Rio Tinto
Water Engagement Initiative
Participant Meeting

Meeting 1
June 13, 2019
Vanderhoof

Intent of today

- Enable participants to introduce themselves
- Present an overview of Rio Tinto operations in the Nechako region
- Discuss the purpose and approach to the WEI Process
- Introduce and discuss draft guiding principles
- Discuss roles
- Confirm next steps and future meeting dates

Welcome and introductions

- Welcome and acknowledgement
- Facilitation team introductions
- Rio Tinto team introductions
- Participant introductions
- Taking notes to prepare a meeting summary that you will review

Rahul Ray

- **Role:** Lead facilitator, focused on supporting a fair, transparent, and meaningful process
- **Employer:** EDI Environmental Dynamics Inc. (EDI)
- **Background:** biology, impact assessment, socio-economic assessment (environmental, social sciences, economics), multi-party processes
- Much of career working for and with Indigenous communities and non-Indigenous northern communities

Jason Collier

- **Role:** Support facilitator. Here to respond to the needs of the table and work with Rahul
- **Employer:** EDI
- **Background:** environmental scientist, project manager, Indigenous community and stakeholder collaborator

Rio Tinto team

- Andrew Czornohalan, Rio Tinto, Acting General Manager
- Justus Benckhuysen, Rio Tinto, Nechako Operations Coordinator
- Daniel DeKay, Advisor, Communities & Communications Rio Tinto BC WORKS

Technical Working Group coordinator

- Jayson Kurtz, Ecofish Research, Technical Working Group Coordinator
- Adam Lewis, Ecofish Research, Technical Working Group Advisor

Participant introductions

- Introduce yourself
- Do you represent an organization in this process? If so, which one? Tell us a little bit about it
- Describe what you hope to achieve through your involvement

What is the purpose of the WEI?

- Facilitate collaboration between interested parties in the Nechako region to identify ways of improving Rio Tinto operations
- Understand issues and interests
- Use a structured process to identify operational improvements to address those issues and interests

WEI preliminary scope

- Scope may include, but will be shaped by participants:
  - spillway discharge schedules
  - flood management measures
  - reservoir levels
  - downstream flow and water temperature targets
  - fisheries and monitoring plans
  - infrastructure
  - research
  - communication
  - **other interests brought forward by participants**

Process Approach

- Build on the principles and approaches outlined in the Province of BC Water Use Plan Guidelines
- Structured process to understand interests and develop refined operational approaches to Rio Tinto operations in the Nechako region
- You are key players in the Process
- Your efforts will be supported by a Technical Working Group

Key steps in the WEI Process

1. Define water management issues and objectives
2. Collect information on water use impacts
3. Create operating alternatives
4. Confirm preferred operating approach
5. Implement operational approach and monitor results

WEI Process Step 1: Define water use issues and objectives

- Review and revise issues list
- Identify objectives corresponding to the issues and interests identified
- Define measures to assess how the objectives can be achieved

WEI Process Step 2: Collect information on water use impacts

- Gather information on the impacts of water flows on each objective
- Build on existing information
- Conduct technical studies to refine and supplement existing information
- Participants will be actively involved in identifying immediate and future information needs
- Will include local knowledge and participant experience

WEI Process Step 3: Create operating alternatives

- Develop diverse set of alternative operating regimes
- Options should be sufficiently distinct to allow comparison
- Range of operating alternatives should be forward-looking, focused on operational improvements

WEI Process Step 4: Confirm preferred operating approach

- Select preferred operational option
- Consensus on an operating alternative is the goal, but not a requirement
- Prepare report on the consultative process
- Report will document areas of agreement and non-agreement

WEI Process Step 5: Implement operational approach and monitor results

- Implement preferred operational approach
- Monitor results
- Support ongoing improvement

Technical Working Group

- The Technical Working Group (TWG) will provide timely information and run analyses for participants
- Process participants can also be members of the TWG or designate a member of their Indigenous community or stakeholder group to participate
- The TWG will meet on a regular basis by telephone or in person and will be supported by a **Technical Coordinator**

Technical Coordinator

- Leads TWG in supporting Process for information, studies, and analysis
- **Ecofish** (Jayson and Adam) are experienced in water management plan information needs and analysis
- Jayson will be the TWG coordinator

Technical Coordinator Progress

Wealth of information exists, 1951-current:

- Fish and Fish Habitat
- Water Quality and Aquatic Productivity
- Hydrology, Flooding and Erosion
- Agriculture and Soils
- Wildlife and Riparian Habitat
- Recreation

Technical Coordinator Progress (2)

Initial focus on 3 information sources:

- Nechako Environmental Enhancement Fund (NEEF)
- Nechako Fisheries Conservation Program (NFCP)
- Nechako White Sturgeon Recovery Initiative (NWSRI)

Technical Coordinator Progress (3)

Annotated bibliography:

- Currently about 350 entries
- Approximately 25% through first 3 sources

Technical Coordinator Progress (4)

Catalogu	Year	Author	Primary Categor	Keywords	Title	Synthesized Summary	Type of Work
3	2011	Michael J. Bradford	Fish	Chinook Salmon abundance	Trends in the Abundance of Chinook Salmon (Oncorhynchus tshawytscha) of the Nechako River, British Columbia	abundance of chinook samlon of the Nechako River were analyzed to quantify the ecological effects of water abstraction for electricity generation.	Science publication, Field
4	1996	Todd D. French	Primary productivity	Macrophyte communities distribution	Habitat partitioning in riverine macrophyte communities	investigated how, or if, macrophyte species are differentially distributed with respect to abiotic gradients in a large river in central British Columbia, Canada.	Science publication, Field
11	1987	L.G. Swain, R. Girar	Water Qualtiy	water quality, hydrology, water use, waste discharge	Talka-Nechako area Nehacko River water quality assessment and objectives	a synthesis of water quality data and objectives in priority water basins; water quality within the Nechakio River watershed based upon data collected up to 1983.	Government - MOE
12	1984	L. Bergman	Hydrology	Murray-Cheslatta Lakes	Natural hydrology of Murray-Cheslatta Lakes		Government - MOE
13	2008	D. Bos, J. Stockner,	Sediment/Erosion	Paleominology, Cheslatta Lake	Cheslatta Lake Paleolimnology Assessment	Uses paleominology to show haow sediments have changed in the physical and biological components of Cheslatta Lake following diversion of water through the Skin's Lake Spillway.	Education Research - UNBC, field data
19	2005	J. Hamilton, N. Schi	Environmental Studies	hydrology, limnology, fisheries, geomorphology, first nation interests, fisheries management	Background information report Murray-Cheslatta River system	a synthesis of information including biological, hydrolocial, first nations interests, flow options, fish management plans, results of modelling analysis, areas of agreement and disagreement.	Consultant research, synthesis of informatino
20	1986	P. Harder and Asso	Fish	fisheries enhancement, Murray Lake, Cheslatta Lake	Fisheries capabilities and enhancement opportunities on four tributary streams to Murray and Cheslatta Lakes		Consultant research
21	2004	Triton Environments	Environmental Studies	Kenney Dam,white sturgeon, fish habitat, temperature, Murray-Cheslatta, water management	Environmental implication of construction of the proposed Kenney Dam cold water release facility	documentation of the environmental benefits of a water release facility. Lists potential benefits and drawbacks, proposes flow management scenarios and lists implications to sturgeon in Murray-Cheslatta system and other fisheries in the Nechako.	Consultant research
26	2015	Fraser Basin Counc	Environmental Studies	watershed health, water quality, flow, fish, wildlife, ecosystem, resource development, resource conservation	Nachako Watershed Health Report	The overall goal of the project is to assess the health of the Nechako River watershed to inform actions and decisions that can improve the health of the watershed and the ecosystems, communities and economies that depend on it. Both the report and online atlas are based on the collection and analysis of best available and accessible data from a wide range of sources.	Organization research - synthesis of data
39	1999	Rescan	Environmental Studies	water management, fisheries, hydrology, temperature	Nechako River summary of existing data	provides a common understanding of the available technical information, and not necessarily to represent the full range of issues and opinions presented by members of the public and scientists over many years of debate on the Nechako River.	consultant research - synthesis of data
86	1992	NFC	Environmental Studies		Summary of biological and physical studies carried out on the Nechako River by Alcan and DFO 1991/92		Organization - synthesis of information
88	1990	W.J. Schouwenburg	Environmental Studies		Review of the environmental studies report submitted by Alcan in support of the Kemano Completion proposal in relation to the continued fish production from the rivers involved		Government - DFO
89	1988	L. Jaremovic, D. Rowland	Fish	salmon	Review of Chinook salmon escapements in the Nechako River, B.C.	Report compiles data collected by DFO to assess the effects of proposed changes in river flow regime on chinook salmon. Provides spawning survey results from 1983-1986 and summarizes historical data on Nechako River chinook populations	Government - DFO
104	1998	Hatfield Consultants	fish	fish, fish habitat	Nechako Reservoir reconnaissance level stream inventory 1997 studies: Kasalka Creek (180-866000-45200	Inventory to support evaluation of timber salvage effects on fish resources in the reservoir and development of fish protection guidelines. Streams examined supported rainbow trout and are potentially significant contributors to Nechako Reservoir production	Consultant research
112	1994	C. Nowotny, D.G. Hi	fish	fish habitat	Inventory and rating of salmonid habitats along the Fraser and Nechako rivers within the city limits of Prince George, B.C		research

Summary

- Need for committed participants over expected 18-month timeframe, one meeting per month?
- Participants will learn about other perspectives and support creative options
- Develop objectives and targets
- Assess scenarios
- Identify operational improvements and monitoring approach

Process guiding principles

- Preliminary set of principles to guide the Process
- Compiled from principles presented at information sessions, through correspondence, and from discussions
- Draft Guiding Principles:
  - sent via email on Tuesday
  - discussion today
  - further refinement next meeting

Participant Activity: Review process guiding principles

- Work through the document on screen
- Identify topics to add
- Interactive process
- Send out revised draft ahead of next meeting
- Review revised draft next meeting

Rio Tinto commitment to the WEI Process

- Providing:
  - Independent facilitators
  - Technical Coordinator (Jayson)
  - Process support (Trinda)
  - Hydrology modelling expertise
  - Financial support for active participation

Radical transparency

- Meeting summary review process
  - Draft meeting summary preparation by facilitation team
  - Electronic Participant review
  - Finalization
  - Website posting
- Community updates
- Avoid the “back box”

Availability of travel funding

- Rio Tinto has committed funds to offset participation costs
- Reimbursement administered by EDI
- Jason is your contact
- Simple travel claim form developed

Availability of travel funding (2)

- Reimbursement for:
  - Vehicle travel
  - Accommodation

WEI Future Meeting Dates

- Discuss next steps and confirm future meeting dates
- Meeting planning process
- Field trips

WEI Future Meeting Dates

- July meeting
  - Date and location
  - Topics:
    - Interests
    - Draft objectives
- August meeting
- September meeting

Thank you!