Memorandum



| То: | WEI Table participants |
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| From: | Rahul Ray and Jason Collier |
| Date: | July 29, 2019 |
| Re: | Rio Tinto Water Engagement Initiative Table meeting summary: Meeting 2, Tuesday, July 16, 2019 |

The second Table meeting for the Rio Tinto Water Engagement Initiative (WEI) was held on July 16, 2019 at Scott's Grille in Vanderhoof, British Columbia. The session ran from 10:00 am to 3:45 pm.

This document is a meeting summary and is not word-for-word "meeting minutes". The information presented highlights the topics raised, key discussions, conclusions, and identified action items.

At the meeting, the facilitators were Rahul Ray (RR) and Jason Collier (JC) from EDI. Jayson Kurtz (JK) from Ecofish Research participated as the Technical Working Group (TWG) coordinator.

Justus Benckhuysen (JB), Rio Tinto Nechako Operations Coordinator, and Danielle De Kay (DD), Rio Tinto Communities and Communications Advisor, were also present as process support. Andrew Czornohalan (AC), Rio Tinto Acting General Manager was a participant at the Table.

Table 1 provides a list of the participants present at the meeting and the organizations they represent.



Table 1. July 16, 2019 - WEI Table meeting participants

| Individual | Organization |
|----------------------|---|
| Ray Klingspohn | BC Wildlife Federation |
| Christina Ciesielski | Carrier Sekani Tribal Council Fisheries |
| Mike Robertson | Cheslatta Carrier Nation |
| Gina Layte-Listen | City of Prince George |
| Mike Henry | Department of Fisheries and Oceans |
| Dan Sneep | Department of Fisheries and Oceans |
| Jennifer Howell | District of Fort St. James |
| Kevin Moutray | District of Vanderhoof |
| Gerry Thiessen | District of Vanderhoof |
| Kim Menounos | Fraser Basin Council |
| Dave Francis | Ministry of Forests, Lands, Natural Resource Operations, and Rural Development |
| Carrie Smith | MLA John Rustad's office |
| Henry Klassen | Public participant |
| Gerd Erasmus | Public participant |
| Craig Smith | Public participant |
| Donna Klingspohn | Public participant |
| John Alderliesten | Public participant |
| Wayne Salewski | Public participant |
| June Wood | Public Participant |
| Lyla Brophy | Nechako Regional Cattlemen's Association |
| Dr. Paul Collard | Nechako Valley Sporting Association |
| Paula Tait | Northern Health |
| Mark Parker | Regional District of Bulkley Nechako |
| Clint Lambert | Regional District of Bulkley Nechako |
| Jerry Peterson | Regional District of Bulkley Nechako |
| Curtis Helgesen | Regional District of Bulkley Nechako |
| Andrew Czornohalan | Rio Tinto |
| Tim Plesko | Southside representative |
| Dustin Snyder | Spruce City Wildlife Association |
| Stephen Dery | UNBC |



The following provides a summary of the topics discussed at the meeting.

- The WEI project team introduced themselves and provided details on their respective roles in the WEI Process. Participants introduced themselves, providing background on the organization they represent, as needed.
- RR reviewed the agenda and asked if any changes were needed. No changes to the agenda were made.
- Table member commented that the table participants need to be honest about the state of the Nechako. Participants are taking part in the WEI to give a voice to the river to enable its recovery. It will be important to develop a base map for people to understand the scale of the situation and gain a clear understanding of the impacts. The map will also help people understand and avoid repetitive discussions during the WEI process.
- Participant mentioned that Table members still need to understand the Government of BC's interests. RR commented that the Government of BC has developed a list of interests which will be presented later in the meeting.
- RR provided a summary of the process that will be used to prepare draft and final meeting summaries. The process is:
 - EDI prepares a draft summary and distributes it to meeting participants, for review and to suggest revisions,
 - o Table members submit their suggested revisions to Rahul,
 - o EDI clarifies and incorporates participant comments into the summary,
 - EDI finalizes the meeting summary and then posts it to the WEI website.

Participants confirmed that they are comfortable with this process.

- Participants reviewed the revised WEI Process Guiding Principles and discussed some suggested wording that was suggested by a Table member to provide more clarity. It was agreed that the Guiding Principles should not be too specific or prescriptive, and the intent was to keep the process flexible. Wording was changed to include reference to "health of the system".
- Action Item: 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.



- AC provided an overview of Rio Tinto's operations in BC. A "virtual tour" video was presented, which provided background information on the system from construction through to current operations. The system is not like a typical hydro dam, but rather a series of lakes that form a reservoir by the Kenney Dam and a series of nine other dams. Tahtsa Narrows is the bottleneck of the system, as it is the shallowest point of the reservoir. There are two discharge points: Skins Lake Spillway and the discharge to the Kemano powerhouse. Rio Tinto manages flows at the Skins Lake Spillway for (1) safety, (2) fish needs, (3) floods, and (4) power generation.
- Question was asked on why the Skins Lake Spillway was chosen as the discharge point? AC replied that he didn't have a clear understanding on why that decision was made historically. However, it appears that cost savings and construction time were key considerations.
- AC provided an overview of what a potential release facility at Kenney Dam would entail. There are basically three options: (1) a water release facility, (2) water release facility with overspill capacity, and (3) a water release facility with hydro generation.
- A question was asked whether Rio Tinto will be providing the energy needed for the new LNG export facility going in at Kitimat? AC responded that there will be approximately a 140 MW demand on BC Hydro. BC Hydro is having many discussions to determine where the power will come from.
- AC related that Rio Tinto in the largest Independent Power Producer in BC and have modernized the smelter in Kitimat a few years ago. There are many companies interested in getting their materials from a greener supply chain. A comment was made that an environmental price is paid by Nechako residents for Rio Tinto to produce low emission aluminum, and that needs to be accounted for. AC acknowledged that Rio Tinto is looking for ways to improve their operations.
- A question was asked on whether the Rio Tinto video can be made available?
- 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
- A question was asked on whether a reference library will be set up to share relevant information? AC commented that a library is being developed and the WEI website could potentially be the library.
- Action Item: Rio Tinto to provide a reference library.
- A question was asked on how much of Rio Tinto's revenue is generated by selling power to BC Hydro? AC responded that approximately 10% of their BC Works revenue is generated through hydro sales.
- JK provided a summary of the efforts, models and results made by the Nechako Watershed Council (NWC).



- AC commented that participants should not limit their thinking to one scenario such as an annual hydrograph. For instance, an approach could be that depending on reservoir levels, large flushes could occur every few years to clear spawning habitats of sediment. JK agreed that was a good point and the NWC's research focused on one scenario.
- A question was asked on why the NWC suggested the 15 m³/sec flows for fish through Skins Lake? Table member responded that those flows would maintain appropriate flows for the system and would help to mitigate erosion through the Cheslatta system—as the new flow regime under Alcan/Rio Tinto changed the system drastically.
- A question was asked on how flows are determined for the fish management? The flows are managed to account for temperature in the system: more water is released for warm temperatures, and less water for cool temperatures.
- It was mentioned that DFO conducted a study on the potential for *Cold* Water Release Facility at Kenney Dam (i.e. cold water drawn at depth and released). They determined that a *Surface* Water Release Facility would be better. The reason being is that upon release, the cold water would be too cold for fish and that the less cold water would be needed (compared to surface water), but would warm-up quicker, so no real gain is achieved.
- It was mentioned that it will be very important for the WEI to learn from the successes and limitations of past initiatives, and build off the foundations established.
- It was also mentioned that we will need to develop a model that will be adaptable to many changing conditions, such as climate change, pine beetle effects, and fires.
- It was noted that there was also a certain political atmosphere when the NWC conducted their work, which provided a different background context than today.
- JK commented that the Main Table does not need to get bogged-down with the data and details of the modelling. The Technical Working Group (TWG) can conduct research and modelling and bring back results to inform the Main Table. The TWG efforts will be directed by the Main Table.
- A question was asked on whether a feasibility study has been completed on a potential Water Release Facility at Kenney Dam? Mike Robertson (Cheslatta Carrier Nation) responded that the Cheslatta Carrier Nation (with the First Nation Major Projects Coalition) is presently conducting a pre-feasibility study and is in discussions with Rio Tinto.
- A question was asked on whether the Summer Temperature Flows for fish are managed on a minimal or maximum temperature? JK replied it is a target temperature.



- A question was asked whether any model has looked at the whole reservoir (not just the river)? JK replied he wasn't sure, but the WEI can consider the reservoir and the river.
- A question was asked on whether there is better modeling being done now (compared to the NWC modeling) and better data available? Also, who would provide the resources for the improved modeling? JK responded that more work and better modeling has been developed. The TWG will support this effort. AC commented that Rio Tinto will provide support and will look into whether the Province is willing to also support the efforts.
- A comment was made to acknowledge and thank the NWC on the great work that was done and the large amount of information that was developed. It was widely agreed that the WEI will build on the wealth of information available.
- Henry Klassen (Public Participant) provided a summary of the efforts undertaken by the NWC from the start
 of the council in the 1990's following the BC Utility Commission hearings decision until 2010. Henry
 provided a summary of the main issues (e.g. Cheslatta system, Kenney Dam, canyon flows, fan, flow regime,
 siltation, sturgeon recovery, adaptive management) that will need to be considered to restore the system.
 Many studies were conducted during the NWC, the results of which remain relevant today and can be used
 as a base for the WEI.
- RR provided an overview of the Strategic Decision Making Process (SDM) and its role in the WEI. SDM has been used successfully in many processes where environmental, social and economic factors need to be integrated, and was the base for BC Hydro planning processes (i.e. Water Use Plans).
- A question was asked on how will the WEI include voices that are not present at the table, such as individuals
 or communities? RR replied that the WEI has the website where people can post their interests, ask
 questions and or get involved to help guide the WEI. The intent is to get everyone involved as much as
 possible, and have and continue to engage with communities, organizations, and First Nations to try and
 bring them onboard.
- A comment was made that it would be good if the WEI had assurances from the provincial and federal governments and Rio Tinto that the recommendations resulting of the WEI process will be implemented. The provincial and federal governments as well as Rio Tinto are supportive of the process, however, without knowing what is being asked, the parties cannot commit to implementing the outcomes.
- Extensive research has been undertaken on fish, floods, and a water release. Comment that we do not want to limit the WEI process to previous recommendations. Some undertakings, such as a release facility at Kenney Dam (which is being looked at by the First Nations Major Projects Coalition) is complex, while others can be easy to implement. There are many opportunities for win-wins.
- Dave Francis (MFLNRORD) provided an overview of the mandate of the provincial government and elaborated on the main topics of interest of the BC government.



- 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: <u>https://www.getinvolvednechako.ca/7037/documents/18094</u>
- A question was asked whether there is a parallel process going on with First Nations? RR responded that the WEI team has and will continue to work with potentially interested First Nations in the Nechako Region (approximately 17) to seek participation as part of the Main Table. There is not a parallel process occurring with First Nations.
- Dave Francis added that the first bullet in the provincial government's support letter for the WEI requests fulsome engagement with First Nations in the process.
- DFO representative commented that it is encouraging to see Rio Tinto undertaking the WEI. The process is
 not the same as BC Hydro's Water Use Planning process. In those, the process was started by an order
 issued by the Water Comptroller. Rio Tinto is a private company. They are undertaking the WEI voluntarily.
 AC agreed. He said that Rio Tinto could have hidden behind their Water License, but improvement would
 not have happened. It is important to start the ball rolling and get some momentum going forward.
- A question was asked about the Saik'uz and Stellat'en First Nation court cases. AC provided an overview of the court case, which is now related to Rights and Title. The case could be expected to last another year or so.
- A comment was made that Rio Tinto should be ready to make trade-offs. A question was asked: What tradeoff is Rio Tinto ready to make? At a previous meeting, Rio Tinto (AC) stated that it would be difficult for Rio Tinto to give up 30% of their Water License. Is that a hard number? AC replied that 30% was just a number given as an example. Rio Tinto interests will be represented at the table, and that changes will need to be justified. A question was asked whether Rio Tinto is willing to change their Water License? AC replied that it depends on the changes, but the most important thing is to determine what is needed, and the best way to get there.
- BC representative mentioned that, based on experience, it is normal for people involved in these types processes to want to start at the end, without going through process itself. BC has provided a draft of its interests and welcomes feedback.
- A question was asked on whether the BC government will be part of the TWG? The answer was yes.
- A preliminary discussion was held to identify some of the interests and concerns for the WEI participants. The following bullets provide a summary of the topics raised:
 - o Build a spillway at Kenney Dam



- O Develop an appropriate flow regime for the Cheslatta Murray River System
- Restore the Cheslatta Murray River System
- O Develop forward-looking communications on operation (i.e. flows)
- Erosion
- o Irrigation systems during low flows
- Interaction of environment to mental and physical health
- o Health River / System
- o Sturgeon recovery
- o Accessibility to the River
- Community input
- Fishing / fish / salmon / habitat /spawning beds
- o Availability of clean water
- Floods and mitigation
- o Recreation / trails / accessibility
- o Health Watershed
- Healthy reservoir / elevations in reservoir / erosion
- Safety / safety communications
- O Beavers / habitat / flow regime
- o Data / research / current state of environment
- o Naturalized hydrograph
- o DFO accountability
- Climate change adaptation



- RR reminded people to send him your interests and be ready to bring them forward.
- A question was asked if there would be an opportunity for people to debate issues raised by participants and ask questions and clarify concerns. RR replied that debate is an important part of the process, and conflicting interests are to be expected in the process. There will be opportunities to clarify, discuss, and debate interests at the next meeting and throughout the process.
- The WEI is a forward-looking process and DFO are there to support the process and provide technical support and statutory oversight. Rio Tinto is compliant with the Fisheries Act. The amended Fisheries Act is now more focused on fish habitat.
- A question was asked whether Rio Tinto has asked DFO for reduced fish flows. AC replied no reduced flows for fish is not an interest.
- Discussion centered around some potential quick wins. The following bullets provide a summary:
 - Quick win 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
 - Quick win action Item: Rio Tinto to work with Table members to scope and develop a database of ranchers for communication purposes
 - Quick win 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.
- Discussion focused on planning for the August 21st field trip. RR has received some ideas from Table members and will develop a draft itinerary that will be circulated to the table. A field trip for September could involve visiting the South side and the Cheslatta system.
- Action Item: RR to develop and circulate draft field trip itinerary for August 21.
- JC presented the process for travel reimbursements for participants.
- A question was asked whether the topic of water temperatures and flows for fish can be discussed at the next meeting, and include how they are managed are regulated? RR will organize a presentation.
- Action Item: RR to coordinate a presentation on how water temperatures and flows are currently managed in the Nechako.



- The next table meeting will be Thursday, August 22, 2019, with a field trip is scheduled for Wednesday, August 21 Rahul will confirm a location soon.
- Action Item: RR to distribute draft itinerary for August 21, 2019 field trip
- Action Item: RR to confirm location details for August 22 Table meeting

Action Items

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