



RioTinto

Nechako Reservoir / River / Freshet Information Sharing – Community Leaders

23 May 2023

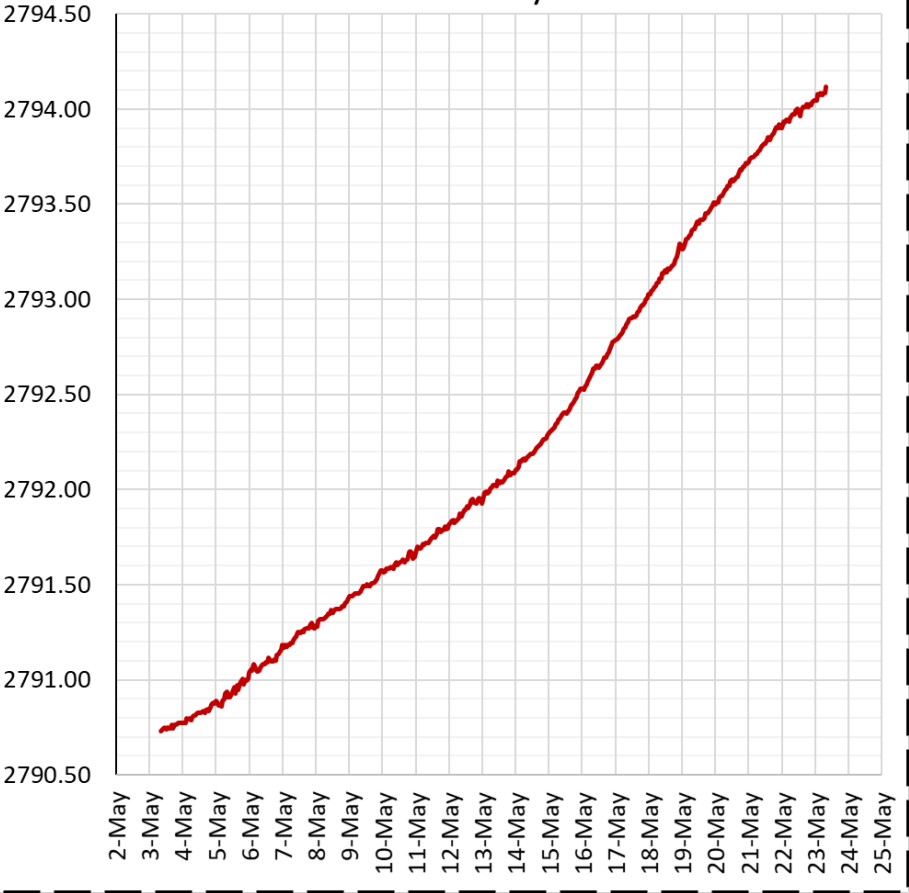
Prepared by Andrew Czornohalan & Simon Matte

Reservoir Elevation - Last 20 days

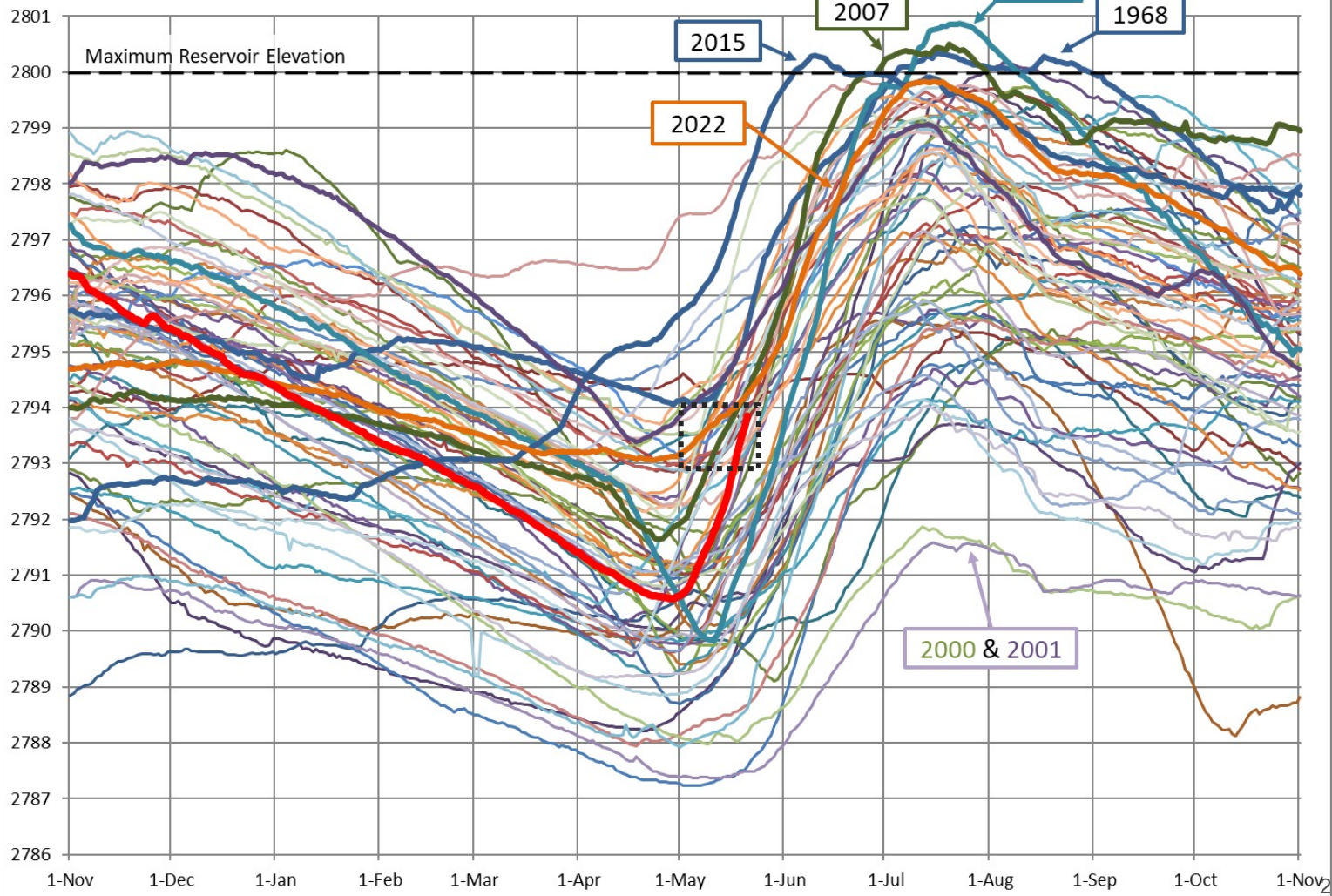
Current reservoir level (May 23rd):

2794.12 ft

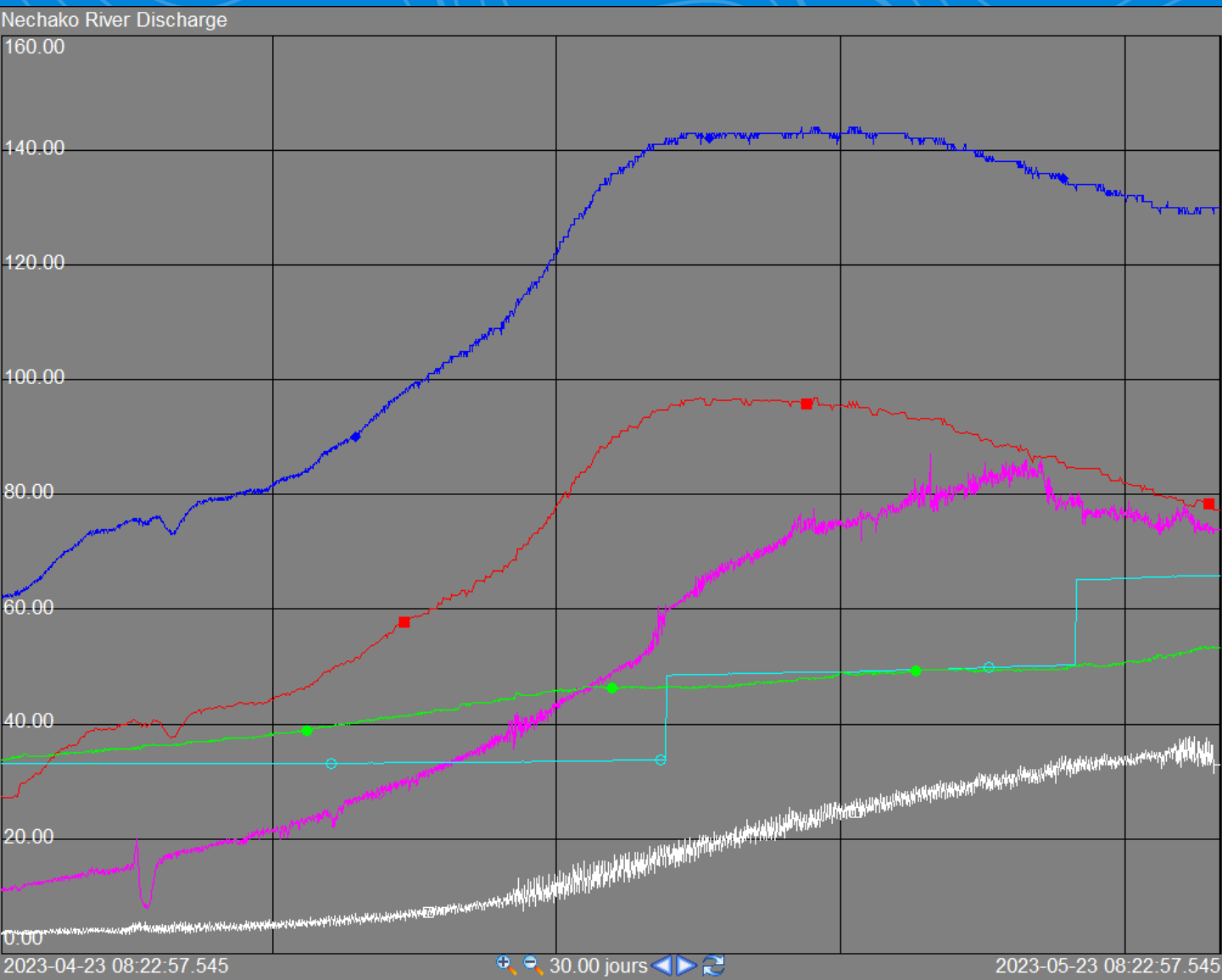
Last 20 days



Nechako Reservoir Historical Elevation since 1957

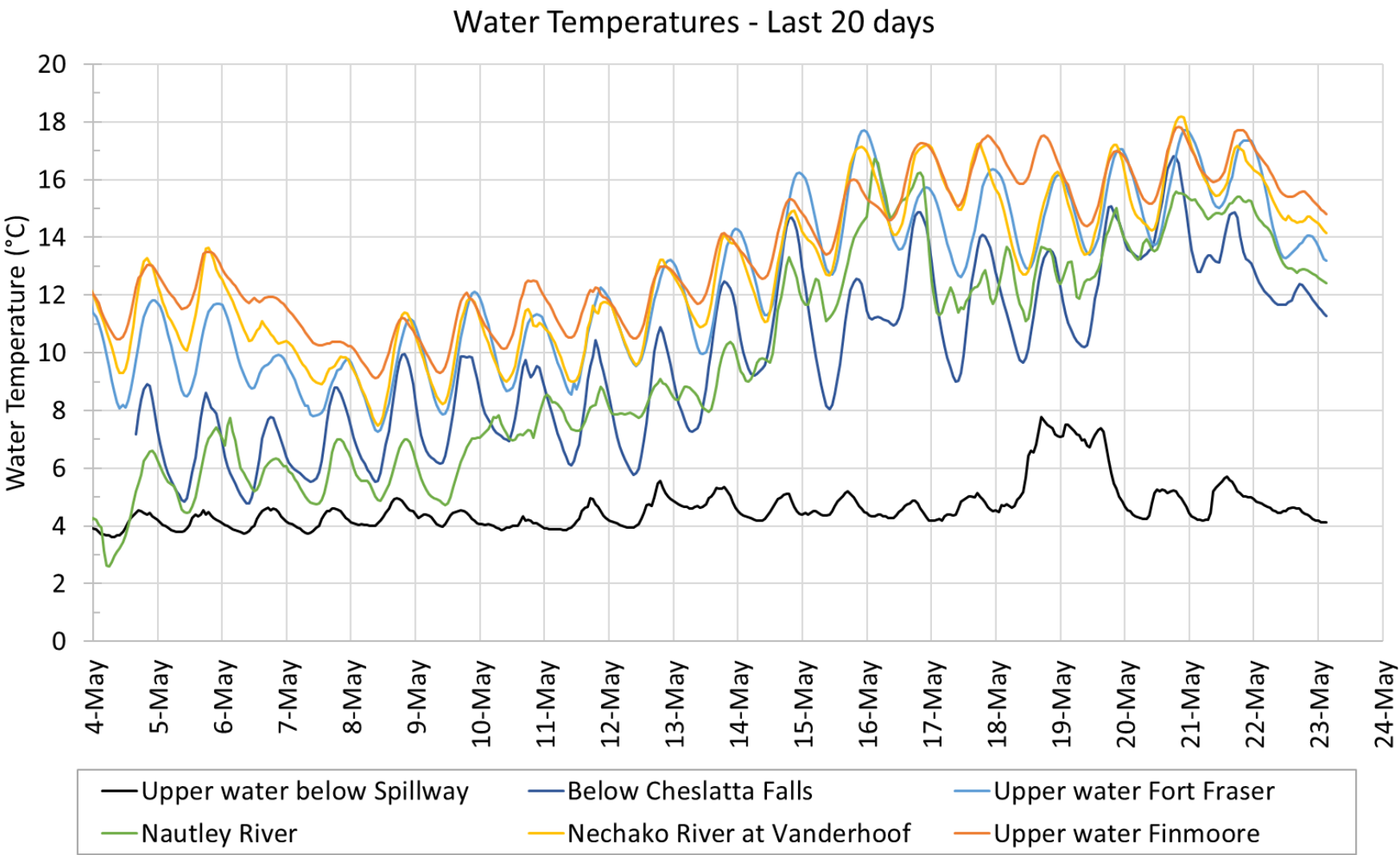


Flows - Last 30 days



Current values (m³/s)	
Vanderhoof	130
Skins Lake	66
Cheslatta Falls	53
Nautley	74
Stellako	33

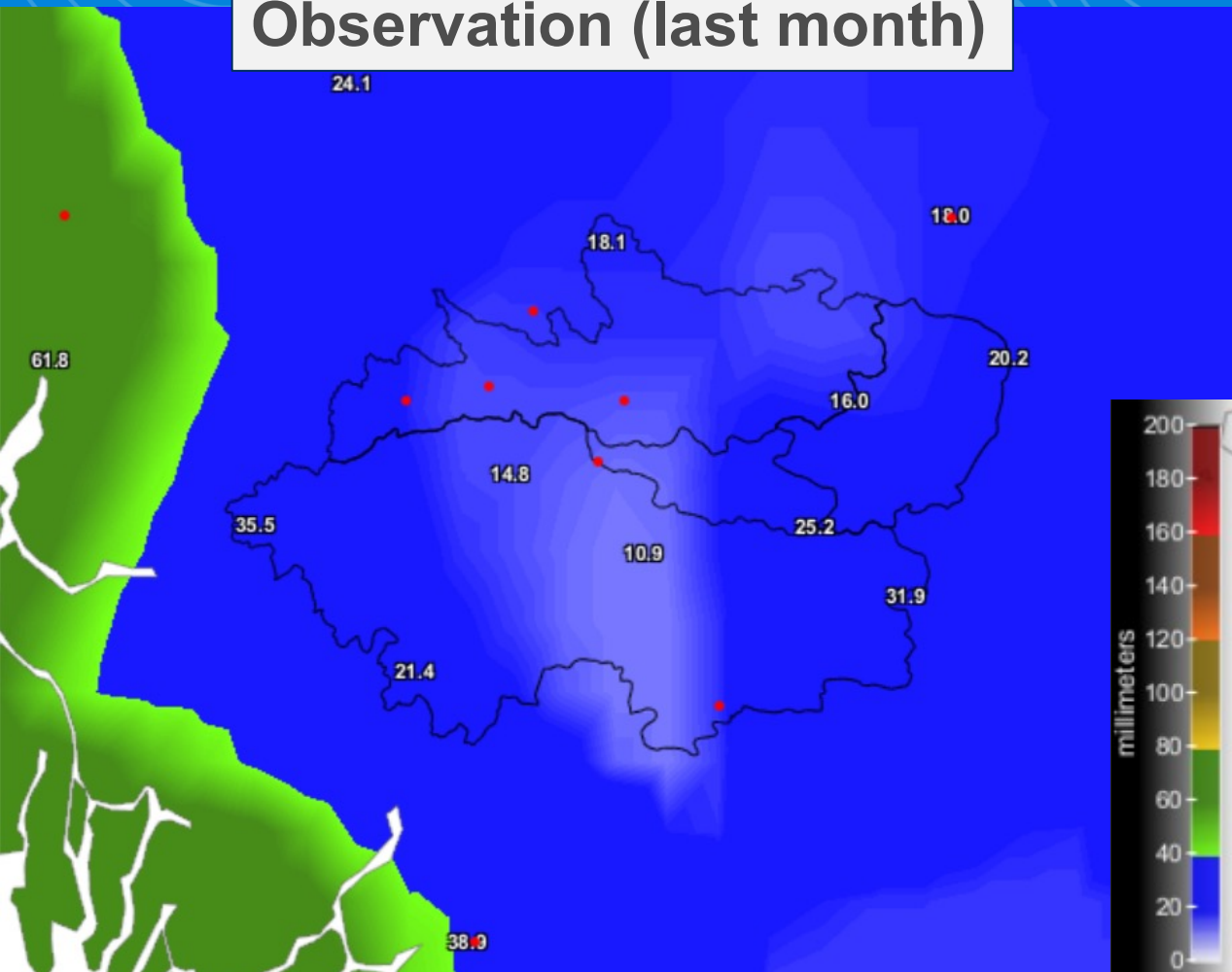
Observed Water Temperatures – Last 20 days



Average – Last 24h (°C)	
Upper water below spillway	4.4
Nechako River below Cheslatta Falls	11.9
Upper water Fort Fraser	13.9
Nautley River	13.1
Nechako River at Vanderhoof	14.8
Upper water Finmoore	15.6

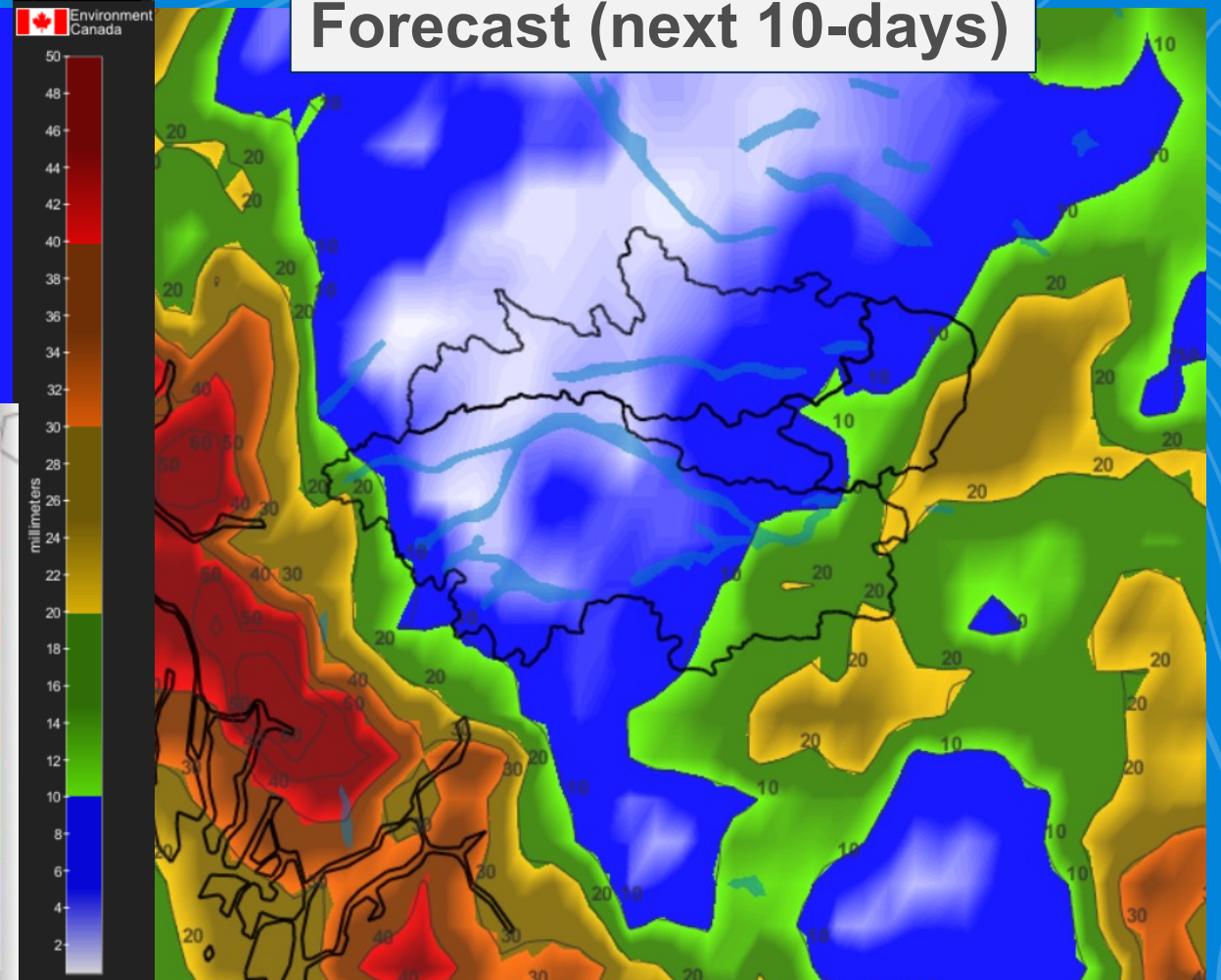
Past & Future cumulative precipitation

Observation (last month)



Nechako Reservoir watershed area-average = 20 mm

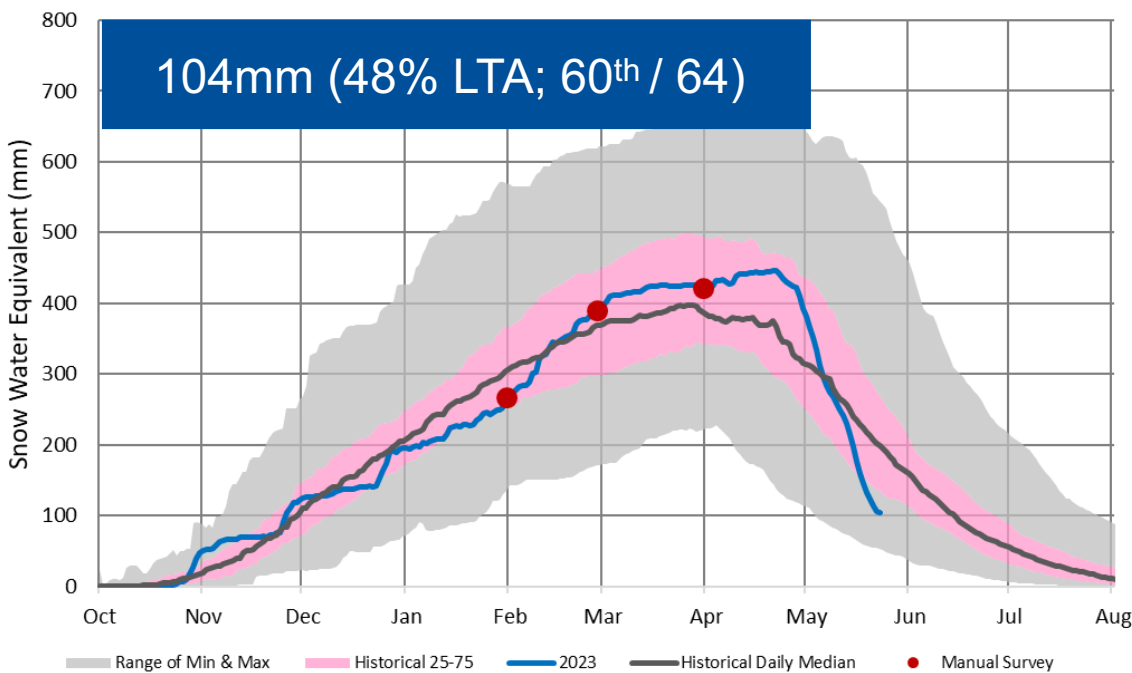
Forecast (next 10-days)



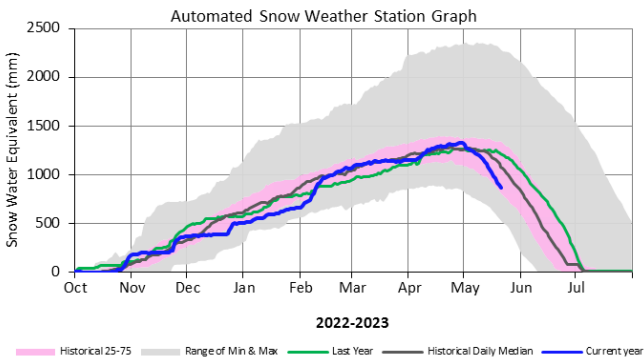
Nechako Reservoir watershed area-average = 2-10 mm

Current Snowpack

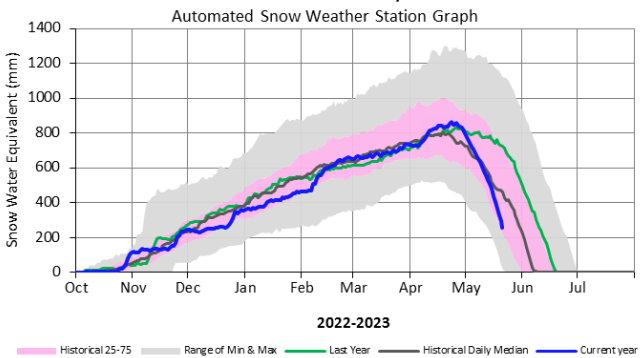
Nechako Reservoir Snowpack



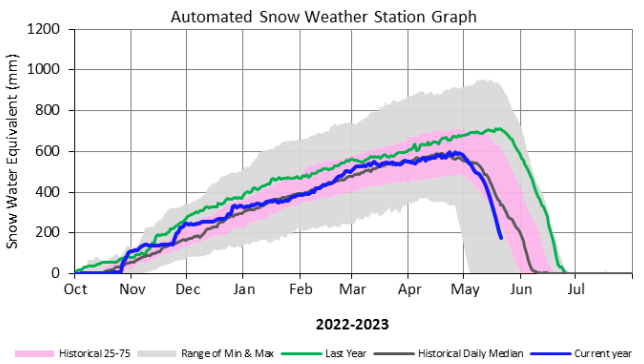
Tahtsa Lake



Mount Pondosy



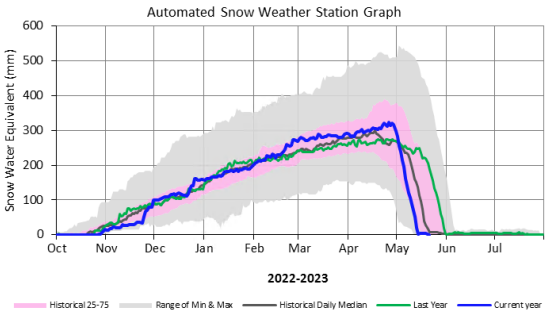
Mount Wells



Station	Current Value (mm)	LTA* (mm)	%LTA*	Percentile Rank*
Tahtsa Lake	864	1112	78%	30%
Mount Pondosy	254	499	51%	25%
Mount Wells	174	423	41%	16%

* (1992-2022)

Lu Lake



Station	Current Value	%LTA*
Lu Lake	0	0%

* (1997-2022)

Weather Forecast

Marilla Weather

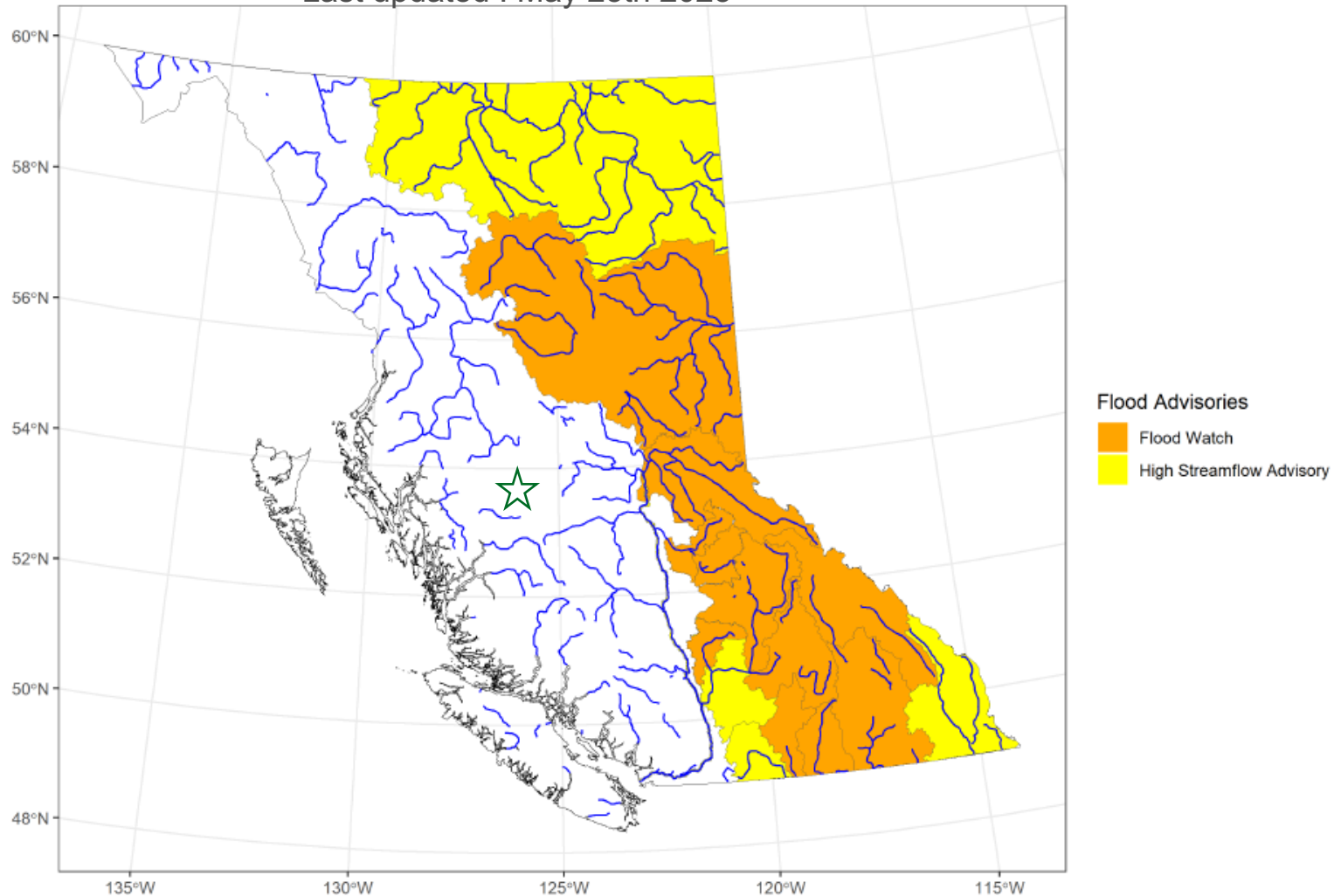


	Wed 05/24	Thu 05/25	Fri 05/26	Sat 05/27	Sun 05/28	Mon 05/29	Tue 05/30
	Mainly sunny	Mainly sunny	Sunny	A mix of sun and clouds	A mix of sun and clouds	A mix of sun and clouds	Cloudy with sunny breaks
	21°	23°	25°	21°	18°	17°	15°
Feels like	21	23	25	21	18	17	14
Night	5°	7°	9°	6°	6°	4°	5°
POP	20 %	10 %	10 %	30 %	30 %	30 %	30 %
24 Hr Rain	-	-	-	-	-	-	-

	Wed 05/31	Thu 06/01	Fri 06/02	Sat 06/03	Sun 06/04	Mon 06/05	Tue 06/06
	A mix of sun and clouds	Chance of a shower	Mainly sunny	Mainly sunny	Sunny	Sunny	A mix of sun and clouds
	17°	17°	17°	18°	18°	21°	21°
Feels like	17	17	16	18	18	21	21
Night	6°	6°	7°	7°	8°	10°	12°
POP	40 %	40 %	20 %	10 %	10 %	10 %	30 %
24 Hr Rain	<1 mm	<1 mm	-	-	-	-	-

Provincial Advisories - Flood

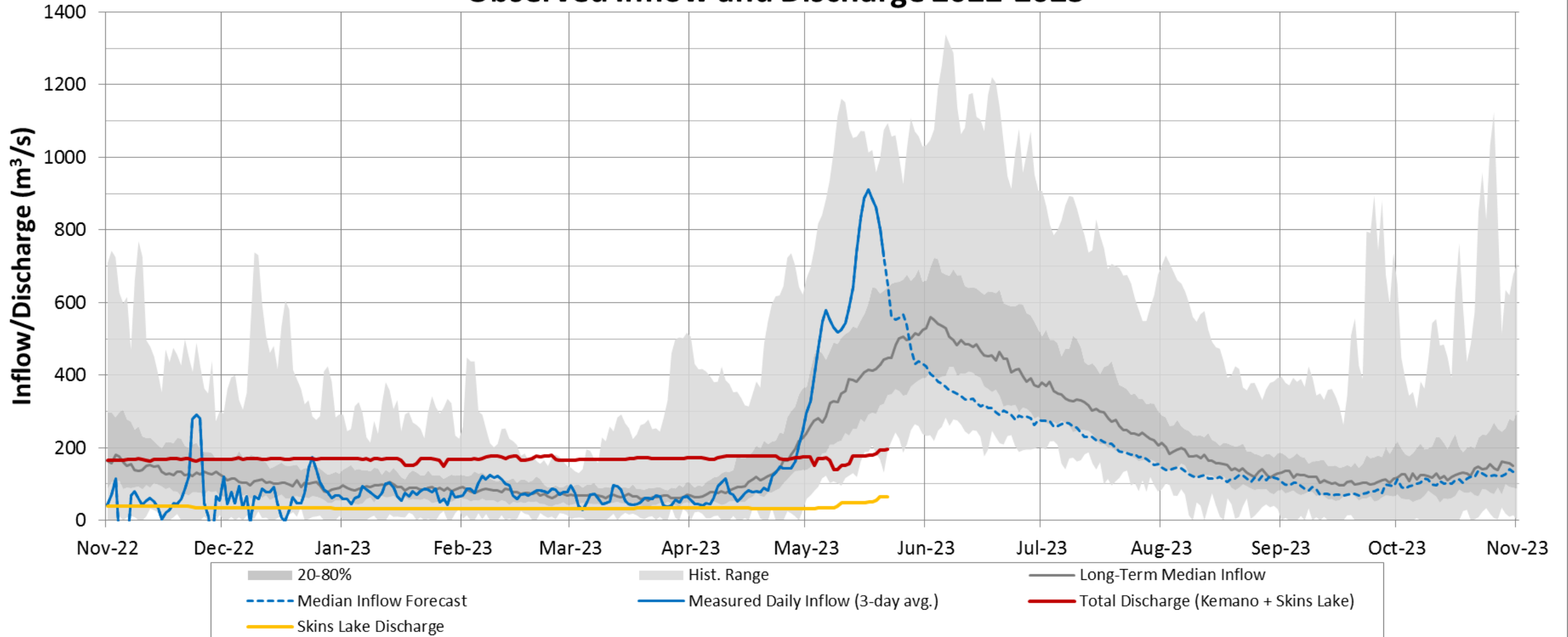
Last updated : May 23th 2023



Source: BC River Forecast Center.

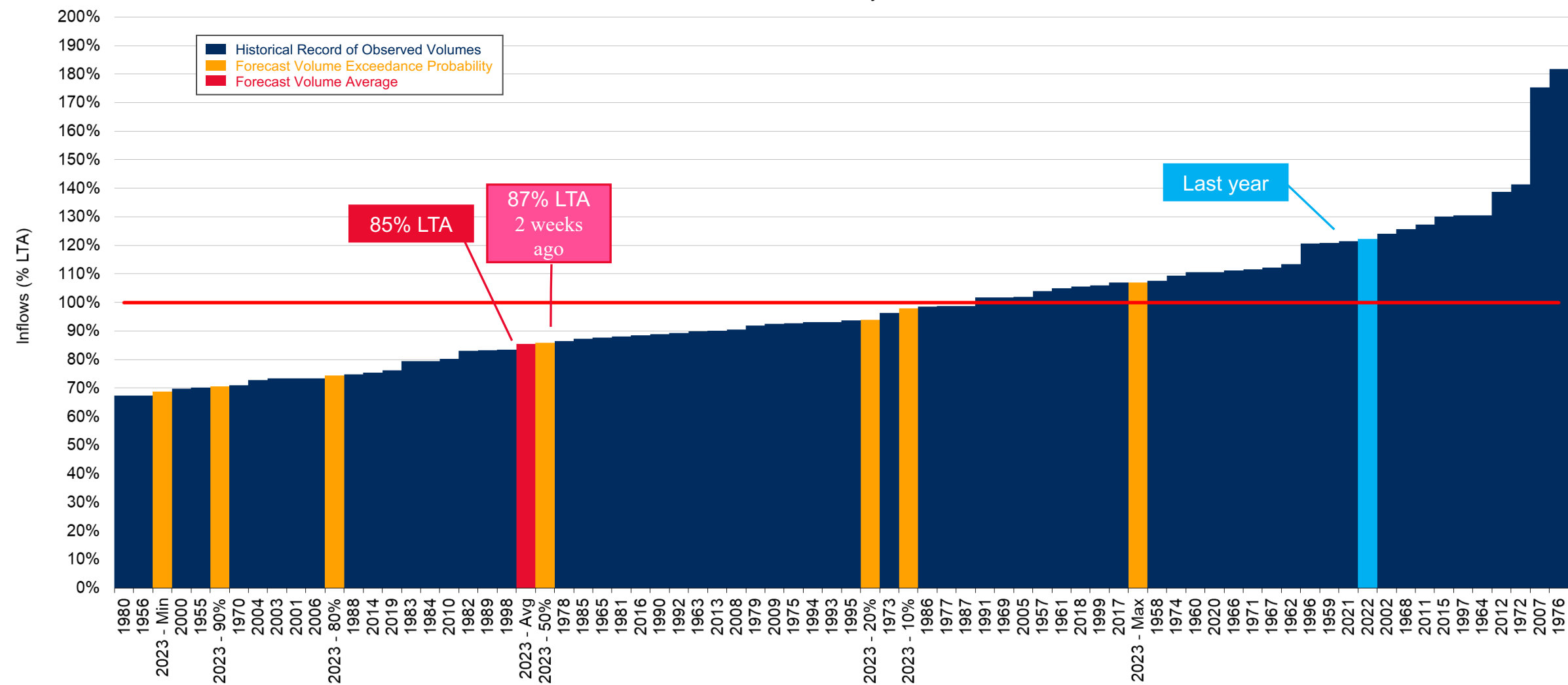
Observed Inflows & Discharge vs Historical

Nechako Reservoir Operation
Observed Inflow and Discharge 2022-2023



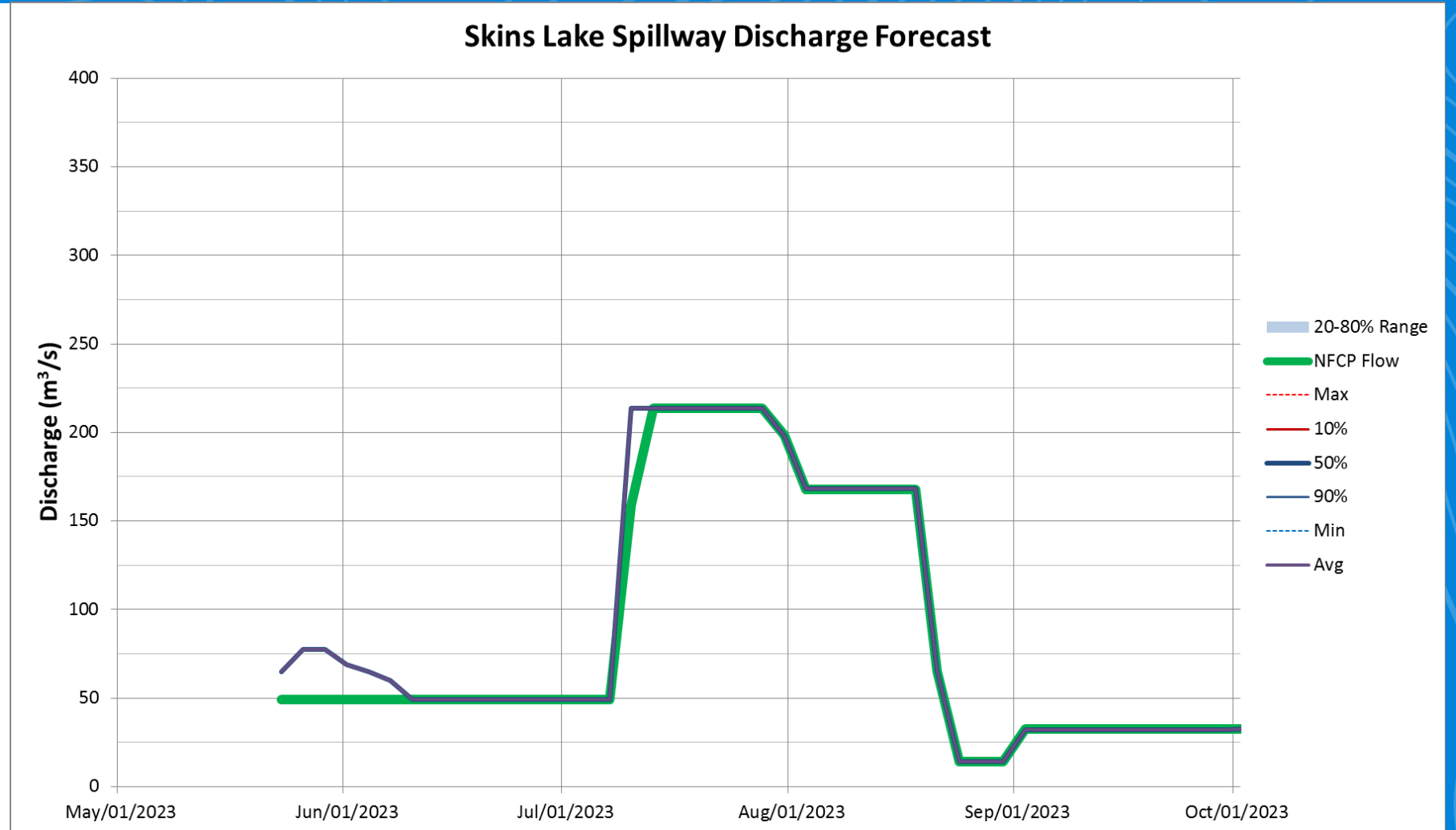
Spring Freshet Inflow Volume

2023 Freshet Volume Forecast vs Historical Record [1 April - 31 August]
Ranked Values - 23 May 2023

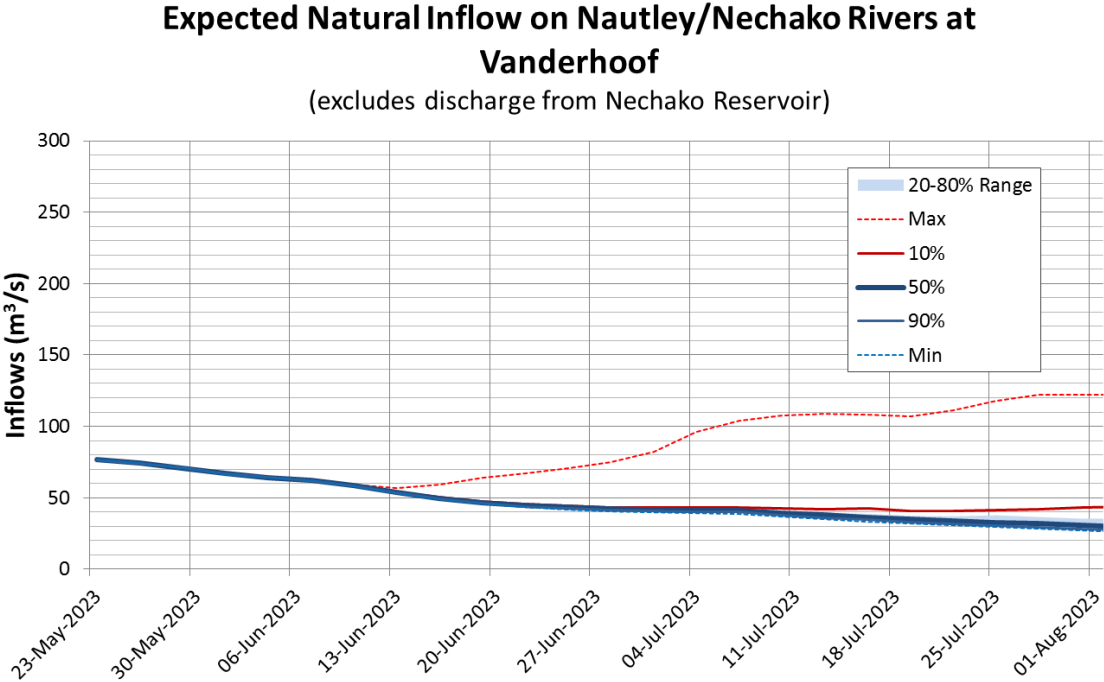
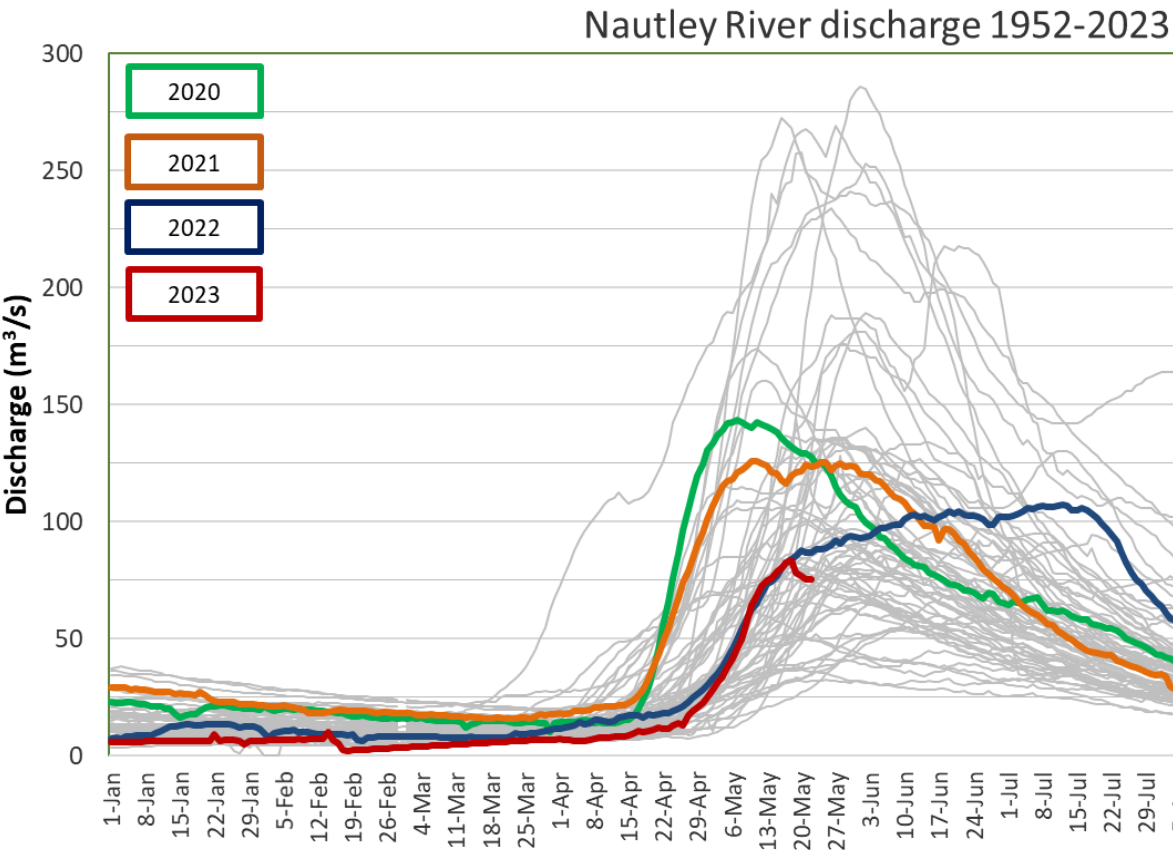


Skins Lake Spillway Release Forecast

- Current = **~66 m³/s**
Minimum = **49 m³/s**
- Change from 49 m³/s to 65 m³/s last Friday
- Forecasted scenario of weekly stepwise increase, and ramp down on June 1st.

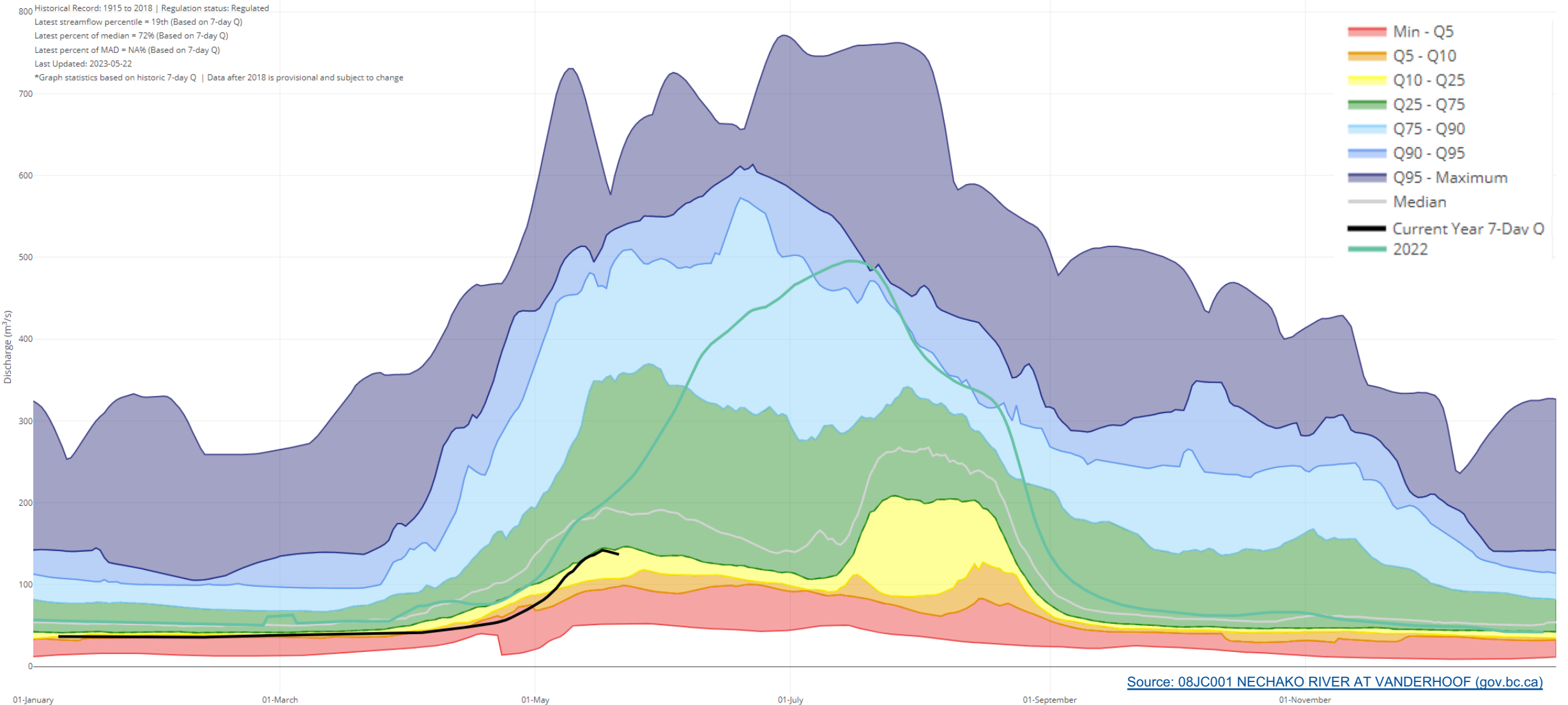


Nautley River Flows, Forecast



Vanderhoof

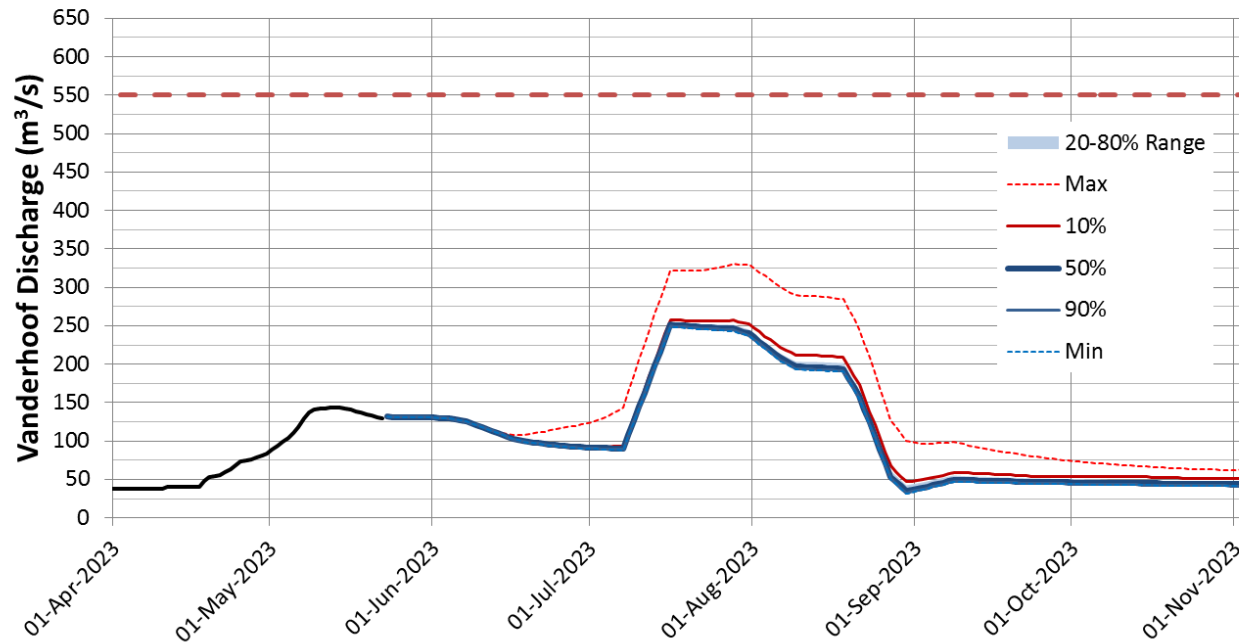
Seven Day Mean Streamflow for 08JC001 NECHAKO RIVER AT VANDERHOOF



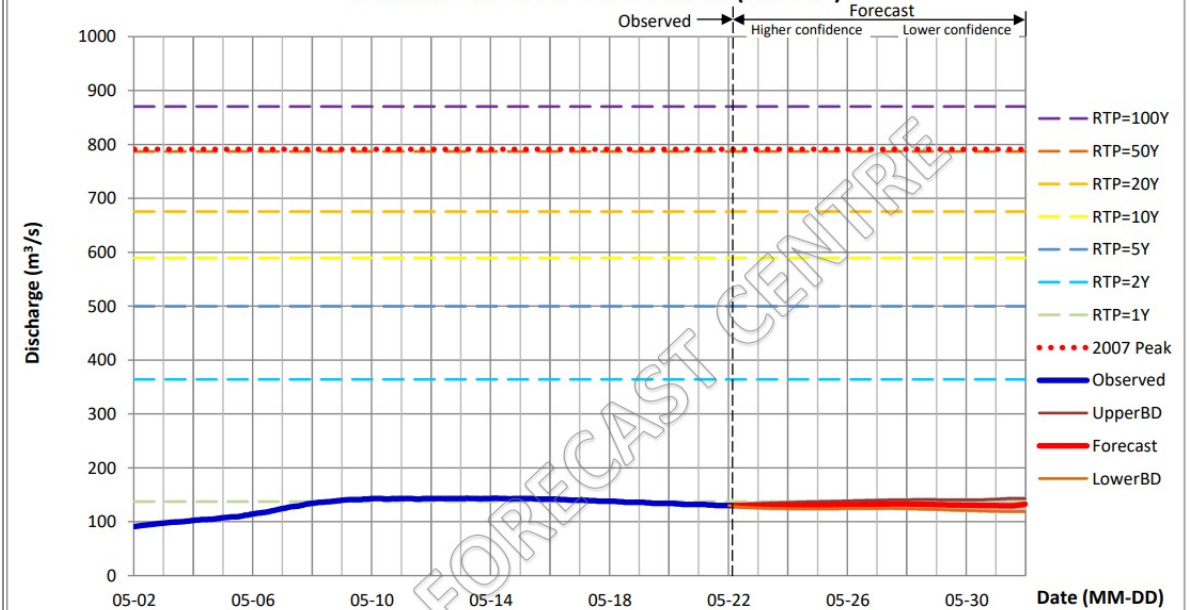
Source: 08JC001 NECHAKO RIVER AT VANDERHOOF (gov.bc.ca)

Forecast – Vanderhoof

Expected Total Discharge at Vanderhoof



NECHAKO RIVER AT VANDERHOOF (08JC001)



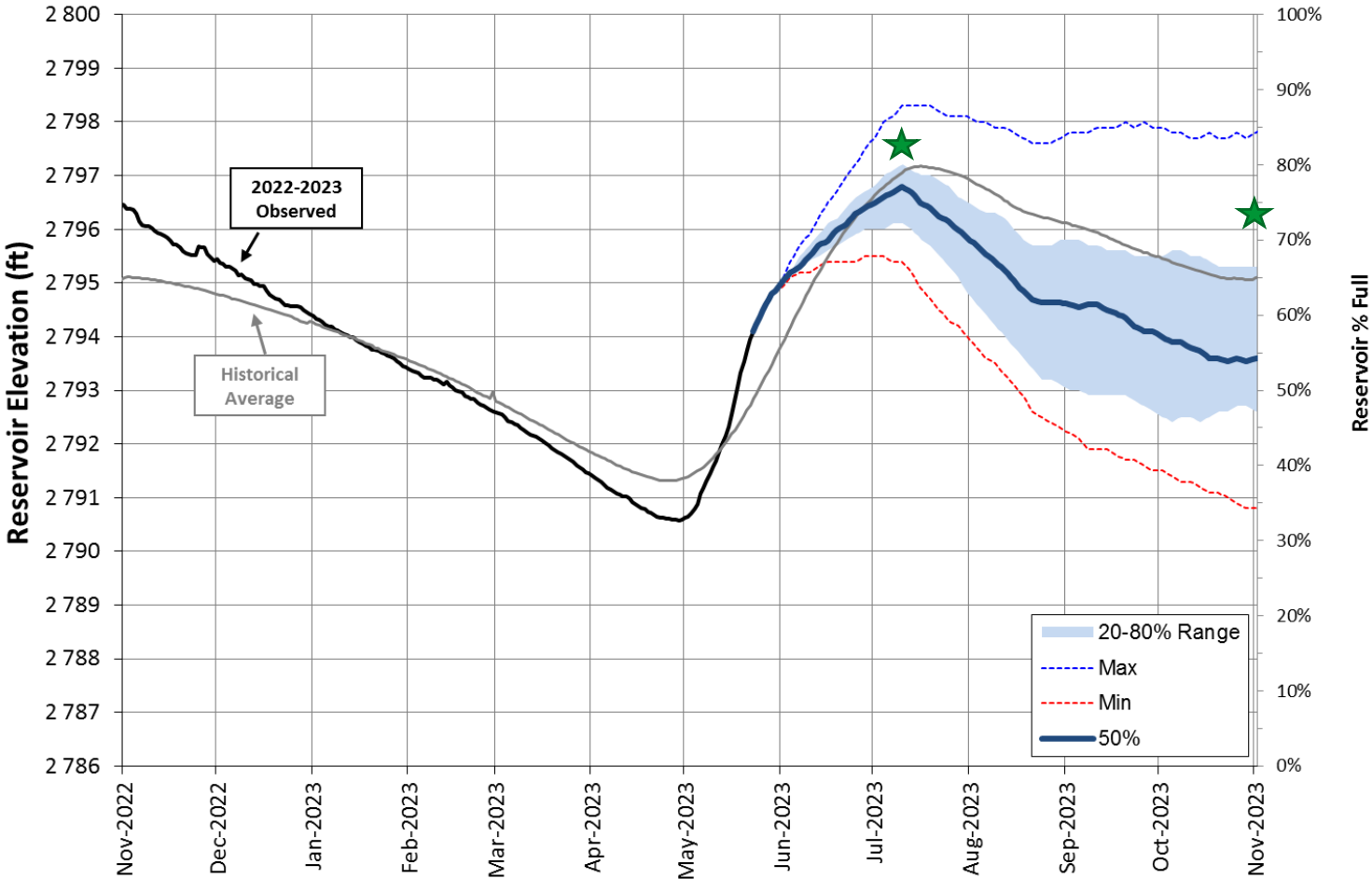
Reading at 05 AM (m³/s) Mon	Forecast Daily Discharge (m³/s): AVERAGE									
	UPPER BOUND					LOWER BOUND				
	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed
2023-05-22	2023-05-22	2023-05-23	2023-05-24	2023-05-25	2023-05-26	2023-05-27	2023-05-28	2023-05-29	2023-05-30	2023-05-31
129.9	133.0	135.0	136.6	137.8	139.2	140.4	140.9	140.7	140.4	143.1
	129.8	129.8	130.3	131.0	131.9	132.8	132.3	131.2	130.3	130.2
	126.7	124.6	124.0	124.2	124.6	124.9	123.7	121.8	120.2	118.9

RTP=1Y	RTP=2Y	RTP=5Y	RTP=10Y	RTP=20Y	RTP=50Y	RTP=100Y	2007 Peak
137.4	364.1	499.7	589.4	675.5	786.9	870.4	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

NECHAKO RESERVOIR
Observed and Projection 2022-2023
May 23, 2023 Projection - SDP V7.13



Expected reservoir peak : 2796.8 ft

★ Projected median on April 21

Feedback & Reflections

Poll

