

**To:** WEI Main Table meeting participants

From: Rahul Ray and Jason Collier

**Date:** May 29, 2020

**Re:** Final Rio Tinto WEI Main Table meeting 10 summary (videoconference)

A videoconference for the Rio Tinto Water Engagement Initiative (WEI) was held on May 13, 2020, from 9:00 am to 11:30 am. The videoconference was held instead of a face-to-face meeting to support social distancing in response to concerns of the COVID-19 virus, while maintaining progress 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. 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 to be covered during the videoconference:

- Anticipated Meeting Outcomes: WEI Main Table recommendations related to sturgeon in the Nechako, and a better understanding of Nechako River geomorphology
- Action Item review
- Technical Working Group (TWG) report
- Northwest Hydraulics Consultants (NHC) presentation and discussion on geomorphology
- Next meeting dates

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

Table 1. May 13, 2020 - WEI videoconference Participants

Individual	Organization
John Alderliesten	Public participant
David Creighton	Northern Health
Andrew Czornohalan	Rio Tinto
Stephen Dery	UNBC
Gerd Erasmus	Public participant
Chantelle Grafton	FLNRORD
Arthur Halleran	Nak'azdli First Nation – Natural Resources
James Jacklin	FLNRORD
Deborah Jones-Middleton	Protective Services - Regional District of Bulkley Nechako
Henry Klassen	Public participant
Donna Klingspohn	Public participant
Ray Klingspohn	Public participant
Phillip Krauskopf	FLNRORD
Clint Lambert	Regional District of Bulkley Nechako
Cyndi Lauze	District of Vanderhoof
Kim Menounos	Fraser Basin Council
Kevin Moutray	District of Vanderhoof
Mark Parker	Regional District of Bulkley Nechako
Jerry Petersen	Regional District of Bulkley Nechako
Ray Pillipow	FLNRORD
Tim Plesko	Public participant/Southside representative
Lindsay Sackett	Fraser Basin Council
Wayne Salewski	Public participant / NEWSS
Linda Sjodin	Public Participant
Dan Sneep	Department of Fisheries and Oceans
Andre Zimmermann	Northwest Hydraulics Consultants

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 reviewed progress on Meeting 9 Action Items:
  - The TWG discussed sturgeon recruitment and will provide recommendations to the Main Table during this conference call.
  - The TWG coordinated a presentation on river geomorphology, which will be given by Northwest Hydraulics Consultants (NHC) during this conference call.
  - NHC are looking at impacts of backflow from the Nechako on Fraser Lake, and the TWG will
    present the results during a later meeting.
  - o NHC will present on river geomorphology during this conference call.
  - o TWG will be analyzing the potential ways of retaining woody debris in the Nechako system.
  - Jayson will confirm if government funding is being provided to the Spruce City Wildlife Foundation at this time.
- ACTION ITEM: TWG to present results of the NHC investigation into the impact of backflow from the Nechako of Fraser Lake.
- ACTION ITEM: TWG to present results from research on the potential ways of retaining woody debris in the Nechako System.
- JK provided an update on TWG activities. The TWG reviewed and discussed the information provided by Steve McAdam (provincial sturgeon specialist and member of the Nechako White Sturgeon Recovery Initiative-NWSRI) during the previous Main Table meeting. It was agreed by the TWG that the NWSRI have a good process in place, but that there are information gaps in their research, as well as some uncertainty (e.g. best water flows for sturgeon, how flows affect habitat, what else is needed for recruitment). It was recognized that it will take time for further research results to come in. The TWG provided some recommendations to the Main Table on how the WEI can proceed with respect to sturgeon: the NWSRI are in a good position to conduct the research and understand sturgeon needs (e.g. restoration, hatchery efforts, flows). The WEI can work closely with the NWSRI to provide support where possible.
- The Main Table discussed the TWG recommendations and next steps for the WEI as they relate to sturgeon.
   It was mentioned that a change in flows alone will likely not address the situation, and that it will take a multi-pronged approach to be effective. The discussion centered on the need and effectiveness of a changing flows, the uncertainty in determining the best approach, as well as where to focus efforts. It was

agreed that decisions need to be made based on sound science, and that "we should do everything we can in the shortest timeframe possible". All options should be considered before taking them off the table. It was mentioned that, ideally, flows should be established so that "human-led mechanical" interference is not required. (Rahul later clarified with the speaker that his comment referred to relying on human involvement over the long-term, instead of using natural processes. Some human activities may be required in the short-term).

- The NWSRI approach is to find out what sturgeon need (e.g. flows regimes, habitat requirements) and how to get there. The WEI should formalize the working relationship with the NWSRI, determining the best way to collaborate. The WEI can lend its support for the NWSRI, increasing the "weight" of NWSRI efforts.
- ACTION ITEM: Rahul and Jayson to draft letter to the NWSRI for Main Table review to explore a WEI/NWSRI working relationship.
- Andre Zimmermann, from Northwest Hydraulics Consultants (NHC), provide a presentation on Nechako River geomorphology and sediment transport. The presentation can be accessed on the Get Involved
- Discussion followed the presentation. It was mentioned that if there is not as much sediment as originally thought, then creating spawning habitat may be the way to go. Andre mentioned that they are still trying to determine the engineering approach for habitat to be created.
- A participant wanted to know how effective it would be to direct flows to clean habitat. Andre said it can
  be done from an engineering perspective, but that first we need to understand the biology aspects to
  determine how to be the most effective.
- The same applies to the establishment of a weir we need to understand if these types of engineering efforts are helpful from a biology perspective. Engineering can be done at the local level.
- A participant wanted to know if the NHC findings have surprised the NWSRI, or changed their perspectives
  and working hypotheses. Andre replied that there is a lot going on and are everyone is continuously learning
  about the system, especially at the localized area (i.e. < 1 m) and about the seasonal changes.</li>
- A comment was made that in other disturbed systems, sturgeon have been known to spawn on large boulders or on silt. It may be that they have a historical affinity for the site itself (regardless of the changes in substrate due to disturbance), or from unknown influences such as parental imprint or genetics.
- A participant wanted to know if large woody debris (LWD) plays a role in river changes. Andre replied that
  he does not think LWD has a big influence on the river hydrology or the channel, and that ice plays a large
  role in that regard.
- A participant made a comment that overall, based on the information presented, it appears that the sediment regime has not changed much. However, sturgeon survival rates have changed, so what is the

theory behind this? Andre commented that there have been hydrological changes in the system that were not presented today. It does appear that regulating the system seems likely to have affected sturgeon recruitment, but the reasons why are not well understood.

- Rahul reviewed the dates for the next meetings. No changes were made
  - o TWG May 27, 2020
  - o Main Table June 10, 2020
  - o TWG June 24, 2020
  - o Main Table July 8, 2020
  - o TWG July 22, 2020 (proposed)
  - Main Table August 5 (proposed)
- The teleconference ended at 11:25 am.

## **ACTION ITEMS**

- ACTION ITEM: TWG to present results of the NHC investigation into the impact of backflow from the Nechako of Fraser Lake.
- ACTION ITEM: TWG to present results from research on the potential ways of retaining woody debris in the Nechako System.
- ACTION ITEM: Rahul and Jayson to draft letter to the NWSRI for Main Table review to explore a WEI/NWSRI working relationship.