



RioTinto

Nechako Reservoir / River / Freshet Information Sharing – Community Leaders

16 February 2022

Prepared by Andrew Czornohalan and Alec
Mercier

Photo: Avison

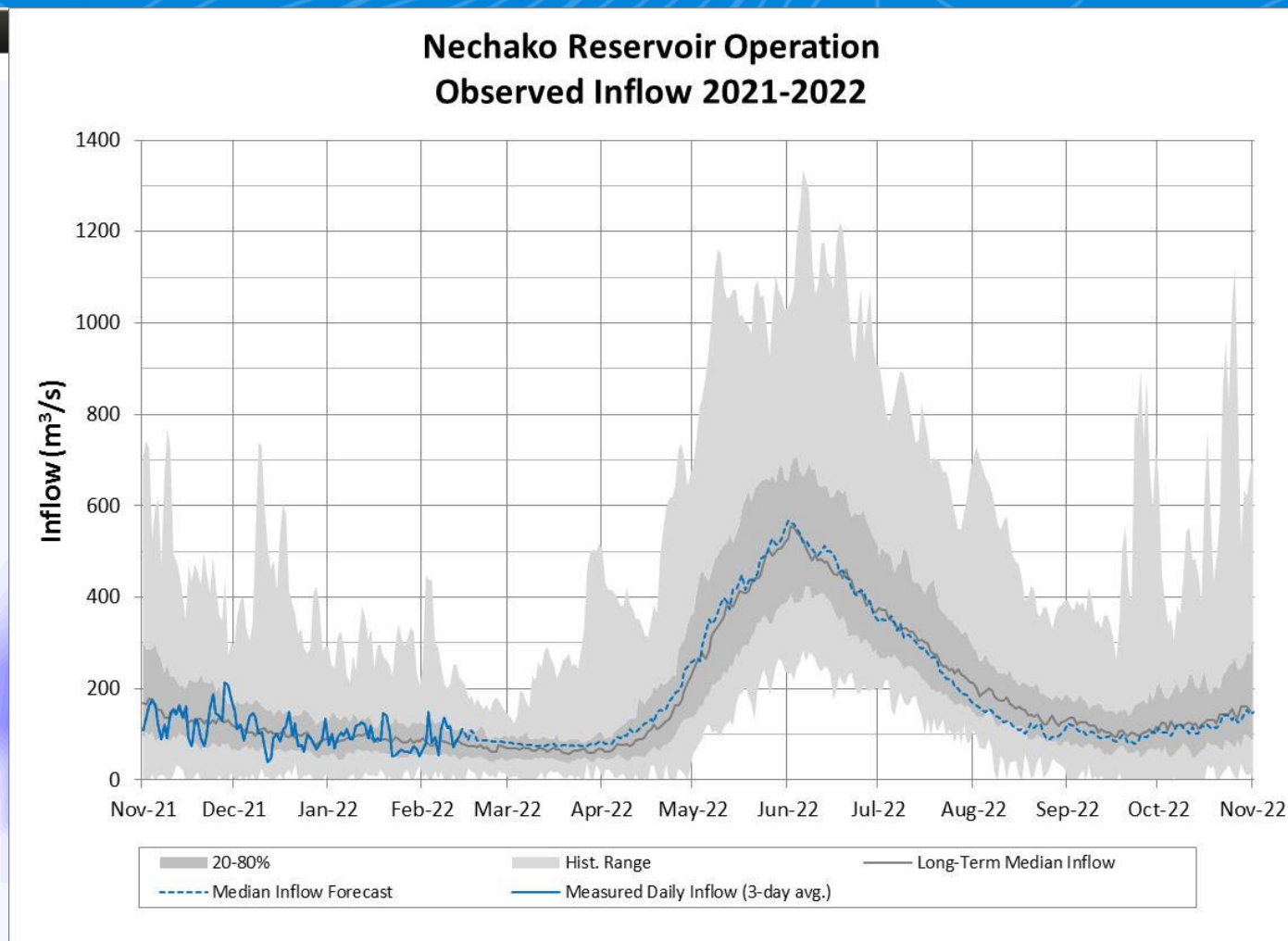
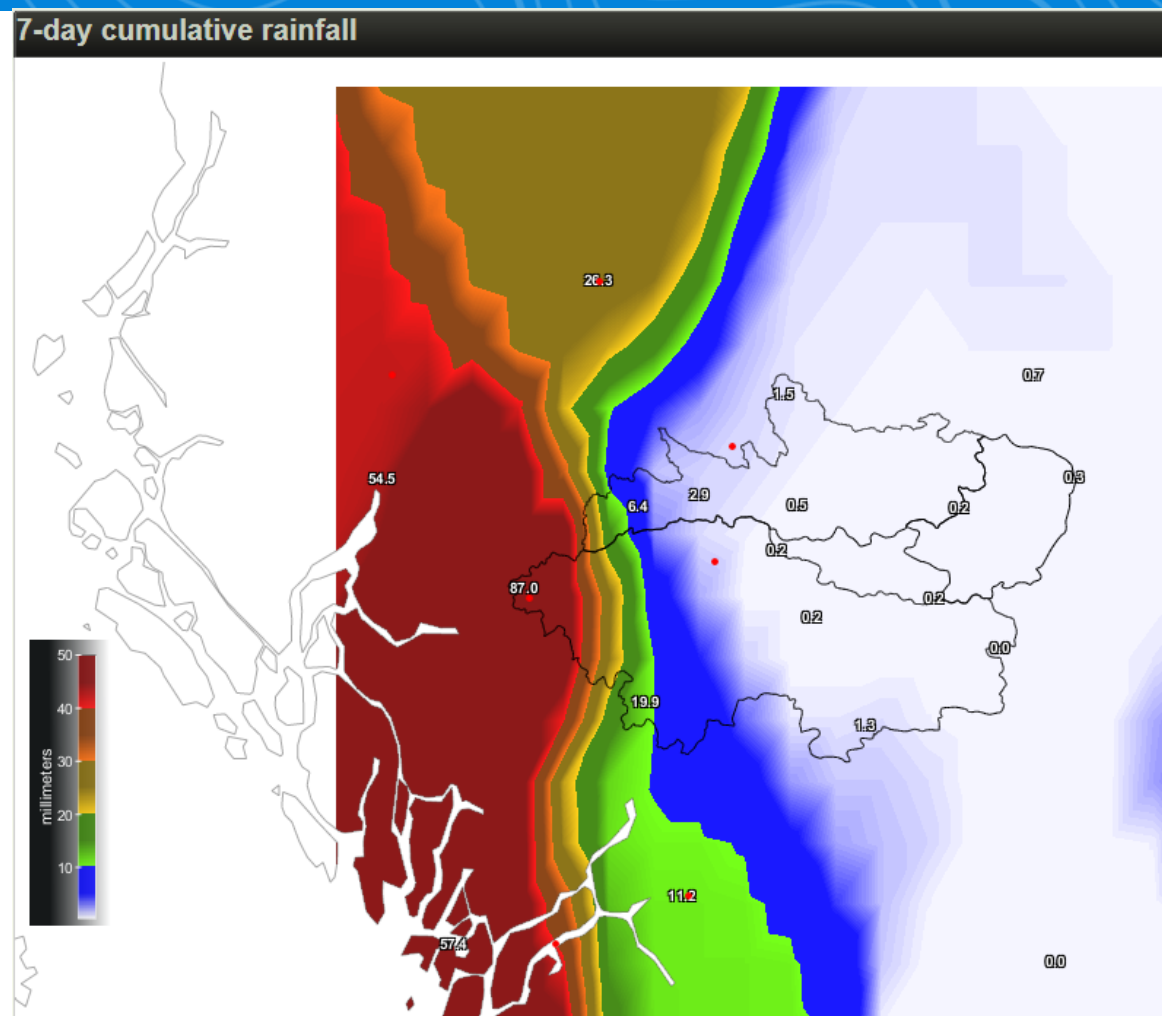
Key Focus

1. Current Watershed Data:
Precipitation and elevation
2. Fall spill and winter
consideration

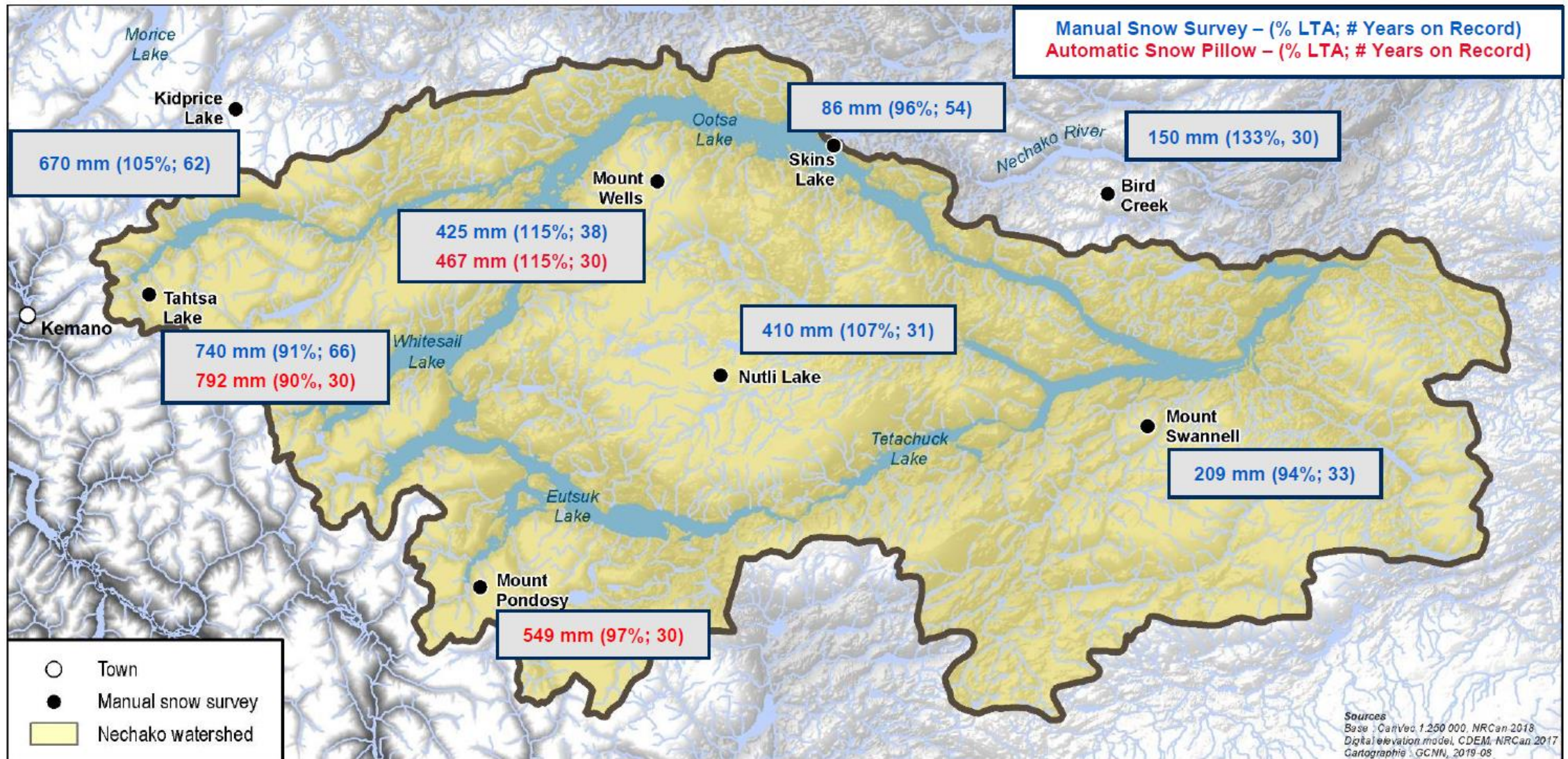


Photo: Avison

Observed Precipitation, Inflows vs Historical

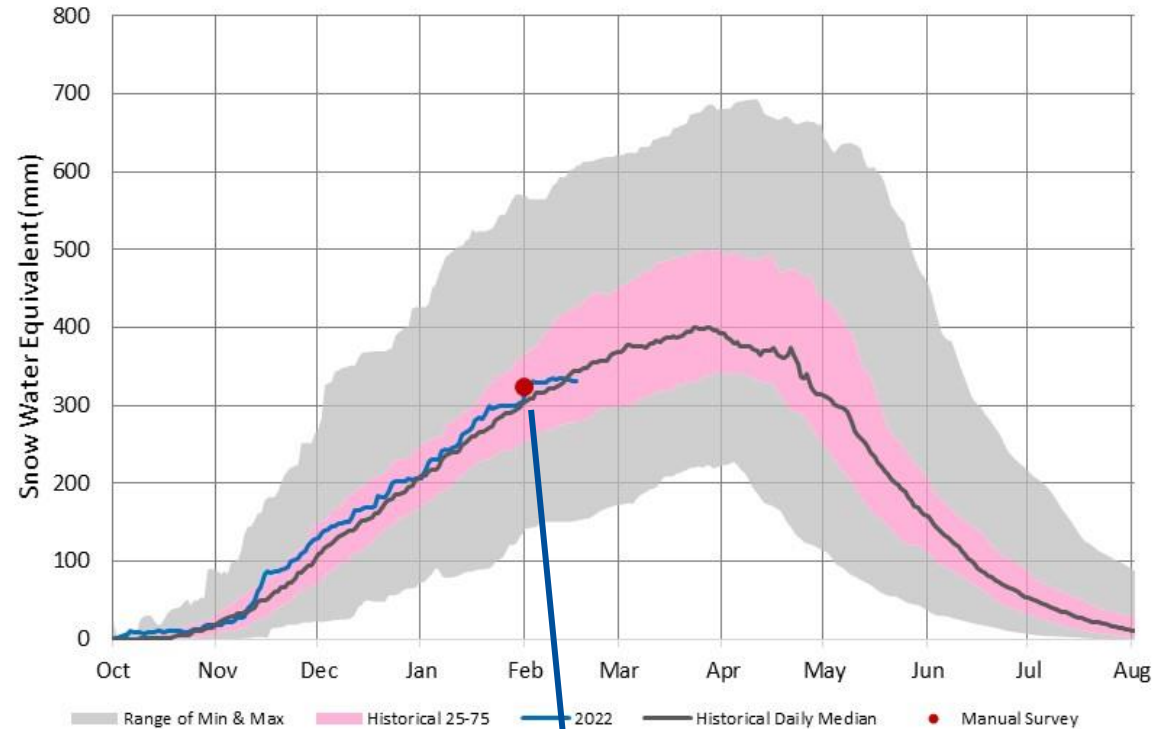


Manual Snow Survey 31 Jan. 2022



Current Snowpack

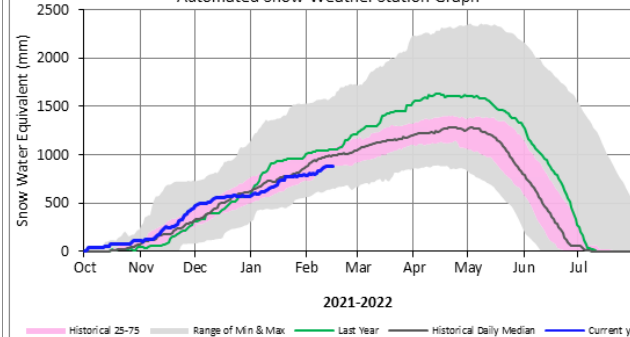
Nechako Reservoir Snowpack



322 mm (102% LTA; 25th/64)

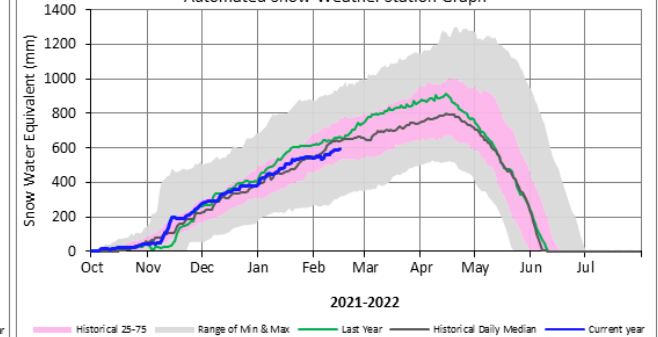
Tahtsa Lake

Automated Snow Weather Station Graph



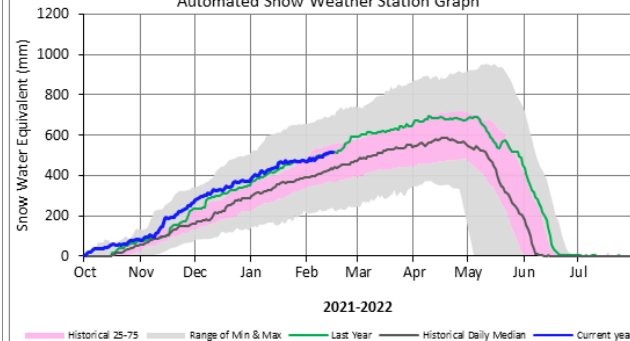
Mount Pondosy

Automated Snow Weather Station Graph



Mount Wells

Automated Snow Weather Station Graph

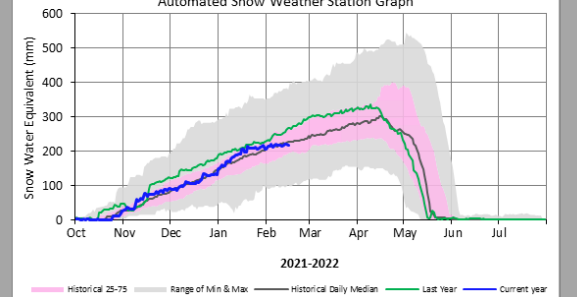


| Station | Current Value (mm) | LTA* (mm) | %LTA* | Percentile Rank* |
|---------------|--------------------|-----------|-------|------------------|
| Tahtsa Lake | 882 | 1012 | 87% | 21% |
| Mount Pondosy | 591 | 632 | 93% | 48% |
| Mount Wells | 514 | 451 | 114% | 68% |

*(1992-2021)

Lu Lake

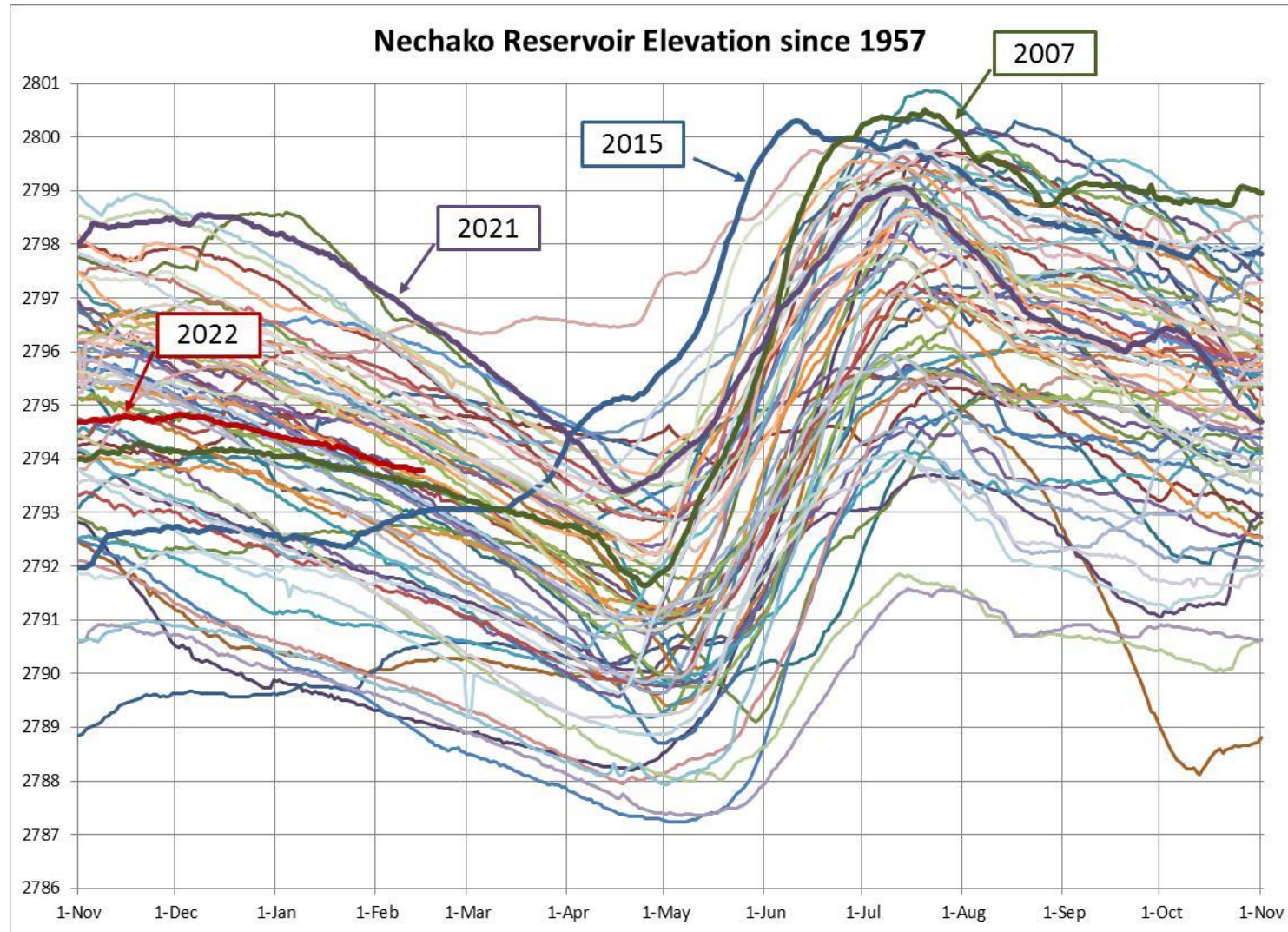
Automated Snow Weather Station Graph



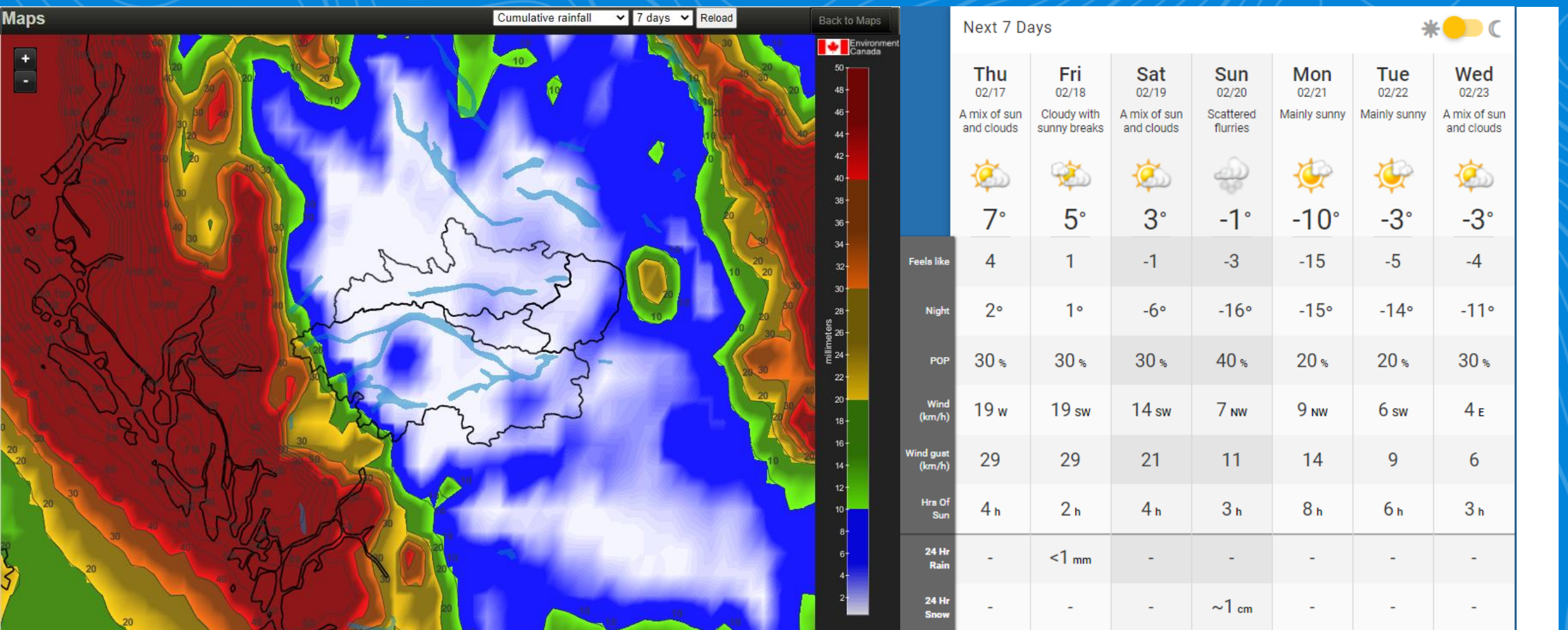
| Station | Current Value | %LTA* |
|---------|---------------|-------|
| Lu Lake | 217 | 94% |

*(1997-2021)

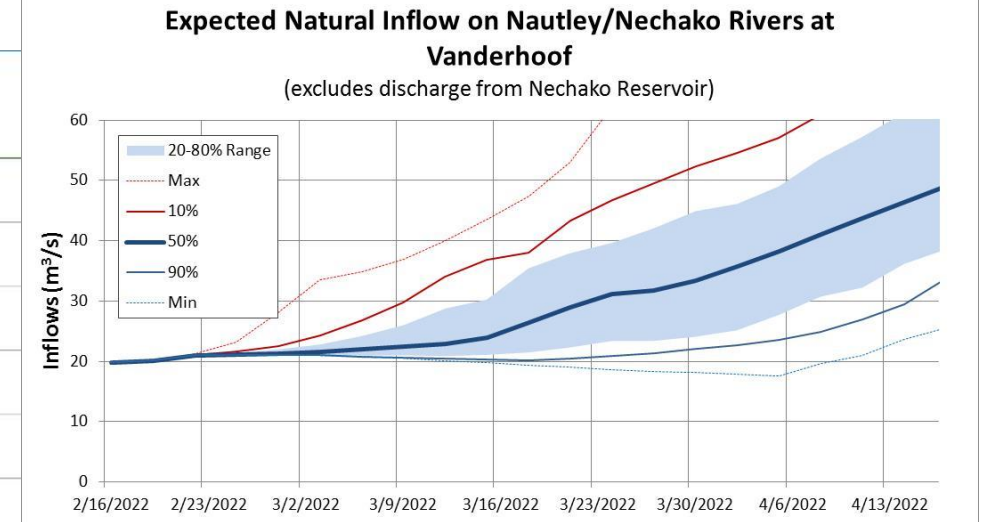
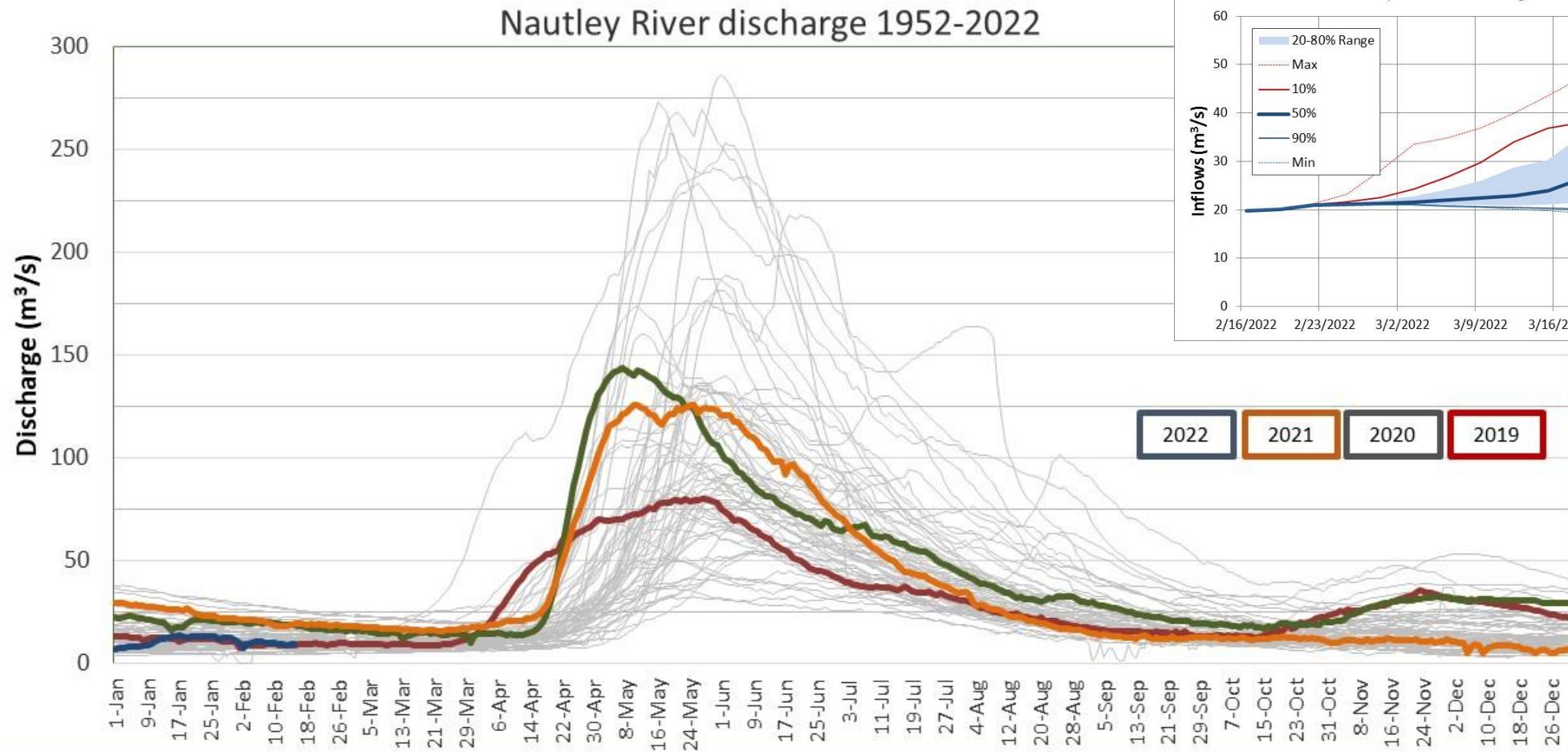
Historical Reservoir Elevation



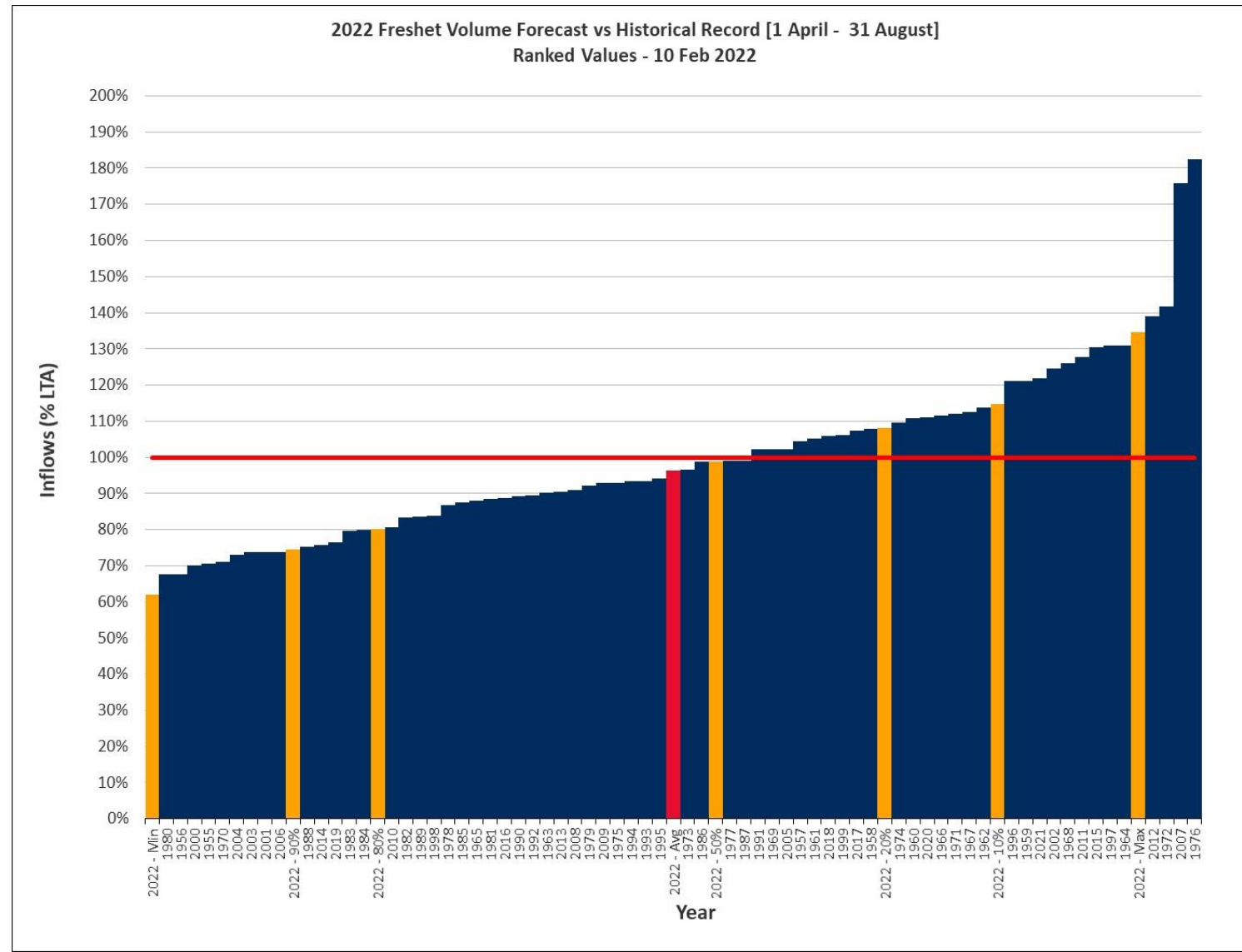
7 Day Weather Forecast



Nautley River Flows, Forecast

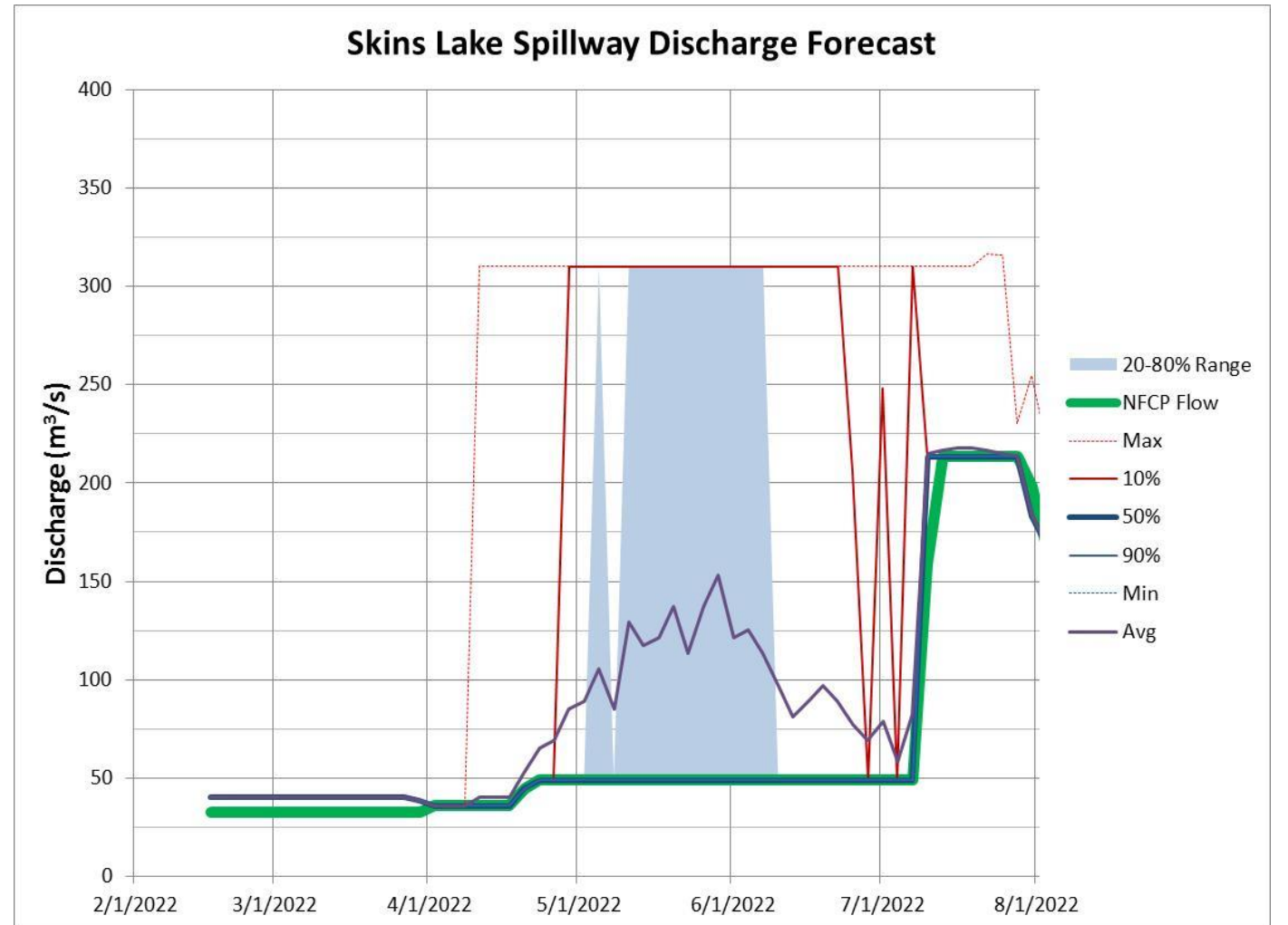


Spring Freshet Inflow Forecast

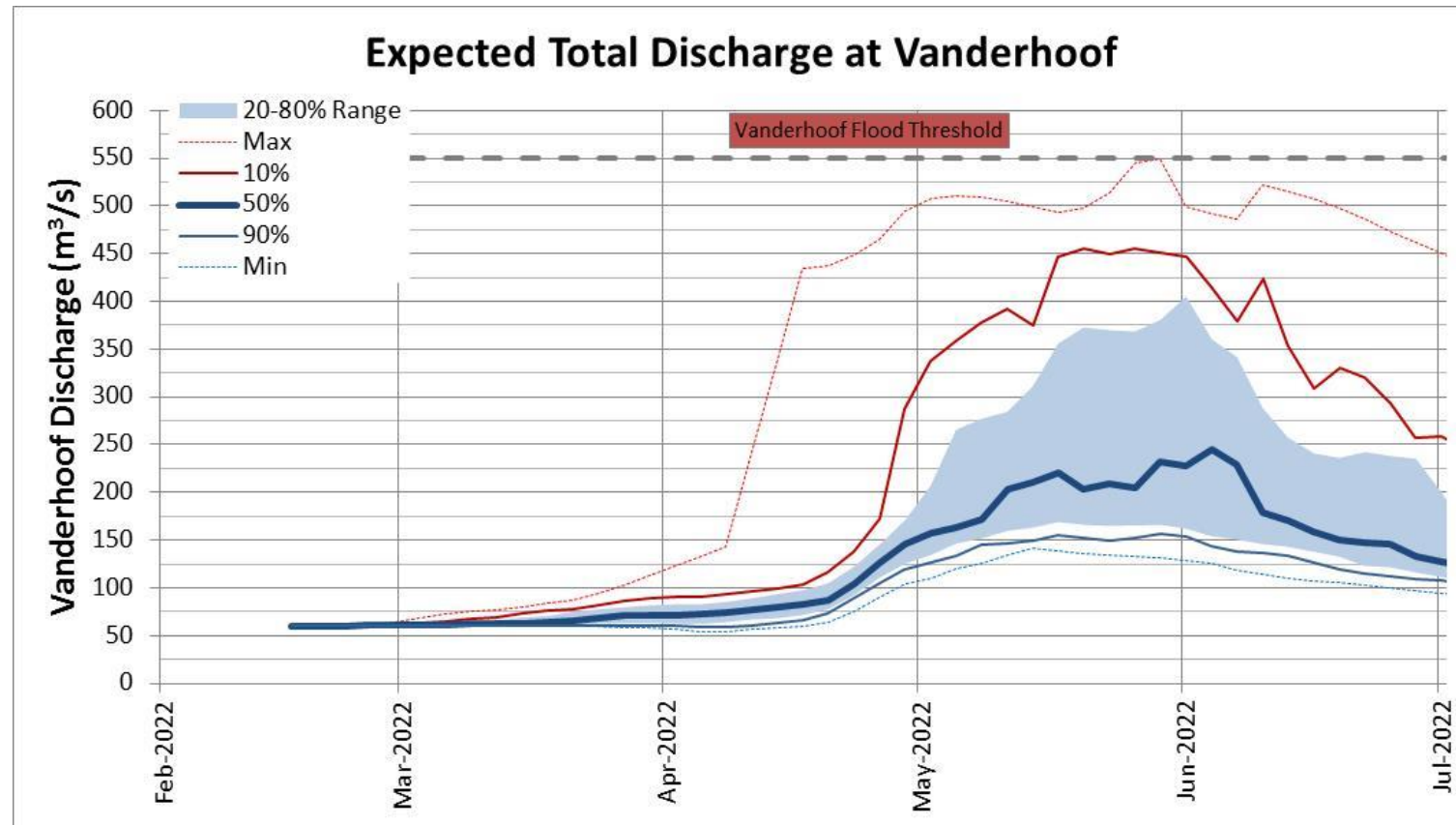


Spillway Management – Looking to Winter and Spring

- SLS discharge currently 40 m³/s, and is most likely to be maintained at 40 m³/s throughout winter;
- Working through the Smelter load and re-start scenarios
- Ice Jam risk and winter flow protocols - collecting data as per NHC recommendation
- Spring Freshet flood risk; Murray Cheslatta System and Vanderhoof

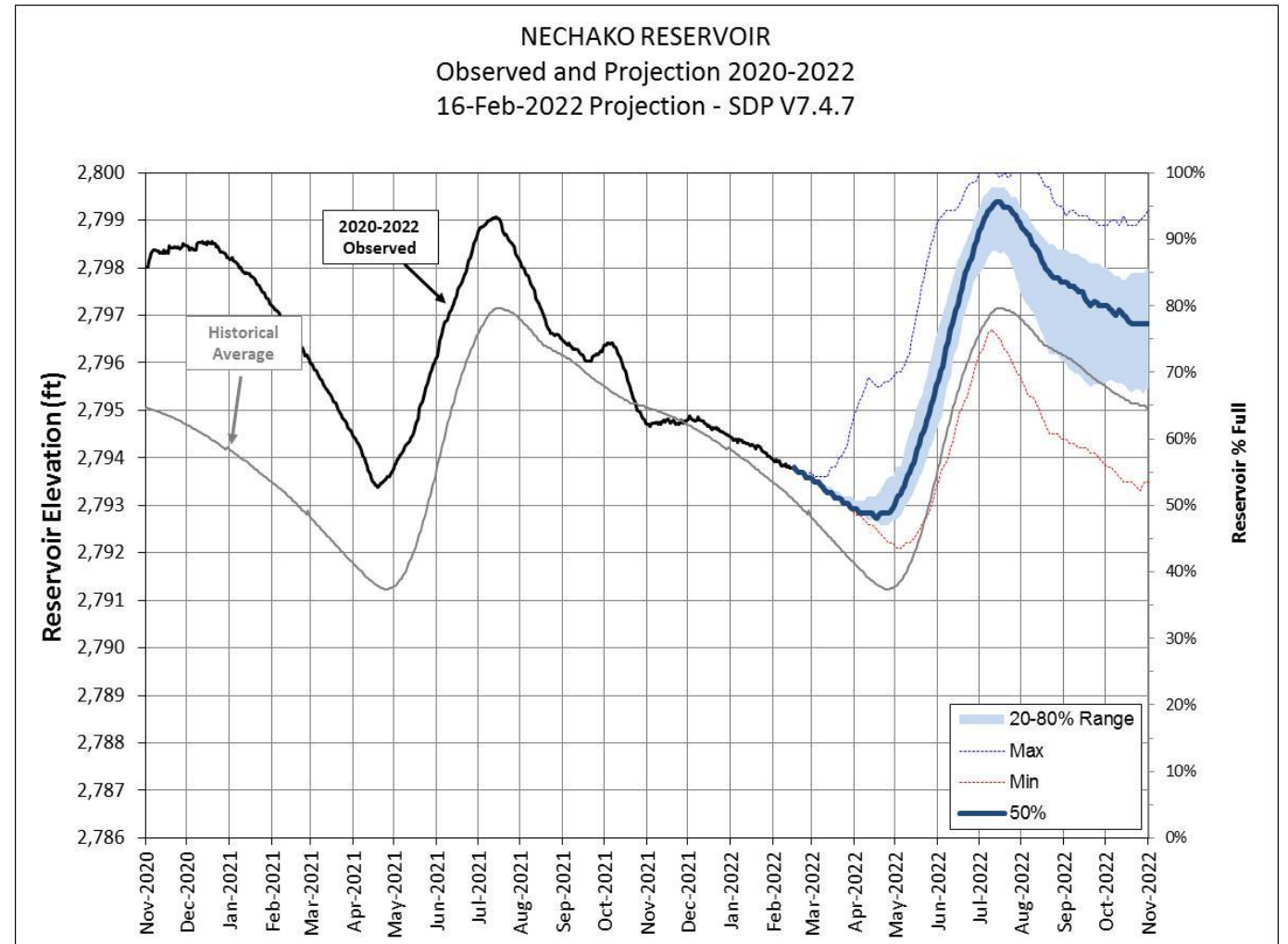


Forecast – Vanderhoof Flows



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



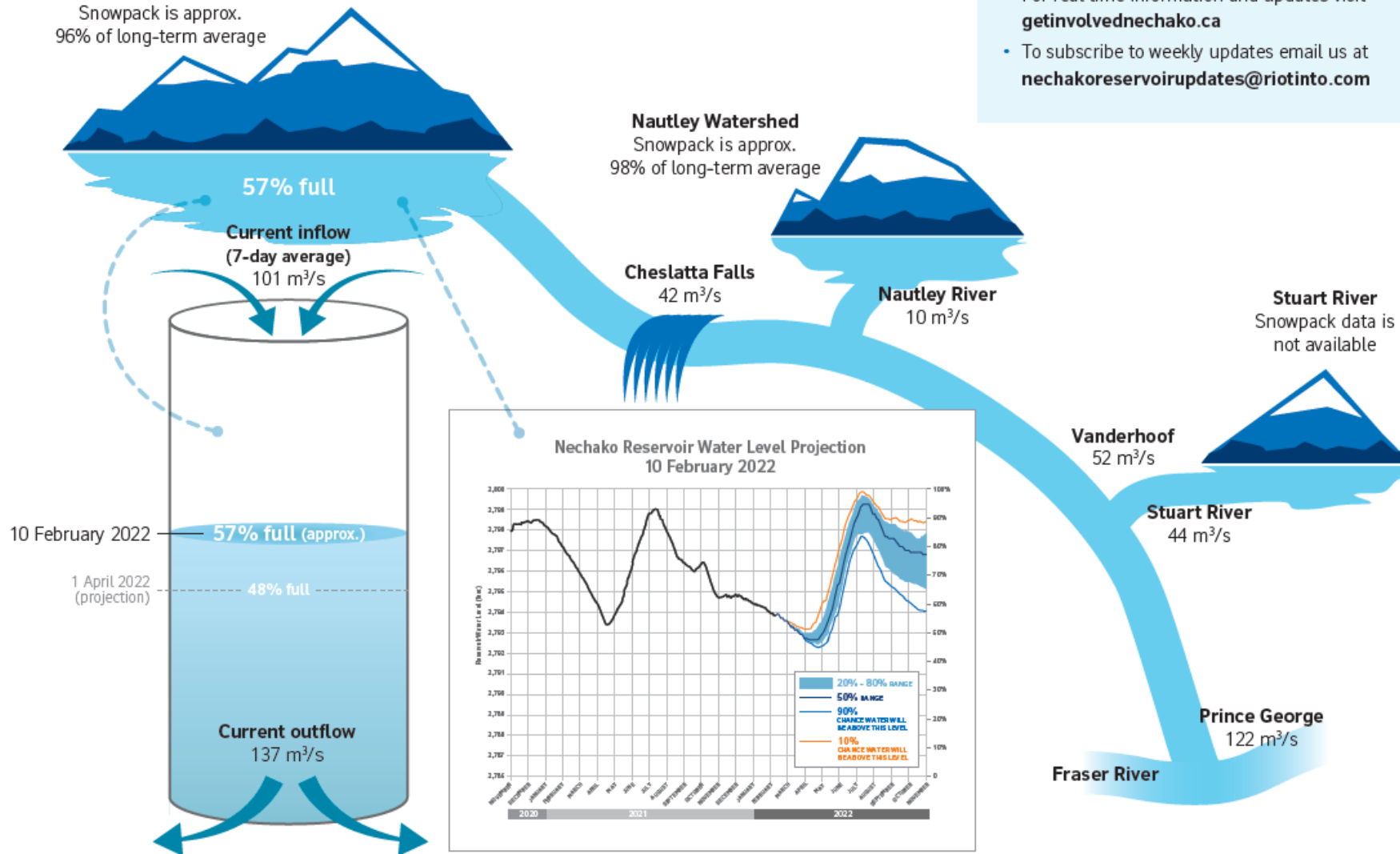
Photo: Avison

1. Model update and communications.
2. Ice Surveys Ongoing
3. Provide update on Re-Start &Nechako Implications – In Progress
4. Confirm next meeting date – **02 or 09 March**

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 - 10 February 2022

Nechako Reservoir
Snowpack is approx.
96% of long-term average



Nechako Reservoir operations update

- Skins Lake Spillway discharge is likely to be maintained at approximately 40 m³/sec for the duration of the winter in accordance to the Nechako Fisheries Conservation Program guidelines.
- For real time information and updates visit getinvolvednechako.ca
- To subscribe to weekly updates email us at nechakoreservoirupdates@riotinto.com

Feedback & Reflections

