



The Rio Tinto Water Engagement Initiative (WEI) Main Table met in Vanderhoof on Wednesday, June 28, and Thursday, June 29, 2023.

The WEI is intended to provide a vehicle to share interests, review information, develop alternative operating options, and select preferred options for Rio Tinto to implement in the Nechako system. Background information on the WEI is available at <https://www.getinvolvednechako.ca/water-engagement-initiative/>.

Meeting 31 began with a review of the Phase 1, Round 2 Flow Alternatives¹. WEI participants agreed on the next steps to develop a package of Phase 1 flow-related recommendations. The following will be considered in the package:

- Flow alternatives
- Critical Data Gaps
- Physical Works
- Monitoring
- In-season Flow Adjustments
- Triggers and Review Period

For Phase 1 (see the table below), WEI participants reviewed approximately 20 potential flow scenarios. Using structured decision-making, two alternatives stood out with the most support: alternatives 4D and 5D.

Alternative 4D received support due to its stepped flow increase (mimics a more natural flow increase prior to the Summer Temperature Management Program (STMP)). This alternative could potentially lead to water temperature improvements for migrating salmon while reducing the potential for flooding and reducing flow ramping rates. Some participants expressed a lack of support due to poor showing related to select fish performance measures (PMs). One concern was expressed about the potential effects on low CO₂ energy production.

Alternative 5D received the least opposition from WEI participants as it performed the best according to the consequence table. It reduced flooding potential and featured a more natural-shaped hydrograph at Vanderhoof, smoothing out the two peak flow events (natural freshet and STMP). The alternative also included ramping and potential temperature improvements for migrating salmon. A concern was raised with Alternative 5D about the potential negative impacts on low CO₂ energy.

Next Steps:

- Further modeling will be conducted by Rio Tinto to determine if the effects on low CO₂ energy production can be mitigated.
- The Phase 1 package of recommendations will provide a plan to address data gaps and enhance understanding of fish habitat, particularly side channels.



ⁱ Rio Tinto Nechako Flow Alternative Phases

Phase	Overview
1	Immediate-term changes (e.g., next calendar year) and within the current water budget for the Nechako River.
2	Near and medium-term changes (e.g., 1 to 3 years) and would require Rio Tinto to seek approval or authorization(s) in accordance with the existing water license and/or flow-related agreements and commitments
3	Medium and longer-term changes (e.g., 3 to 5 years) Involve a combination of new water management facilities (mitigation/enhancement projects) and potential changes to flow releases to the Nechako River to maintain and/or improve conditions related to key water uses.