
To: WEI Meeting Participants

From: Tanya Guenther and Rahul Ray

Date: August 15, 2023

Re: Final Rio Tinto WEI Table Meeting 31 Summary, June 28 and June 29, 2023

A hybrid meeting for the Rio Tinto Water Engagement Initiative (WEI) was held on Wednesday, June 28, 2023, from 1 p.m. to 4:45 p.m. and Thursday June 29, 2023, from 9:00 a.m. to 3:45 p.m. The hybrid meeting was held to offer participants the option of meeting in person or virtually in response to COVID-19 concerns. The WEI Main Table will continue to adapt meeting options for participants and will follow current public health recommendations for meetings or gatherings.

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

The facilitator was **Rahul Ray** (RR) from EDI. **Tanya Guenther**, also from EDI, took notes remotely during the meeting and prepared this summary. **Colin Parkinson**, EDI, attended to provide support. **Jayson Kurtz** (JK) from Ecofish Research participated as the Technical Working Group (TWG) coordinator. **Katie Healey** and **Kirsten Lyle** from Ecofish were present as process technical support. **Michael Harstone** (MH), from Compass Resource Management, participated as a decision analyst. **Clayton Schroeder** (CS), also from Compass Resource Management, participated as SDM support. **John Russell** from Russell Audio-Visual provided AV technical support.

Andrew Czornohalan (AC), Rio Tinto Operations Director Power and Services, Kitimat and Kemano participated as a WEI Table member. **Andy Lecuyer** (AL), Senior Environmental Advisor, Communities & Social Performance Advisor, also from Rio Tinto, participated as support.

A draft agenda was included in the pre-reading package and outlined the anticipated meeting topics.

June 28, 2023, attendance is listed in Table 1 (in-person) and Table 2 (online/videoconference).

JUNE 29, 2023, ATTENDANCE IS LISTED IN DAY 2 JUNE 29, 2023

Table 3 (in-person) and Table 4 (online/videoconference).

Table 1. June 28, 2023—WEI Main Table meeting In-Person Participants

Individual	Organization	Individual	Organization
Aman Pahar	Rio Tinto	Katie Healey	Ecofish
Andrew Czornohalan	Rio Tinto	Kevin Moutray	District of Vanderhoof
Andy Lecuyer	Rio Tinto	Lyla Brophy	Nechako Valley Regional Cattleman's Association
Clayton Schroeder	Compass	Michael Harstone	Compass
Denis Wood	Public participant	Rahul Ray	EDI
Donna Klingspohn	Public participant	Ray Klingspohn	Public participant
Henry Klassen	Public participant	Shirley Moon	RDBN representative
Jayson Kurtz	Ecofish	Wayne Salewski	Public participant/NEWSS

Table 2. June 28, 2023—WEI Main Table meeting Online Participants

Individual	Organization	Individual	Organization
Colin Parkinson	EDI	Phillip Krauskopf	Ministry of Forests, Water Authorizations
Dan Sneep	Department of Fisheries and Oceans	Rachel Chudnow	Ecofish
Justin Greer	Regional District of Bulkley-Nechako	Stephen Dery	UNBC, TWG
Kim Menounos	Fraser Basin Council	Steve Gordon	Ministry of Water, Land and Resource Stewardship
Kirsten Lyle	Ecofish	Tanya Guenther	EDI, Meeting Support
Maria Sotiropoulos	Department of Fisheries and Oceans	Tim Plesko	Public participant

The following provides a summary of the topics discussed during the hybrid meeting.

WELCOME AND UPDATES

The supporting slide deck is here: https://www.getinvolvednechako.ca/wp-content/uploads/2023/07/WEI_Table_Meeting_31_presentation_Jun28-29_2023_Master_DRAFT1_DAY1.pdf

Attendees were welcomed to the meeting. The agenda for June 28 was reviewed and there were no additions or deletions.

The WEI-Approved Meeting Ground Rules were reviewed and there were no objections.

Updates/Past Action Items

The action items from Meeting 30 were reviewed and updates were provided as follows:

- **Action item:** There was agreement to move forward with the 3-phased approach regarding sturgeon as presented at the last meeting.
 - **Update:** This item was completed, and the approach will guide sturgeon efforts moving forward.
- **Action item:** Materials will be reviewed to make sure there is consistency with the measurement units.
 - **Update:** Materials were reviewed for consistency.
- **Action item:** A Doodle poll will be sent out to members with date and time options to continue the flow alternative discussion. This is to be a one-hour meeting.
 - **Update:** Poll was sent out and the additional meeting was held on March 22, 2023.
- **Action item:** RR to send a one-page summary of the meeting that will be created and sent out to the Main Table for review before posting.
 - **Update:** This was not completed for the Meeting 30. It will be created for Meeting 31.
- **Action item:** Expand Communication of the WEI with the goal of increasing awareness of the WEI in the community.
 - **Update:** In our efforts to continue to expand communication efforts and awareness of the WEI, presentations were given to the District of Vanderhoof Council and the Village of Burns Lake Council.

South Side Working Group Updates

- Navigation buoys: These have been installed in the reservoir.
- Reservoir Navigation signs: There is a plan to improve existing signage.
- Docks: Reached out to BC parks representatives regarding plans for dock at Wistaria boat launch.

Rio Tinto Operations Update

An update of current operations was provided by AC. Slides for this presentation can be found in the WEI Document Library titled *WEI – June 26 Business Update_Rio_Tinto*.

https://www.getinvolvednechako.ca/wp-content/uploads/2023/07/WEI-June-26-Business-Update_Rio_Tinto.pdf

Highlights included:

- Smelter has reached 90% operational capacity.
- A 7-year dam safety review is currently underway.
- Hydrology update:
 - Now on stage 3 drought advisory from the province.
 - Flood advisory in the Peace.
 - Tier 2 energy will be curtailed on July 1.
- Research is taking place for monitoring and understanding side channels in the upper Nechako at different flows and different flow levels. Working on quantifying some of the things we are looking to improve. Work is happening at spillway this year. Significant maintenance work in the fall (typically done after STMP) working with NFCP on planning.
- BC Hydro call for energy went out 2 weeks ago. The Province has put out call for 342 megawatts. This is the first call with 2nd call expected to be out soon.

Technical Working Group Update

A detailed updated was provided from the TWG.

- TWG has met four (4) times since the last Main Table meeting. They have continued working on:
 - flow alternatives: developed, modelled, and revised Round 1 and new alternatives, flow targets. Iterative approach to present best options to Main Table.
 - shortlist PMs, identify PM confidence
 - data gaps, physical works and monitoring.

Technical work reviewed included:

- Reservoir productivity: Effective littoral zone (ELZ).
- Beaver population
- River ice
- HEC-RAS Model
- Technical memos
 - River erosion

- Nautley backwatering
- Review in progress

Meeting Overview and Objectives for Today

Reviewed where we are in the Nechako WEI process. Currently working on step 5. The workplan was reviewed.

Overview of Development of Round 2 Flow Alternatives for Phase 1

At Meeting 30, there were no preferred Round 2 Flow Alternatives for Phase 1 identified. Main Table members were split in their preferred alternatives between the status quo (SQ), alternatives 1-3, 1-4 and 1-5. As no one preferred alternative 1-2, it was dropped.

The direction of Round 2 in Phase 1 for building new and improved flow alternatives included:

- Reshape flow releases to meet flow objectives (Alt 1-3, Alt 1-4, and Alt 1-5) with and without Tier 2 hydropower to provide additional benefits; and,
- Set higher flow targets in wetter years when more water was available and to minimize Tier 2 hydropower and explore additional benefits.

The shortlisted Round 2 Flow Alternatives included six (6) alternatives:

- status quo for all years;
- one (1) standalone alternative for all years, using current water budget (not dipping into tier 2); and,
- five (5) hybrid alternatives: minimum flows during dry/normal years, higher targets during wet years (not targeting Tier 2):
 - reshaped round 1 alternatives;
 - hybrid alternatives (reshaped round 1 target status quo as minimum);
 - existing water budget reshaped; and,
 - hybrid alternatives (reshaped round 1 as target, existing water budget reshaped as minimum).

The alternatives were presented and discussed in detail. Discussion included:

- It was noted that we often do not always know ahead of time if we may have a wet or dry year, until after it has happened.
- There are riskier times of year to provide additional flow.
- A question was raised about the timeframe for irrigation needs, specifically May 24 to June 5 and July 3 to 14, which are important irrigation periods.
- What does dry and average mean?

- Subjective answer. Our last meeting had 3 alternatives that dipped into Tier 2 power. This led to a discussion on wet years and what years can we dip into those hydrographs. We included years that everyone agreed were wet years.
- The question really is, how do we achieve the benefits without dipping into Tier 2 power?

Point of convergence: The Main Table members were asked if they agreed with the recommendations from the TWG. There was agreement to move forward with the recommendations from the TWG as presented. There were no objections presented or noted.

ASSESSING FLOW ALTERNATIVES

Hydrology (HydroViz)

Hydrographs were reviewed including:

- Skins Lake Spillway Releases (wet year, dry year, normal year)
- Downstream hydrographs at Cheslatta Lake and Nechako River
- Effects on power generation and reservoir levels

Discussion and questions included:

- Why is the model putting out flows in a spiky manner? What is making the model do that?
 - Looking at Nechako and Cheslatta Falls, it is a remnant of the flow release. If it is an artifact of modelling it would be mitigated in operations. It is a decreasing hydrograph up to the STMP compared to 4D, 5D, and 5C which do not seem to have the low or double peak.
 - This is not how they operate in real life?
 - Even if they didn't spill for the days after, they would just be releasing the minimum flows from May up to STMP. Slight bump up leading into that period.
- This is one heck of a balancing act that Rio Tinto does for all factors. The WEI effort has increased our awareness of what is going on and what needs to be done. Kudos to all of you!
- When we decide on what is the best alternative and what we would like to see, would there be any appetite from government on meeting our changes in water budget if needed?
 - Tomorrow we will talk about flow alternatives and physical works. Is there habitat improvement that can happen?
 - We are not changing the management of water. We are exploring small changes. When we get to Phase 2, we can build a business case for the benefits and what impacts might be warranted to hydropower. These would then move into Phase 3.

- Some of the group feels hamstrung by the 1987/1997 agreement and other formal agreements between industry and government. We have to take this next step and convenience the powers that be it is in everyone's best interest to do it.

ADJOURN DAY 1

Day 1 adjourned at 4:45 p.m.

DAY 2 JUNE 29, 2023

Table 3. June 29, 2023—WEI Main Table meeting In-Person Participants

Individual	Organization	Individual	Organization
Aman Pahar	<i>Rio Tinto</i>	Katie Healey	<i>Ecofish</i>
Andrew Czornohalan	<i>Rio Tinto</i>	Kevin Moutray	<i>District of Vanderhoof</i>
Andy Lecuyer	<i>Rio Tinto</i>	Linda Sjodin	<i>Public participant</i>
Clayton Schroeder	<i>Compass</i>	Michael Harstone	<i>Compass</i>
Denis Wood	<i>Public participant</i>	Philip Krauskopf	<i>Ministry of Forests</i>
Donna Klingspohn	<i>Public participant</i>	Rahul Ray	<i>EDI</i>
Henry Klassen	<i>Public Participant</i>	Ray Klingspohn	<i>Public participant</i>
Jayson Kurtz	<i>Ecofish</i>	Shirley Moon	<i>RDBN Area F representative</i>
Jim D’Andrea	<i>Cheslatta Carrier Nation</i>	Wayne Salewski	<i>Public participant</i>
June Wood	<i>Public participant</i>	William Elkins	<i>Cheslatta Carrier Nation</i>

Table 4. June 29, 2023—WEI Main Table meeting Online Participants

Individual	Organization	Individual	Organization
Clint Lambert (joined in the afternoon)	<i>Bulkley-Nechako Regional District</i>	Maria Sotiropoulos	<i>Department of Fisheries and Oceans</i>
Colin Parkinson	<i>EDI</i>	Rachel Chudnow	<i>Ecofish</i>
Dan Sneep	<i>Department of Fisheries and Oceans</i>	Stephen Dery	<i>UNBC, TWG</i>
Justin Greer	<i>Regional District of Bulkley-Nechako</i>	Steve Gordon (joined in the afternoon)	<i>Ministry of Water, Land and Resource Stewardship</i>
Kirsten Lyle	<i>Ecofish</i>	Tanya Guenther	<i>EDI, Meeting Support</i>

OVERVIEW DAY 2

The supporting slide deck is here: [Rio Tinto Water Engagement Initiative Main Table videoconference \(getinvolvednechako.ca\)](https://getinvolvednechako.ca)

Meeting Overview and Objectives for Today's Meeting

Attendees were welcomed to the meeting. Following yesterday's meeting, we enjoyed a lovely dinner down by the river. It was great to spend time with everyone.

The agenda for today was reviewed and there were no additions or revisions.

Meeting objectives were reviewed and included to:

- review and assess the performance of Phase 1 Round 2 Flow Alternatives;

- discuss and identify preferred Flow Alternatives and determine whether there are new and improved flow alternatives to model and assess for the next meeting;
- discuss other flow-related recommendations that would make up a "Package" of Phase 1 Recommendations; and,
- discuss upcoming workplan and any next steps.

ASSESSING THE FLOW ALTERNATIVES PERFORMANCE MEASURES (PMS)

Review of Current TWG Shortlisted PMs

A recap was provided of Day 1. The Main Table reviewed the Round 2 Flow Alternatives, and the evolution of new and improved flow alternatives.

Preliminary Calculated PM Results

The results of the 19 shortlisted PMs were reviewed in detail, as well as the Round 1 Flow Alternatives.

Alternative	Performs Well For
Alt 1 (Status Quo)	
Alternative 3D	Caribou land links
Alternative 4B	Cheslatta fish habitat
Alternative 4D	Cheslatta fish habitat, reservoir osprey nests, Tier 2
Alternative 5B	Cheslatta fish habitat
Alternative 5C	Caribou land links, Tier 2
Alternative 5D	Cheslatta fish habitat, reservoir osprey nests

Feedback and discussion included:

- What criterion were used to decided on 31-year time span and why starting in 1991?
 - Lots of research in climate change models right now, and those models are long term (50 years). The TWG and Main Table agreed that 50 years for Phase 1 changes is too long of a time period. Data and science research were looked at broadly and indicates the last 30 years are more indicative of what will happen. The standard data set is 30 years looking backwards to see the short-term climate change we are seeing.
 - BC Hydro water use planning felt that the longer period of record the better for information. Lesson learned was that the hydrology has changed and the Water Use Plans (WUPs) are already somewhat outdated as the hydrology is different than it was 50 years ago.

- Feel we need to take the data with a bit of a grain of salt. Making decisions only based on data is dangerous. Need to make decisions based on the land, need to use gut reactions of what is happening on the land too, using experiential information.
- Someone shared a conference speaker they heard said, "science should be on tap, but not on top."
- The river goes up and down naturally. Can't be just based on wet or dry years. Thought our intent was to get a more natural flow for the Nechako? Regardless of whether wet or dry, it has to be healthy and the flow maintained.
- The Main Table agrees that we want to have a healthy river and we are trying to determine what makes a healthy river. We have many needs and interests to meet. We are not disregarding the health of the river by looking at the data, but looking to ways to improve.
- Main Table members are asked to bring judgements, experience and knowledge to the table. The team is bringing the data (PMs and hydrographs). Using your experiences and judgements this information will be used to make the best decisions possible. This afternoon we will look at data gaps. What monitoring do we need to look at in the longer term to inform decision and planning/tools, etc.? Data gaps and monitoring need to be paired and ground truthed to make sure we have made good decisions.
- Would be nice to have an input when we are out in the field and have data we can collect that can plug not the system.
- There was a request from a member to have additional data to identify any outlier plots on the box plots. This has been noted and will be included moving forward.
- Looking at PM 32: Reservoir Caribou Land Links:
 - This is an example of how each measure may something outside of the PM that would better satisfy the caribou habitat.
 - Key is not only the flow recommendations but the physical works recommendations that need to be made (archeological site protection, bank stabilization, etc.). Phase 1 can provide recommendations.

The Round 1 Flow Alternatives were reviewed.

Discussion and feedback:

- In ALT 3D there is an additional 4 cms year round outside STMP. Other places in the reading package the number was 8 cms?
 - During wet years there is more cms released outside of STMP. During dry years there is less available. In 19 of our 30 years, there are 4 cms additional and in the other 10/11 years there is more.
 - Thanks for the whole team for all the modelling. The modelling work from a Cheslatta perspective has taken away a lot of stress we have for biological and

cultural pieces. We have a camp out in 2 weeks as STMP flows start and great knowing this conversation is happening and that people are willing to listen and take steps to mitigate challenges. Thank you from a Cheslatta perspective for listening to the concerns we have brought.

Review Overall Consequence Table (Altaviz)

The consequence table for Round 2 Flow Alternatives was reviewed. It was clarified that a red N/A indicates where temperature data was not modelled. It was not available and not modelled for all alternatives.

Discussion about land link and caribou:

- Many factors involved. Key is whether or not they are islands or linked mainland. Lots of research on this herd. Don't need to set it aside, it is an indicator of that interest and some are likely to be better than others.
- Comments about whether it is not the number of days but whether it is wetting and washing away the scent?
- Had similar discussions for other areas and was told a decade ago it is currently moving the odours away that is the issue and not the depth.
- We could that away and look at it for a potential revision to how the PM is calculated

Discussion about osprey nests:

- Believe they are not going to be an issue.
- Interesting note that the reservoir wildlife PMs are the most sensitive. Most people are about the fish and not the wildlife. Will be interesting in how people rate the interests. Clearly an example where physical work might be done in lieu of operational change and may be more cost-effective solution.
- Speaks to the point, which interests and which PMs are most helpful in determining preferences.

RANKING THE FLOW ALTERNATIVES

Purpose:

- get a better sense of priorities and preferences;
- identify which round 2 alternatives are preferred;
- identify which alternatives are endorsed or accepted by the Main Table; and,
- explore whether there are new and improved alternatives that make sense to model

The ranking exercise was reviewed. Paper based forms were provided to the in-person participants and online participants were provided with a link. The information was collected and compiled over the lunch break.

Ranking Exercises

Results were reviewed and discussed.

Participants was asked to share their thoughts behind their rankings.

ASSESSING PHASE 1

Ranking Exercises Results

Observations:

- Alternatives 4d and 5d are the most popular and seem to perform better for the majority of people.
- Alternative 1 was the least preferred.
- Trends show support to focus on 4D and 5D, with 5D having the most support.
- Question remains, to what degree do chinook rear in the side channels versus the main stem of the river, which may have impacts from the flows.
- Pinch point is Tier 2 power.
 - 4D and 5D are preferred the most, but there is a concern around impacts to Tier 2 power.
 - Using Tier 2 power to look at alternatives 1, 4D and 5D:
 - In wetter years there is no difference between these three alternatives.
 - In drier years there is no difference either.
 - There is a little bit of aberration with Alt1 but they are all very similar.
 - In the median years, there are dips that happen, similar with 4D.
 - What is going on in the reservoir in a median year? There are differences but they are centred around springtime.
 - The changes in Tier 2 power are not a result of the bump ups, it is happening in the small reshaping at the beginning of freshet and into the STMP. That is where all the Tier 2 power is happening. Looking at the reservoir, the differences are really subtle and may be an artifact of the model.
- Think that 4D and 5D are the most preferred with the benefits we will accrue, but would need more thorough investigation into the differences in the average years.

- If we were moving forward on something to reach consensus on 4D and 5D, there is no impact to Tier 2 power so why would we do that? May need to give more thought to chinook and side channel rearing habitat.

Discussion:

- Looking at hydrographs, it is the anomaly years that are of interest. We can clearly take that away, and 4D and 5D can be modelled in detail. We can come back with what the impacts are and look at ways to operationalize out the impacts, still looking to realize the gains in 4D and 5D, and look to mitigate the energy side. We can have our cake and eat it too with that one, we just need to run the numbers.
- Can accept 4D and 5D, but insistent that the rearing habitat/side channels be watered, particularly in the upper part of the river. This is needed to avoid fry being stranded in the side channels.
- Side channels are clogged with weeds. In '60s used to swim in the side channels. Could go from the main channel out of the river. Now it is a series of little puddles of water. The side channels are also used by beaver.
- As we look at alternatives, a few are emerging as preferences. Need to explore why folks prefer one over the other. May come up with a new alternative that covers the best of both. Power issues, the fish, and other interests as well, and we may be able to find a way to optimize the best of both alternatives.
- This round, the alternatives provided additional water in every year. Looking the measures systematically, the hybrid performs better than trying to release water in every year. Different amounts in different years can lead to better results for more interests.
- In 1965, the river could be navigated in an outboard motor all year round. Especially during the summer that river was crawling with scientists and people from BC Hydro and DFO. At about that time, when the reservoir got high the river got high and reservoir would flow over (spillway). They built the gates and from that point on the flow in the river was more determined by humans than it was in the he past and the level of the flows decreased. When we went from that scenario, it ran stronger and therefore filled the side channels and didn't allow the grass and willows to get established. In coincidence with that there were additional generators established at Kemano using the water that was freely flowing down the river.
- Weeds are interesting. Through work with the Nechako First Nations, we understand that canary reed grass has expanded throughout the province with cattle in the riparian zone. The cattle eat it and it continues to propagate and continues to be eaten. Trials happening this year on scarification to remove the weeds. Data provided says the most effective way to deal with it is remove the cattle from the riparian zone. Would like to see as one of the recommendations from this table. Once we remove the cattle, we can look at methods for remediation. There are encouraging signs that back-channel filling, which has happened from two major events over time. Channel dug 35 years ago that is still more productive and cooler than the main channel.

- We are in Phase 1 now and looking at what we have. Does this include an opportunity to go identify things we can do that are not major policy or legislation changes? Understand hydrology of how a stream flows, and once we work on the flow regimes it could lead to a better understanding of what we can do for the system. If we find something that works well, is there a plus that we can add into the process?
- We have federal and provincial folks at this table. If we discuss what we can do, we can take it away and consider how we could fund it and monitor going forward.
- Need to remember, we started this process with a number of people with many different interests. We started with looking at some flow improvements. There has been a really good opportunity for community input. There has been a better understanding of community interests, and the process is still ongoing.
 - Early on we had a communication working group looking at effective ways to share communications and the South Side Working Group formed. There are great things that are coming out of that group.
 - Community Leaders Forum was created. Compiled some good information. There are data gaps for sure but compiling what we know.
 - The framework that we have can be used again for Phase 2 and Phase 3.
- We should be very proud of what we have started to where we have gotten to today.
- For some this has been a very painful process to go through. The Watershed Council spent 2 years going through 13 terms of references. It created a climate in which every decision was made by consensus. It was a steep learning process. Saw similar things happening at this table, and I'm very pleased with how it has gone.

The group reviewed, discussed and added to the list of for items that could be included in the package of recommendations including:

- Data gaps identified:
 - Side channels – improve PM
 - Fish stranding (side channels in particular)
 - Ramping
 - Wet/dry year forecast/decision
 - Cheslatta turbidity
 - STMP model/reservoir temp
 - Winter flow/ice (habitat/fish/aesthetics) – new PM
 - Sturgeon flow trials – new PM
 - Salmon habitat
- Physical Works ideas:

- Improved caribou calving ground access (LWD removal)
- Reduce wolf predation on caribou calves (dredge land bridges)
- Osprey nest relocation
- Bank stabilization
- Cottonwood planting
- Instream fish habitat
- Side channel fish habitat/reed canary grass scarification
- Flood protection
- Footprint: reservoir erosion
- Parking lot:
 - Tributary fish habitat
 - Tributary temperature
 - Tributary sediment input
 - Tributary fish access
 - Reed canary grass
 - Cheslatta outlet weir
 - Cattle management
- Monitoring ideas:
 - Confirm flow change predictions
 - Temperature
 - Salmon
 - Survival of migrating adult salmon
 - Number/health of out-migrating juvenile salmon
 - Fish stranding
 - Entrainment
 - Flooding
 - Caribou
 - Confirm physical works
 - Review results of instream fish habitat (railway rails/LWD)

Further discussion and feedback:

- Would like to be sure the methodology of data collection and monitoring is consistent and others can use it.
- Goal to see information that is transferrable and usable by all. Not just for WEI but for the health of the river. TWG can work with Cheslatta and others to achieve this.
- Given the broad nature of this group, we have opportunities to share work.

- Comment that a participant considers physical works in the back channels as a temporary measure and something that would need to be done on a regular basis. It does not stand the test of time. The only answer is more water.
- Nechako Round Table (NRT) has members that overlap with this group. Would be nice to have regular and collaborative communication system. Would be good for us to know what and where their projects are. Would like to see more shared at the Main Table.
- The NRT has been active, and JK has attended their AGM and technical meetings. We discussed broader information sharing and governance and is there something we can do? Goals to streamline where information is stored. UNBC has an active information portal for the Nechako. We have pretty good information sharing with UNBC through Stephan Dery and the Watershed Council. Stephan gives updates to the TWG, JK attends graduate presentations to see what is going on. It may not be visible to the Main Table, but the on the TWG we have overlap from individuals.
- We had a series of presentations from climate researchers a few years ago, and we can do a better job of sharing information.

Next Steps with Phase 1 Flow Alternatives

- TWG to develop a proposal for the Main Table from the framework discussed today, with technical ranking and prioritization.
 - Note: As we are in the summer season, the TWG will not meet as frequently. Anticipate the proposal to have high level priorities and medium level details for the next Main Table meeting. Following that would take it back to develop finer details.

PACKAGE OF PHASE 1 FLOW-RELATED RECOMMENDATIONS

Building a Coherent Package of Flow 1 Recommendations

Jayson provided a presentation on the potential Phase 1 package which may include the following topics:

- Flow Alternative(s)
 - Options to be considered by the Main Table
- Critical Data Gaps
 - Side channels—improve the PM
 - Cheslatta turbidity—new PM
 - Winter flow/ice (habitat/fish/aesthetics)—new PM
 - Sturgeon flow trails—new PM
- Physical Works
 - Improved caribou calving ground access (LWD removal)
 - Osprey nest relocation

- Side channel excavation
- Monitoring
 - Direct PM monitoring
 - Issue-receptor monitoring
 - Ecological result monitoring
- In-season flow adjustments
 - In-season weather/hydrologic monitoring/modelling
 - Communications with community leaders
 - WEI governance team
 - Role of TWG
 - Implementation team
- Triggers and Review Period
 - Set period (5 years?)
 - When data gaps/monitoring provides new information?
 - Phase 2?
 - Who reviews?

Discussions and feedback included:

- In light of transparency, have we considered having a 3rd party evaluation? Perhaps UNBC involved? This would provide a credible academic group looking at our proposed outcomes and providing an independent evaluation.
- We have a truly independent 3rd party review, including academia or private consultants. For monitoring program, etc., there is a lot of work to do to understand that. This group is part of making the decision of who does the work and reviews it, etc.
- The TWG has been provided professional evaluation and then having a peer evaluation system in place as required to do the research across the different aspects. In these types of groups, creates an opportunity for passionate individuals to come to a table like this. It allows people to take ownership of things. If we want the river to look after itself we have to provide the conditions for that to happen through different seasons. This cannot be achieved by different individuals implementing their own ideas. The Nechako system is extremely large and fragile and must be managed by the big picture layout which can absorb extremes and not breakdown in the meantime.

Members were asked to share their thoughts on the idea of a package? Are the 6 components suitable?

- There are questions on what we are reviewing. From a perspective of sturgeon it can take 50 to 100 years to get a result that is acceptable. How do we evaluate the issue when looking at the river. Is it greener, deeper, shallower, etc.? There are outside influences that are going to

cripple the opportunity. Some things are outside of our control. Would like to understand what will be judged and how we will judge it.

- WUP will often have delayed flow alternatives to collect baseline data and bolster monitoring programs. Would like to know, do we like the idea? Are there any initial concerns? We can develop details, options, thoughts, constraints, concerns, etc. then narrow down where the Main Table wants to pursue.

This package of 6 items—does this resonate with you? If we put this together, would this be a good outcome for Phase 1?

- Comment that not sure that 5 years is the right number.
- That is one of the details we need to determine yet. We are looking for feedback on the concepts to try and develop acceptable details.
- Package is appropriate. It is what a member was expecting as the outcome of Phase 1. Lots of details and nuance to work out, but as a framework this is what we were looking for.
 - **There was general agreement with this statement.**
- Will be able to set monitoring parameters? What is we decide we want monitoring for 5 years, and then we decide we see some changes?
- Need to have the discussion on monitoring process and that will be further in our process.
- How successful will only 5 years of monitoring be?
- In some WUP of monitoring has not had clear-cut, defined improvements. If we are going to detect a change in a system, we have to do enough monitoring and enough of a signal to cut through the noise. Need to temper and manage expectations of what we might see in terms of monitoring results.
- Could a monitoring program feed into Phase 2 and 3?
 - Yes, several of these components would. Might set some baseline information for monitoring of future decisions.

Action: There was agreement to move forward with building the framework package of for Phase 1, as presented.

NEXT STEPS

Next Meeting Dates

Main Table Meeting September 27, 2023 (*will need to be reassessed*)

Field trip tour September 26, 2023 (*will need to be reassessed*)

FINAL THOUGHTS

Thank you to everyone for a respectful meeting with some challenging discussions!

AC is very appreciative of everyone's time and effort. Seeing how well everyone understands the system, the situation, and the performance metrics. It is great to see the journey the team has been on!

MEETING ADJOURNED

The meeting was adjourned at 3:42 p.m.

ACTION ITEMS

Action: There was agreement to move forward with building the framework package of for Phase 1, as presented.