



To: WEI Meeting Participants
From: Rahul Ray and Jason Collier
Date: May 4, 2020
Re: Final Rio Tinto WEI Table Teleconference Summary - Wednesday, April 15, 2020

A teleconference for the Rio Tinto Water Engagement Initiative (WEI) was held on April 15, 2020, from 9:00 am to 11:30 am. The teleconference was used instead of a Main Table face-to-face meeting to promote social distancing in response to concerns of the Corona virus (COVID-19), while keeping progressing on aspects of the WEI.

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

The facilitators were Rahul Ray (RR) and Jason Collier (JC) from EDI. They prepared this meeting summary. Logan Thideman from EDI was present as technical support. 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, Rio Tinto Communities & Communications Advisor participated in the teleconference. Andrew Czornohalan (AC), Operations Director - Power & Services, Kitimat and Kemano is a WEI participant.

A draft agenda was included in the invitation, and outlined the following topics:

- Anticipated Meeting Outcomes: Understanding of the state of sturgeon in the Nechako system, as well as research and restoration efforts
- New Day Agreement update
- Presentation on Sturgeon and discussion
- Confirmation of topics, information needs, and suggested specialists
- Next meeting dates

Table 1 lists the participants that were involved in the teleconference and the organizations they represent.

Table 1. April 15, 2020 - WEI Teleconference Participants

Individual	Organization
Tim Plesko	Public participant/Southside representative
Steve McAdam	Nechako White Sturgeon specialist
Arthur Halleran	Nak'azdli First Nation – Natural Resources
Andrew Czornohalan	Rio Tinto
Carrie Smith	MLA John Rustad's office
Mike Robertson	Southside representative / Cheslatta Carrier Nation
Deborah Jones-Middleton	Protective Services - Regional District of Bulkley Nechako
Chantelle Grafton	Superstar / FLNRORD
Mark Parker	Regional District of Bulkley Nechako
Gina Layte-Listen	City of Prince George
Cyndi Lauze	District of Vanderhoof
Henry Klassen	Public participant
Donna Klingspohn	Public participant
Ray Klingspohn	Public participant
Garry Blackwell	Public participant/Southside representative
Gerry Thiessen	District of Vanderhoof
Linda Sjodin	Public participant
James Jacklin	FLNRORD
Jason Llewellyn	Regional District of Bulkley Nechako
Phillip Krauskopf	FLNRORD
Ray Pillipow	FLNRORD
Wayne Salewski	Public participant / NEWSS
Lindsay Sackett	Fraser Basin Council
Gerd Erasmus	Public participant
Paula Tait	Northern Health
Kim Menounos	Fraser Basin Council
June Wood	Public participant
Dennis Wood	Public participant
Kevin Moutray	District of Vanderhoof
David Creighton	Northern Health
Jerry Petersen	Regional District of Bulkley Nechako

The following provides a summary of the topics discussed during the teleconference.

- Rahul opened the call by welcoming participants and reviewing the draft agenda. No changes were made. Rahul provided the protocols for the meeting: muting speakers, using the chat function, etc.
- Mike Robertson and Andrew provided an update on the New Day Agreement between the Cheslatta Carrier Nation and Rio Tinto. Negotiations related to the Agreement began in 2012, with the signing of a Memorandum of Understanding between the parties, with the goal of coming to a business-to-business partnership. The negotiations continued until January, 2020. The Agreement includes several components, such as operational, environmental, contractual, as well as training and education opportunities. Andrew mentioned that it was a rewarding process to go through and he was proud to be a part of it. He looks forward to seeing how it evolves, as the New Day Agreement is a framework for how Rio Tinto and the Cheslatta Nation can work together towards mutually beneficial opportunities.
- A participant wanted to know if the New Day Agreement addresses the Water Release Facility (WRF) at Kenney Dam. Mike replied that the WRF is not part of the New Day Agreement, but rather as part of a separate project and process, which is currently developing the feasibility study and planning for 2020 spring and summer work. Another participant wanted to confirm if the reservoir became the responsibility of the Cheslatta, as was reported in a news article. Mike confirmed that this is not the case.
- A participant wanted to know if the New Day Agreement outlined stewardship efforts and locations and, if so, how that process works. Mike said there are components of environmental enhancements opportunities, but they are not necessarily targeted towards Rio Tinto's operational issues on the reservoir, such as erosion, water intakes, cattle, etc. – those can be addressed through the WEI.
- Steve McAdam is a provincial sturgeon specialist and member of the Nechako White Sturgeon Recovery Initiative (NWSRI). He gave a presentation on sturgeon, including information on sturgeon distribution, life cycle, research about recruitment failure, restoration efforts, recovery approaches, and monitoring efforts. The presentation is posted on the Get Involved Nechako website.
- A participant commented that the presentation provided the context for what we are up against. The Nechako system has changed radically since 1948, with approximately 30% of its original flows and a disturbed hydrograph. It would cost a lot of money to go back in time to pre-dam conditions, which is also unrealistic. The participant wanted to know how soon the information from the research will be available in order to solve the sturgeon problem. Steve replied it would take some time, as we need to identify how to improve spawning habitat and maintain recruitment. It will take approximately three years to detect success in monitoring juveniles, and three to five years to show success of the habitat restoration efforts that are being undertaken.
- A participant commented that there is concern about Nechako sturgeon migrating into the Fraser River and the subsequent loss of genetic diversity in the Nechako. Steve acknowledged that, and commented that the intent is for hatchery sturgeon to return to spawn in the Nechako. The participant also commented that

they are concerned that, with the lack of recruitment, if we do not keep the species alive, we may only have 10 years to keep the genetic diversity. It is also apparent spawning beds get silted over with low flows.

- A participant commented it will be challenging and unlikely to recreate the high flows in 2007 to clean spawning habitat, due to the associated flooding that occurred. Steve commented that we need to determine the correct timing and the flows that are needed. The participant inquired if there were any thoughts on using “structures” installed at the beds to create spawning habitat. Steve replied that those would be a temporary fix and good in the short-term. Another option includes placing substrate in locations where it does not get affected by sediment.
- Rahul asked if the NWSRI had any key limitations (besides the time for the research results to come to fruition), such as resourcing or funding. Steve replied that some aspects of the initiative are reasonably well funded, with thanks to Rio Tinto, DFO, and others. Although, having adequate funding is always helpful for planning purposes, so work can be planned for many years to come. Long-term funding for the juvenile monitoring program (which is conducted by the Carrier Sekani Tribal Council), spawning success monitoring, and larval drift monitoring would be helpful.
- A participant wanted to know if dredging, such as on the Fraser, would be helpful. Steve replied that the dredging on the Fraser is for shipping, not habitat enhancement. On the Nechako, the approach is to remove sediment and transport it elsewhere.
- A participant wanted to know if the WEI can support NWSRI efforts by, for instance, helping to fill the gaps in the science (e.g. flows, substrate analysis). Steve replied that there are ways for the WEI to help. It would be helpful if the NWSRI put together a multi-year study plan, with goals and steps to identify what to do and how much it will cost, although that is challenging because we are learning year to year, so things change. It was mentioned that the WEI helps to bring collective interests together and provides a unique forum and opportunity for a collective voice to be heard by the regulators or to put in requests for other programs to grow the initiative in the Nechako.
- Jayson said that the WEI will bring together and evaluate multiple interests, and will address knowledge gaps to provide an understanding of the system. Jayson wanted to know if the NWSRI have any considerations for the WEI related to flows, negative effects, or anything to avoid. Steve said that is difficult to answer as studies are being done over multiple years and the results need to be interpreted on a case-by-case basis from flows coming downstream, and it will take a few years before we see the results of the relationship between flows and substrates.
- A participant wanted to know if there is any evidence or studies on the effects of the STMP cooling flows and spawning beds. Steve replied that the NWSRI is not focused on the STMP flows because they occur later in the year than spawning.

- Rahul wanted to know if the NWSRI had a list of key considerations or issues that need addressing. Steve said that that should be taken to the NWSRI Technical Working Group to develop. The focus now is on developing the hypothesis/key questions that need to be addressed both in the short and long-term.
- Given the information that Steve McAdam presented, Rahul sought feedback from participants on what can the WEI do now to support sturgeon recovery. A participant commented that the WEI can learn from the presentation/information. There is a lot of short-term research being conducted, which is good, but it will take time to get a comprehensive understanding of the relationship between the river and sturgeon recruitment. It was noted that the NWSRI is a complicated process, adaptive in response to emerging research and with much uncertainty. The NWSRI is learning as they go and it will unfortunately take years to complete. It appears the STMP flows are not a problem and we also know there is a lack of spring freshet. Perhaps it is worthwhile looking at the potential for a regular spring freshet, and not just results from flows from individual years. It was discussed that the WEI TWG should, at the next meeting, discuss and draft a list of questions that can be posed to the NWSRI, so that the WEI has clarity on how to best strategically support/coordinate the efforts to reach common goals. It was reiterated that efforts need to move quickly, as there is not much time left to save the genetic diversity.
- **ACTION ITEM: TWG to discuss and develop a list of potential key concerns, actions, and recommendations to support sturgeon recruitment.**
- Jayson commented that it was great to have Steve provide clarity on the approach that is being taken towards sturgeon recovery, as well as the information gaps that exists. It is understood that there are habitat limitations and the link between flows/timing of flows on habitat is complex and there is uncertainty. Jayson asked if it would be worthwhile to have a presentation on the hydrology/geomorphology to show what is happening, so that participants have a good understanding of the complexity. Participants agreed to have that presentation, as the whole flow/sediment relationship needs to be understood in order to create something that the sturgeon can recover with. It was mentioned that the table needs a common understanding of the hydraulics of the system before providing recommendations. We are learning more about the system every year and there is uncertainty and perhaps not a silver bullet to fix everything, but there is forward momentum and lots of opportunities to provide support.
- **ACTION ITEM: TWG to create/coordinate a presentation on the hydrology/geomorphology of the Nechako system.**
- Rahul provided updates on action items:
 - The investigation into the impacts of backflow from the Nechako on Fraser Lake is ongoing. There will be a presentation from external experts on hydrology at the next meeting.
 - The TWG will present the results of the NHC Report regarding sedimentation at a future meeting.

- Rainbow trout and pygmy whitefish added to the fish species of interest list. Inconnu remains on the list as there is anecdotal evidence of its presence.
- Finding ways of retaining woody debris in the system has been added to the TWG to-do list.
- Pre-meeting summary information of sturgeon was sent out to participant prior to this meeting.
- The TWG determined that the risk of entrainment at the tunnel intake is low, but will determine if there is a gap with Rio Tinto's data and if so, the need to install a camera at the entrance is an option.
- Mike Robertson and Andrew provided an update on the New Day Agreement.
- **ACTION ITEM: TWG to present results from research into the impacts of backflow from the Nechako on Fraser Lake.**
- **ACTION ITEM: TWG to present results from NHC Report at a future meeting.**
- **ACTION ITEM: TWG to research ways of retaining woody debris in the Nechako system.**
- **ACTION ITEM: TWG to determine if there is a data gap regarding entrainment at the tunnel.**
- Rahul reviewed the proposed next meeting dates. No changes were made. Rahul to send out meeting invites. Next meeting dates are:
 - **TWG – Wednesday, April 29, 2020**
 - **Main Table – Wednesday, May 13, 2020**
 - **TWG – Wednesday, May 27, 2020**
 - **Main Table – Wednesday, June 10, 2020**
 - **TWG – Wednesday, June 24, 2020**
 - **Main Table – Wednesday, July 8, 2020**
- A CBC article provided updates on the efforts of using 20-year old frozen to save salmon: <https://www.cbc.ca/news/canada/british-columbia/endangered-salmon-scientists-use-20yearold-frozen-sperm-1.5281954>. A participant wanted to know if governmental funding was being provided to the Spruce City Wildlife Association hatchery to aid with the efforts.
- **ACTION ITEM: TWG to determine if governmental funding has been provided to the Spruce City hatchery.**

- Ray provide a link to participants to access the latest update on the Big Bar incident. The update is also available on the Get Involved Nechako website.
- The teleconference ended at 11:30 am.

ACTION ITEMS

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