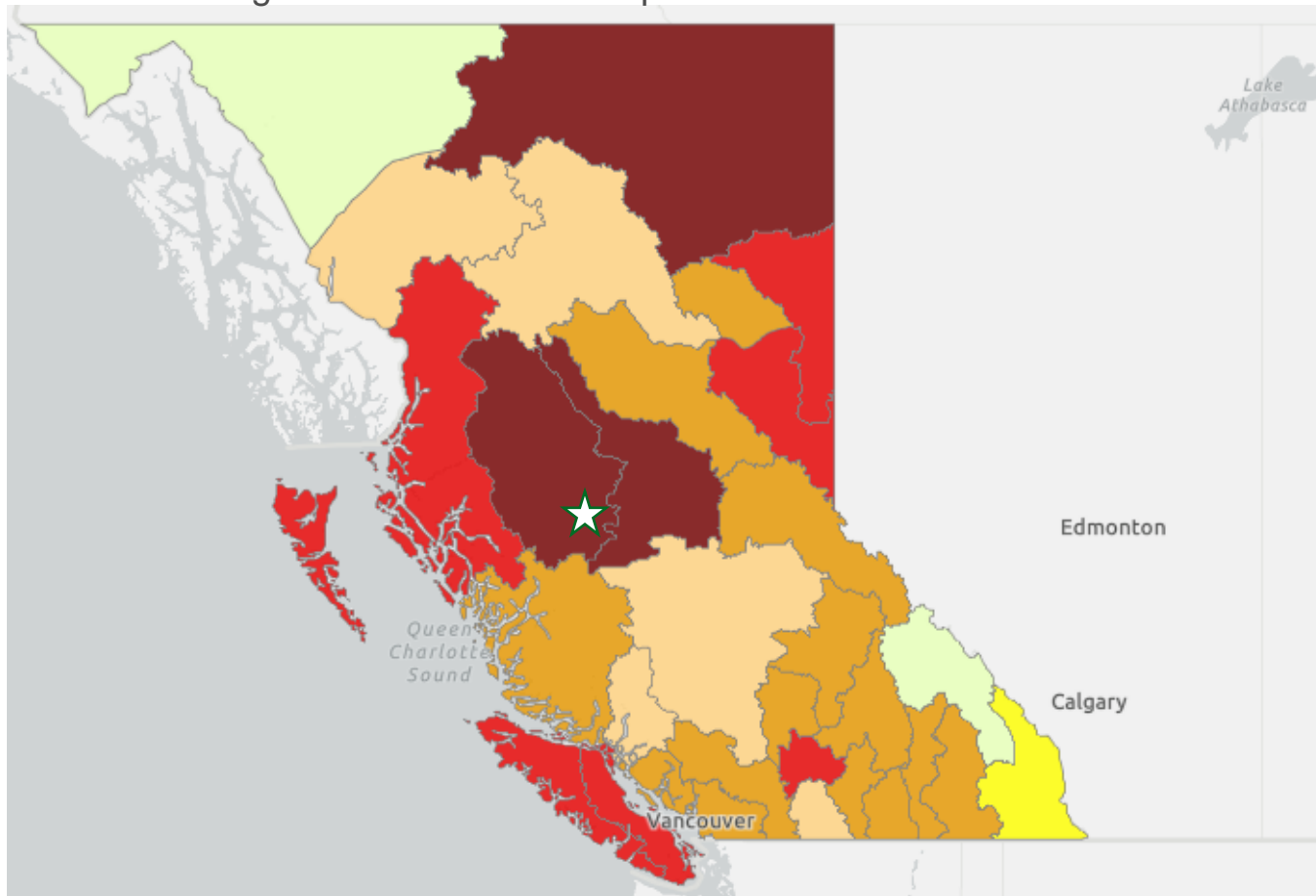


Nechako Reservoir watershed area-average = 33 mm  
Historical Average = 56 mm







Nechako Reservoir watershed area-average = 0-20 mm

# Provincial Advisories - Drought

Drought Level 5 : Adverse Impacts Certain



## British Columbia Drought Levels

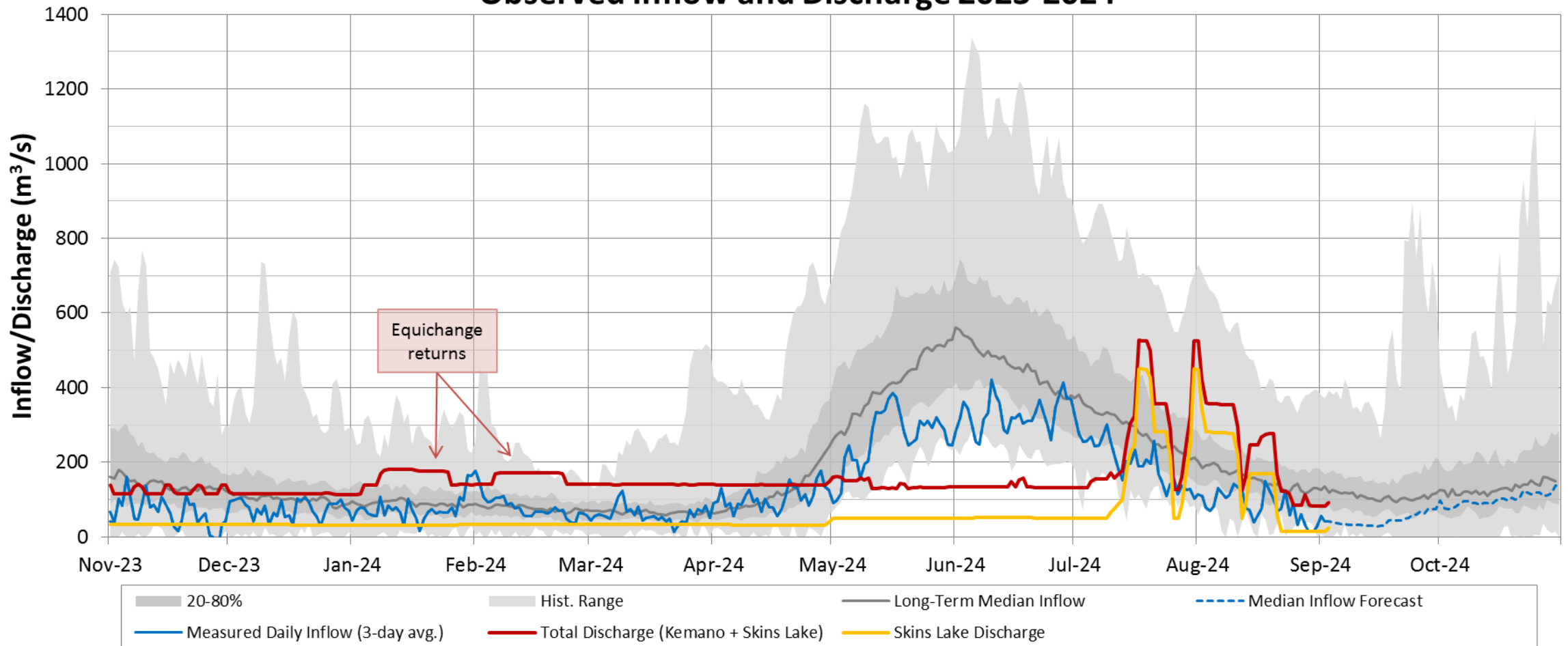
-  Drought Level 0 - No Adverse Impacts
-  Drought Level 1 - Adverse Impacts Rare
-  Drought Level 2 - Adverse Impacts Unlikely
-  Drought Level 3 - Adverse Impacts Possible
-  Drought Level 4 - Adverse Impacts Likely
-  Drought Level 5 - Adverse Impacts Almost Certain

Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, NRCAN, Parks Canada | Water Management Branch and GeoBC, Ministry of Water,

**Drought conditions as of: August 29, 2024**

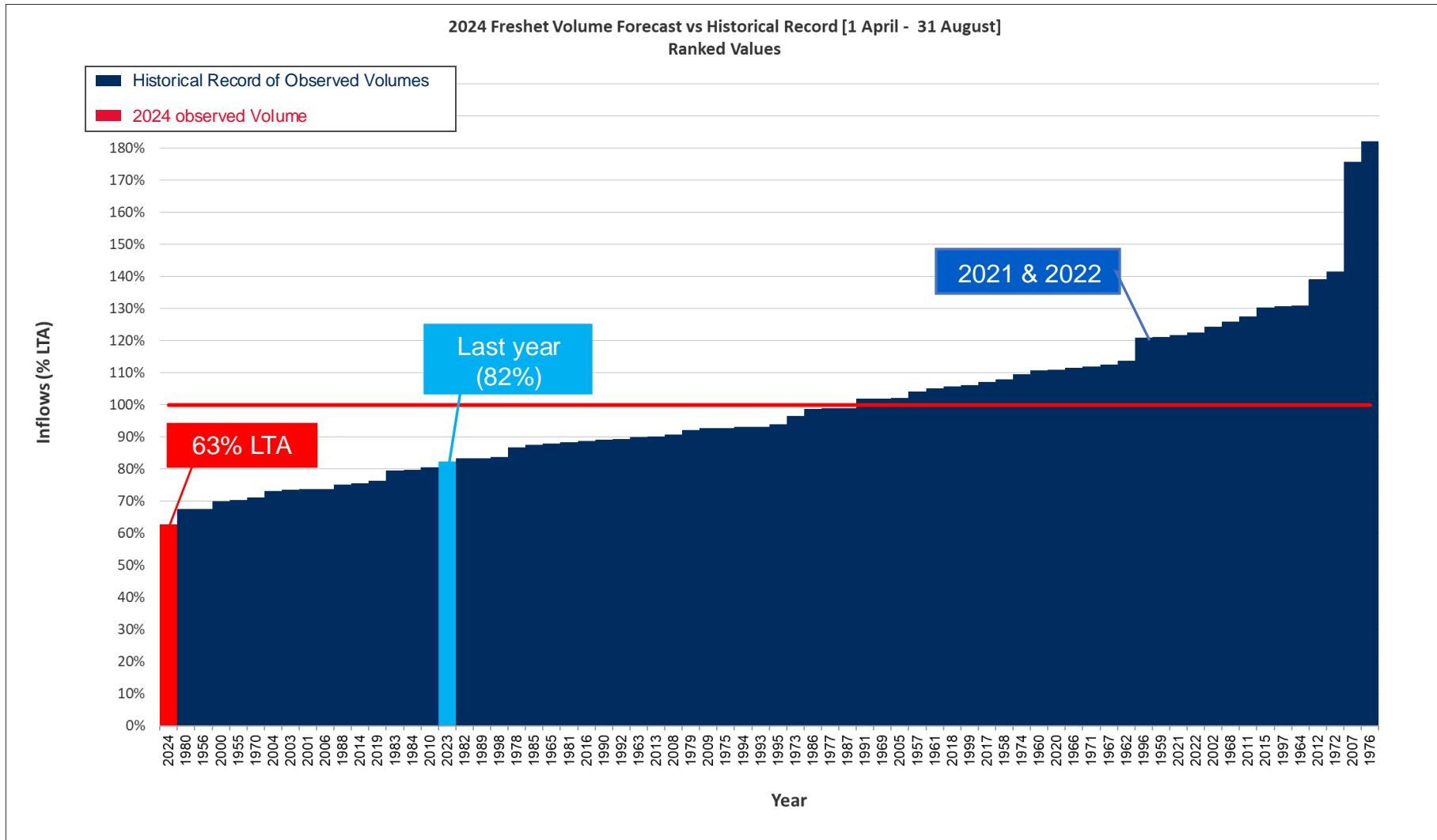
# Observed Inflows & Discharge vs Historical

## Nechako Reservoir Operation Observed Inflow and Discharge 2023-2024

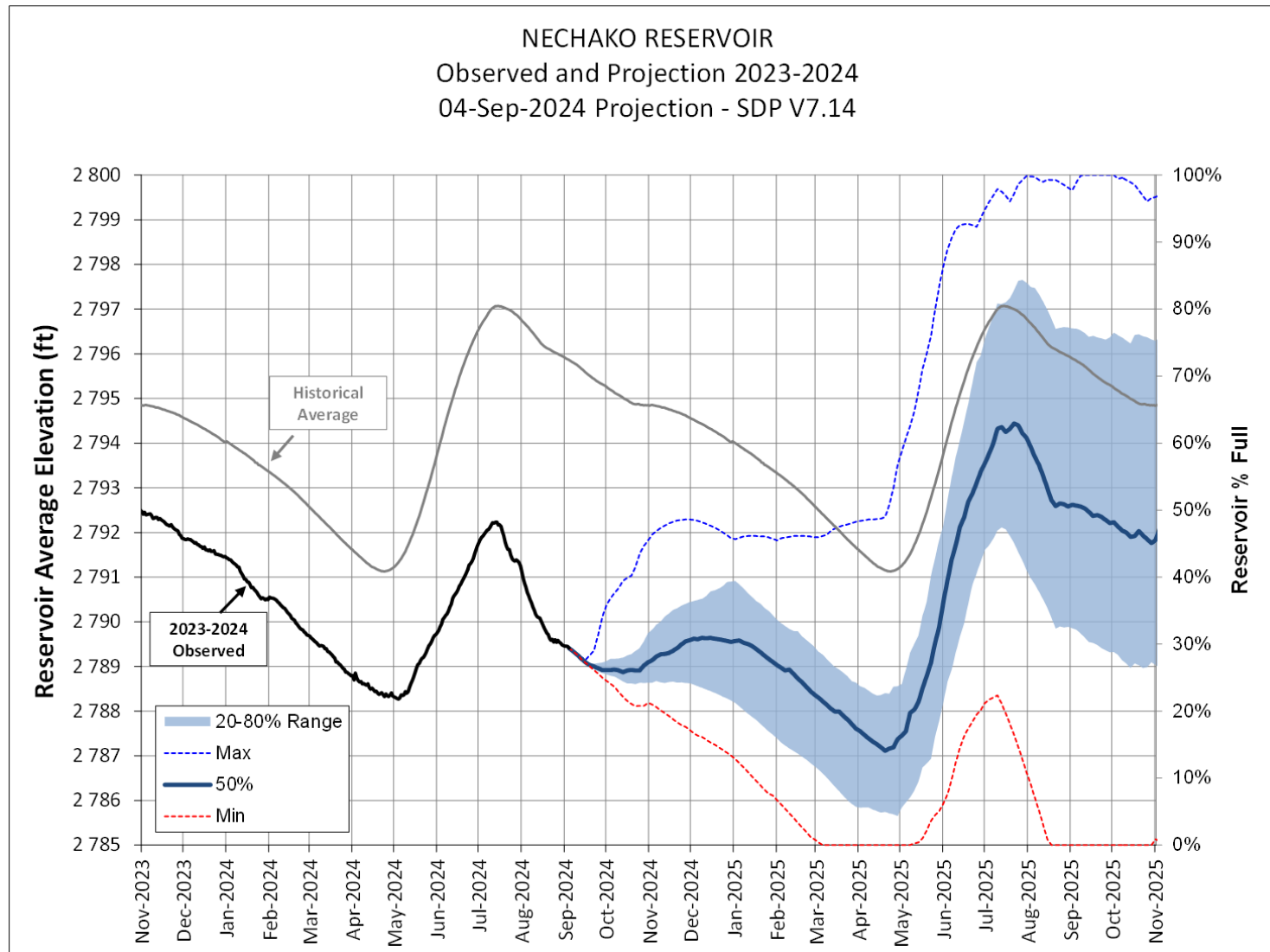




# Spring Freshet Inflow Volume Observed

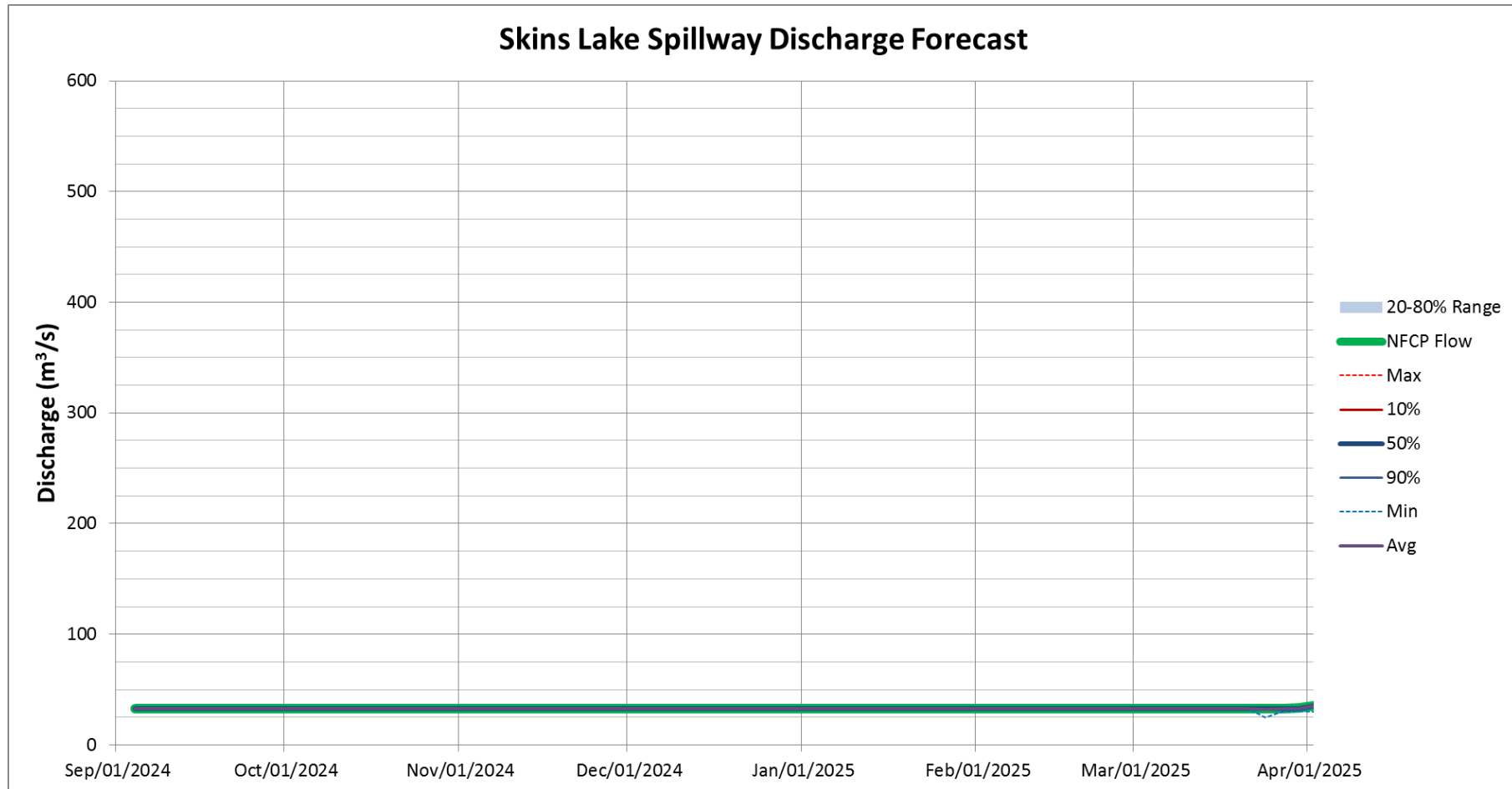


# Reservoir Level Projection

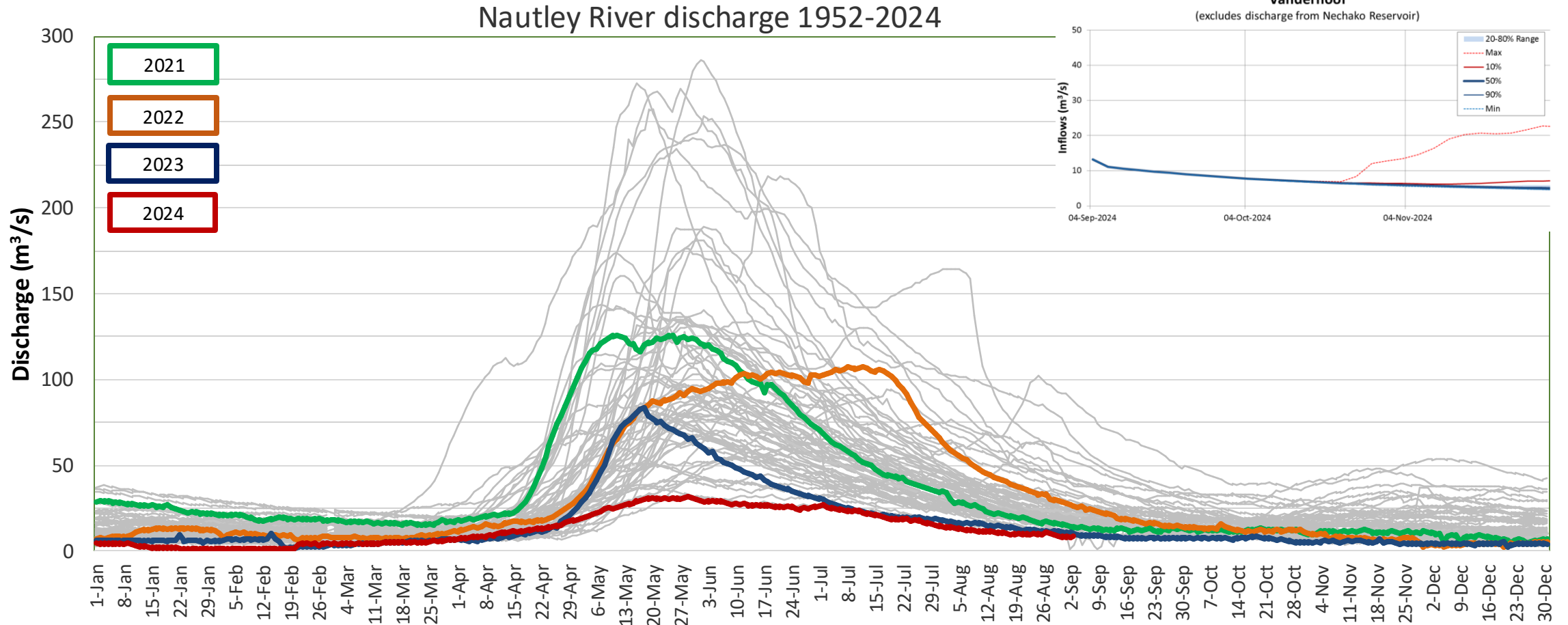


# Skins Lake Spillway Release - Forecast

- Current release = 32 m<sup>3</sup>/s

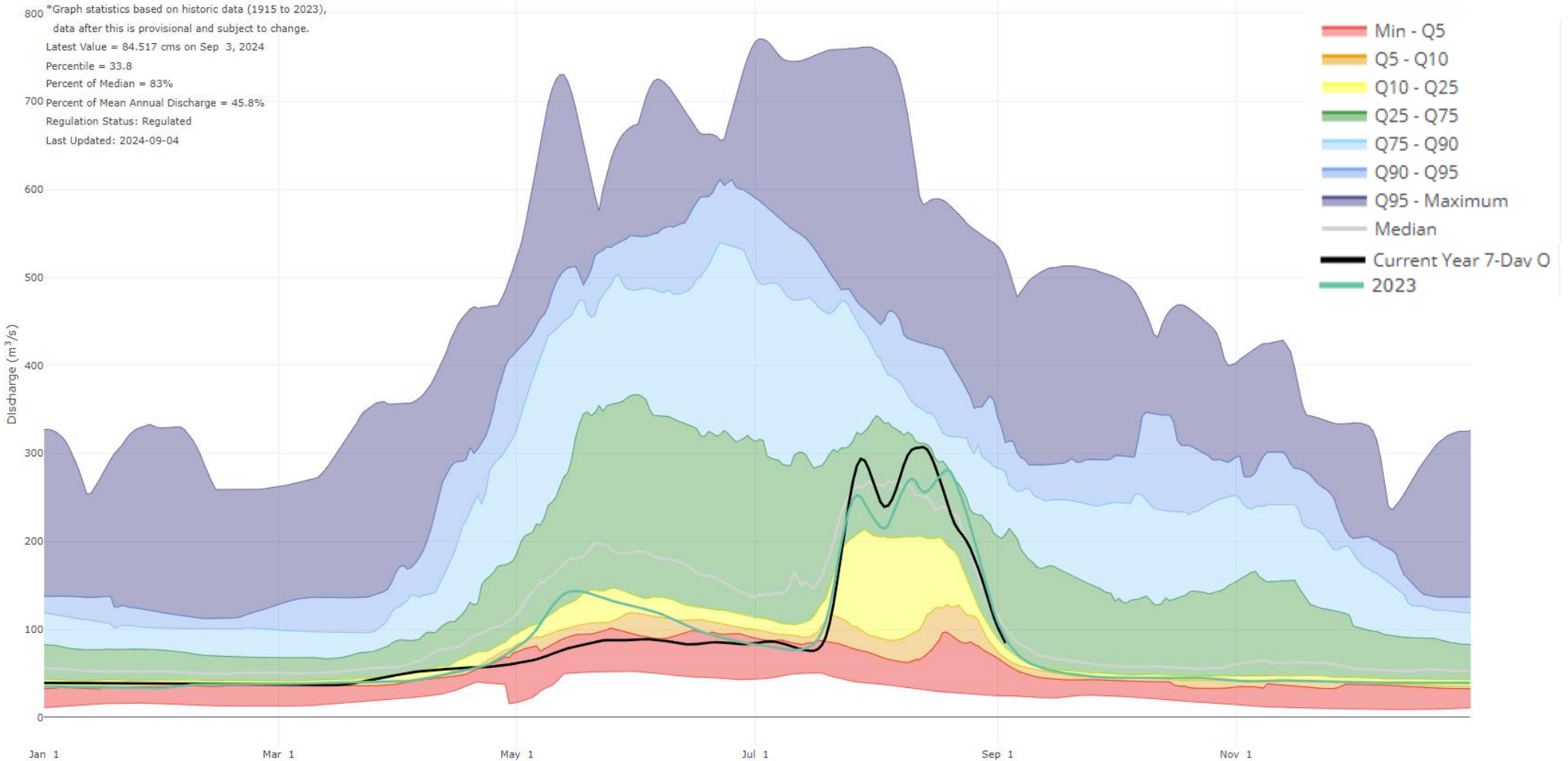


# Nautley River Flows, Forecast



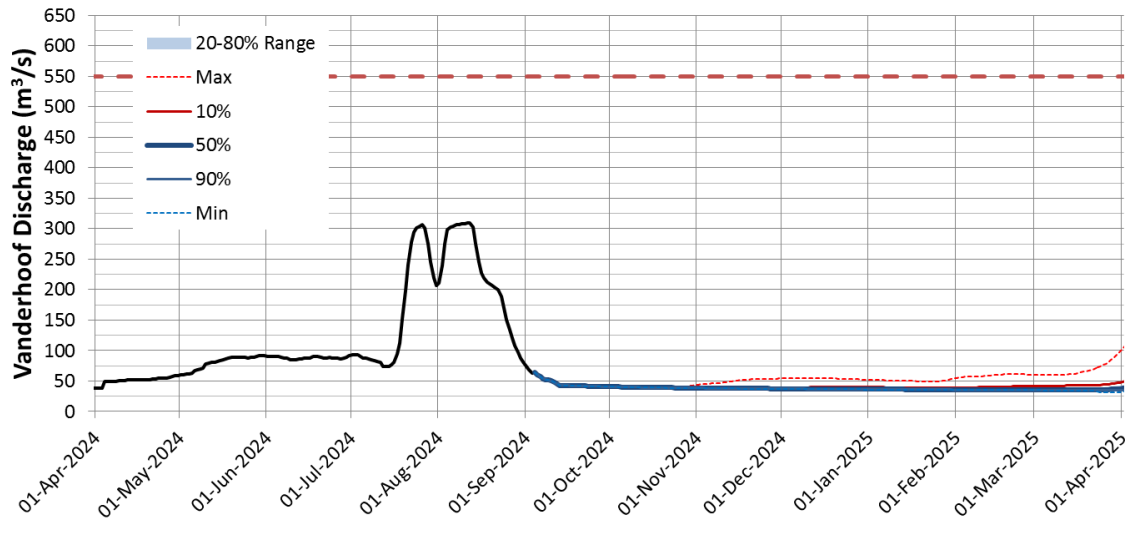
# Vanderhoof

Seven-Day Streamflow for NECHAKO RIVER AT VANDERHOOF (08JC001)

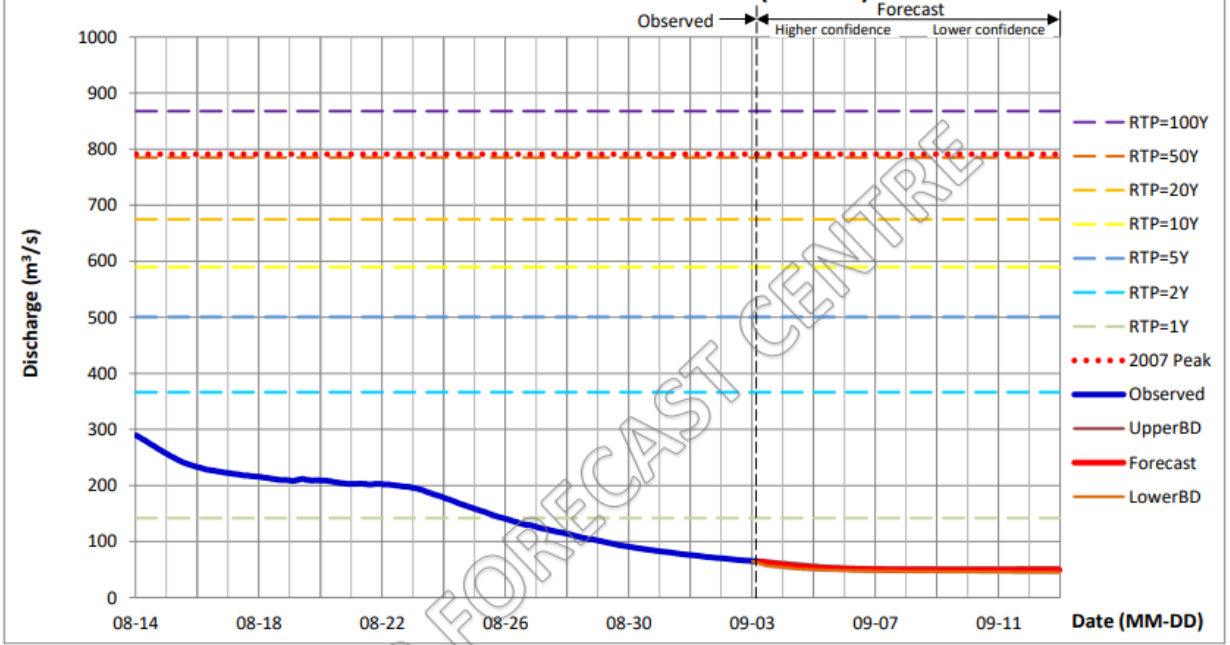


# Forecast – Vanderhoof

Expected Total Discharge at Vanderhoof



NECHAKO RIVER AT VANDERHOOF (08JC001)



Reading at 07 AM (m³/s)	Forecast Daily Discharge (m³/s): AVERAGE									
	UPPER BOUND					LOWER BOUND				
	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu
2024-09-03	2024-09-03	2024-09-04	2024-09-05	2024-09-06	2024-09-07	2024-09-08	2024-09-09	2024-09-10	2024-09-11	2024-09-12
64.5	65.6	60.4	55.8	53.7	52.8	52.5	52.5	52.7	53.0	53.2
	<b>61.0</b>	<b>55.5</b>	<b>52.2</b>	<b>50.7</b>	<b>50.0</b>	<b>49.6</b>	<b>49.5</b>	<b>49.3</b>	<b>49.3</b>	<b>49.2</b>
	57.0	51.4	48.9	47.8	47.2	46.8	46.4	45.9	45.5	45.2

Color Scheme for Return Periods:

RTP=1Y	RTP=2Y	RTP=5Y	RTP=10Y	RTP=20Y	RTP=50Y	RTP=100Y	2007 Peak
142.0	366.5	500.7	589.6	674.8	785.2	867.8	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.

Source : RFC's Clever model - 08JC001.PDF(gov.bc.ca)

# Updates - Next Steps – Actions



1. Confirm next meeting date & time  
– **Propose October 2<sup>nd</sup>**
2. Work with BC Hydro to manage the drought and energy balance for the winter

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

# Feedback & Reflections

