Rio Tinto Water Engagement Initiative Table Meeting

Meeting 3

Thursday, August 22, 2019



Welcome and introductions

- Welcome and introductions
- Agenda review

Agenda Review

- Province of BC: Big Bar slide update
- Review and finalize materials from last meeting
 - Meeting summary
 - Action items
- Presentation on Nechako reservoir regulatory context and existing flow schedule:
 - Regulatory context
 - Flow schedule

Agenda review (2)

- Breakout groups: Identification of issues and interests related to current Rio Tinto operations in the Nechako region
- Breakout groups each present the issues and interests identified

Agenda review (3)

- Information needs discussion
- Next meeting dates
 - September 11, 2019 (confirmed at the August 22, 2019 meeting)
 - October
 - November
- Adjourn

Anticipated outcomes

- Increased understanding of Nechako reservoir regulatory context and existing water flow schedule
- Comprehensive list of issues and interests related to current Rio Tinto operations in the Nechako region

Province of BC Big Bar update

Action item status

- Action Item: Rahul Ray (RR) to revise the wording in the WEI Process Guiding Principles to reflect what was discussed at the meeting and post the final version on the Get Involved Nechako website.
 - RR comment: RR revised the WEI Process Guiding Principles to incorporate the agreed upon language from the meeting. The final WEI Process Guiding Principles were posted on the Get Involved Nechako website on Friday, July 19, 2019.

Action item status (2)

- Action Item: Rio Tinto to make the "virtual tour" video available online.
 - RR comment: Action item complete. Video available at https://www.getinvolvednechako.ca/learn-more-our-operations
- Action Item: Rio Tinto to provide a reference library
 - RR comment: Document library hosted on the Get Involved Nechako website: https://www.getinvolvednechako.ca/

Action item status (3)

- Action Item: RR to post the 1-page summary of the province's interests received from Dave Francis electronically and distributed in hard copy at the meeting on the WEI website.
 - RR comment: The summary is posted on the Get Involved
 Nechako website at:

https://www.getinvolvednechako.ca/7037/documents/18094

Action item status

- Action Item: RR to develop and circulate draft field trip itinerary for August 21.
 - RR comment: Field trip postponed
- Action Item: RR to coordinate a presentation on how water temperatures and flows are currently managed in the Nechako.
 - RR comment: Jayson Kurtz to give presentation today
- Action Item: RR to confirm location details for August
 22 Table meeting
 - RR comment: Welcome to the meeting

Quick wins: Rancher communication

- Action item: Rio Tinto to work with Table members to scope and develop a database of ranchers for communication purposes
 - RR comment: Draft approach below
- Key steps include:
 - Build of work done previously
 - Attend meetings this fall
 - Update contact database
 - Reissue invitation to join Flow Facts
 - Receive feedback on preferred communication modes, e.g. moving to text messaging.

Quick wins: Forward looking communication

- Action item: Rio Tinto to work with Table members to scope and develop forward-looking communications (flows, changes in elevation and timing, ramping rates) including real-time updates
 - RR comment: Draft approach developed

Key tasks

- Task 1. Seek input on Flow Facts format from WEI Participants
- Task 2. Solicit feedback from existing Flow Fact recipients
- Task 3. Seek input on Flow Facts format including recent format updates from the broader public
- Task 4. Prepare revised Flow Facts and circulate for review and comment

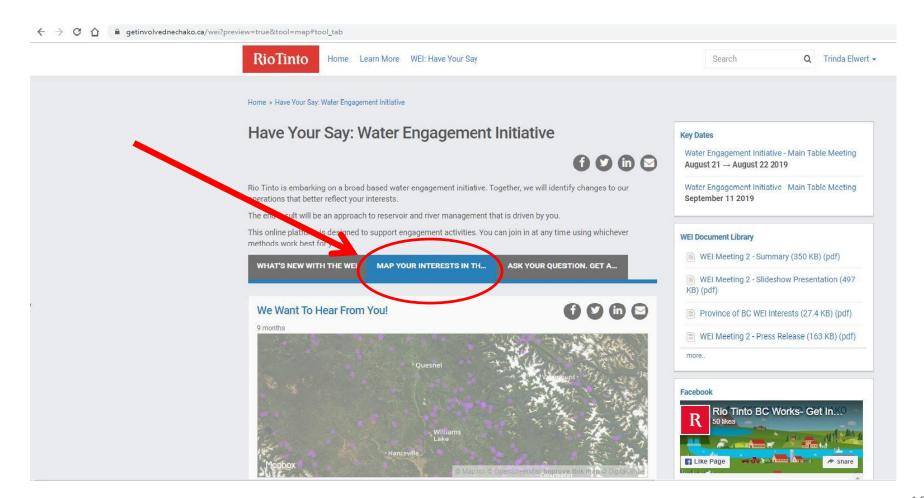
Quick win: Base map

- Action item: Rio Tinto to work with Table members to scope and develop a base map of key features including the fan, canyon, profiles, and erosion sites.
 - RR comment: Draft approach developed, summarized in the following four slides

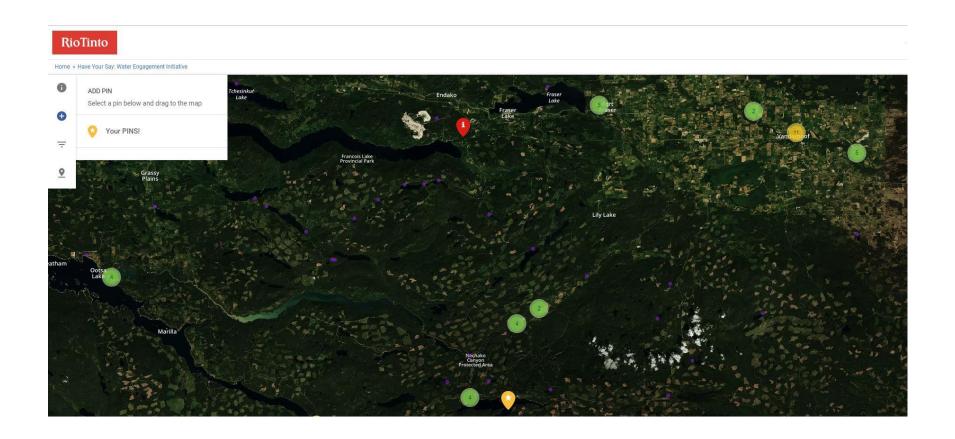
Base map: Interactive Map overview

- Trinda Elwert coordinating
- Interactive map allows registered users to place a pin vour PINSI on the map. On that pin users can post a picture or comment on a location in the watershed
- Allows website users to learn about the watershed from the people who live and work here
- We're looking for everyone to add to the map!

How to access the interactive map on the GetInvolvedNechako.com website



Interactive Map on the GetInvolvedNechako.com website



A few of the things identified on the map include:

- Water survey locations
- River confluences
- Bridge and boat launch locations
- Osprey nesting sites
- Spawning habitat for various fish species
- Interesting bank formations and erosion
- Animal sightings

Nechako reservoir operation

- Presentation by Jayson Kurtz
- Nechako Reservoir regulatory context
- Current flow schedule

Rio Tinto WEI Table Process Overview

- Scoping: understand Table issues and interests
- Develop objectives
- Identify performance measures
- Create alternatives
- Make trade-offs
- Select an alternative
- Implement alternative

Issues and interests

- Identification of issues and interests related to current Rio Tinto operations in the Nechako region:
 - Category (e.g. salmon, archeological sites, recreational access)
 - Issue
 - Timing of issue
 - Description
 - Information need

Known Issues and interests: categories

- Communication
- Salmon
- Sturgeon
- Resident fish
- Wildlife
- Archaeology
- Erosion
- Power production
- Emergency preparedness

- Cattle
- Aquifer
- Ice jams/reservoir levels
- Murray-Cheslatta system
- Non-flow enhancements
- Waterfowl
- Recreation
- Health of the river
- Flooding

Smaller group discussion

- Small group discussions to continue identification of issues and interests related to Rio Tinto Nechako operations started last meeting
- Some of the issues I have heard are provided in this slide deck.
- Please add, remove, refine issues, adding detail in your groups!
- Report out after discussions today
- Rahul to compile information from your discussions

Known issue: Communication

- Incident communication
- Operational emergency planning
 - E.g. Modes of communication, roles and responsibilities
- Ongoing operation communication
- Multi-party body?

Known issue: Salmon

- Chinook
- Sockeye
 - Habitat
 - Flows: e.g. water volumes, timing, winter flows
 - Temperature

Known issue: Sturgeon

- Habitat
- Flows
- Sediment
- Temperature

Known issue: Resident fish

- Habitat
- Flows
- Temperature

Known issue: Wildlife

- Habitat
- Access

Known issue: Reservoir

- Bank erosion
- Logs and deadheads
- Osprey
- Fisheries (e.g. rainbow trout, burbot)
- Littoral productivity
- Spawning habitat
- Recreation (e.g. canoeing)
- Wildlife habitat

Known issue: Archaeological sites

- Inundation of archeological sites (e.g. village sites, graveyards)
- Archeological dig opportunities with fluctuating water levels?

Known issue: Erosion

- River bank
- Reservoir (identified earlier)

Known issue: Power production

- Need for reliable flows for power generation
- Hydroelectricity generation opportunities

Known issue: Cattle

- Irrigation infrastructure
- Access to water

Known issue: Aquifer

Water levels

Known issue: Ice jams/aquifer levels

Community infrastructure

Known issue: Murray-Cheslatta system

- Flows
- Sediment
- Restoration opportunities

Known issue: Non-flow enhancements

- Tributaries
- Side-channels
- Off-channel
- Riparian restoration or enhancement

Known issue: Waterfowl

- Middle Nechako known as waterfowl staging area
- Spring and fall nesting; interaction with potential flushing flows

Known issue: Recreation

Flows

Known issue: "Health of the river"

- Need to explore components
- Mental and physical health connection
- Accessibility of the river
- Access to clean water

Known issue: Flooding

- Vanderhoof
- Other locations
- Explore linkage with Fraser Lake flooding

Known issue: Ongoing research

Continuous learning

Known issue: Climate change

Understanding and adaptation

Information needs

- Presentation on results of DFO cold water release study
- DFO presentation on preferred temperature
- Grand Canyon needs
- Presentation on sediment issue
- Presentation on carrying capacity of Nechako for Chinook; role of NFCP
- Broadened cattle and agriculture discussion

Field trips

- Timing in August was challenging
- Learning and sharing opportunities
- Discussion

WEI Future Meeting Dates

Meeting 4:

- Thursday, September 11 (confirmed by WEI participants at the August 22, 2019 meeting)
- Wednesday, September 10: Southside Field trip (confirmed by WEI participants at the August 22, 2019 meeting)

Meeting 5:

- Monday, October 14, 2019 is Canadian Thanksgiving
- Tuesday, October 8 (confirmed by WEI participants at the August 22, 2019 meeting)

Meeting 6:

- Monday, November 11, 2019 is Remembrance Day
- Wednesday, November 20, 2019 (confirmed by WEI participants at the August 22, 2019 meeting)

Thank you!

