To: Rahul Ray, Rio Tinto Watershed Engagement Initiative Facilitator

From: Henry Klassen

Please distribute the attached documents to all Rio Tinto W.E.I. members for discussion in the March 18, 2020 meeting under the topic "Recommendations brought to the table".

I'm also submitting a new document entitled "A definition of a healthy river"

Recommendation: That this definition serve as a reference point as we strive for a healthier Nechako River.

To all members of the Rio Tinto Nechako Watershed Engagement Initiative

A Definition of a Healthy River

A river in which:

- All the waters in the entire watershed flow freely from headwaters to the sea as influenced by the climate, the seasons, and the geography;
- All artificial influences such as those from logging, agricultural, and industrial practices are avoided – namely, clearcut logging, agricultural land clearing, nutrient runoff pollution, and industrial chemical pollution;
- All riparian zones are free to respond seasonally to spring freshets;
- All high water events are allowed to re-water lowlands and backwater swales to ensure vibrant growth of plant and animal life;
- All resident and transient creatures can reproduce naturally, and travel throughout the watershed as required to complete their entire life cycles;

And finally, a healthy river is a river on the banks of which no fish hatchery of any kind is necessary and on which no dam structures have been installed.

In 2020, the reality is that West is Rio Tinto; East is Nechako. Our challenge is to move these extreme opposite positions toward centre in an honest attempt to achieve a positive outcome for both sides of the equation.

Submitted by Henry Klassen Nechako Watershed Council Chair, 1998-2012 Improving the Efficiency and Focus of the Nechako Water Engagement Initiative

- 1. Regarding status of WEI members
 - a. Participants
 - b. Observers

In a democracy all members are of equal value. All benefit when we're right; all are equally culpable when we're wrong.

The WEI has no formal status, no legal charter, and no voting authority. At best, it is an invited group of citizens hopeful of acting in an advisory capacity in public resource management.

Recommendation: Remove the membership distinction.

2. Regarding the Technical Working Group

This is a large committee. Meetings in person have not taken place. Teleconference meetings are awkward and ineffective; some questions from the WEI Table have not been addressed.

Recommendation: Form a three-member committee with a mandate to secure and employ the experts in specific fields as dictated by the questions from the WEI Table.

3. Regarding the Nechako White Sturgeon spawning habitat restoration and NW Sturgeon population recovery.

Action on this issue is decades overdue and demands urgent changes in the flow regime of the Nechako River. Developing a downstream hydrograph suitable for both sturgeon habitat and salmon migration must be our collective priority. To do less would be irresponsible. Adaptive management techniques to effect flows changes must be applied.

Recommendation: That the Provincial Government immediately take the lead on this issue. This critical work on flows changes must precede work on other lesser flows concerns.

Respectfully submitted,

Henry Klassen, chair of the Nechako Watershed Council from 1998 to 2012.

September 9, 2019

Henry Klassen, Former Chair Nechako Watershed Council (1998-2012) Vanderhoof, BC

This are questions that requires a clear answer from the Department of Fisheries and Oceans Canada (DFO) and the Ministry of Forest, Land, Natural Resources and Rural Development (FLNRORD)

Whereas: It is well documented that the Nechako White Sturgeon is not successfully spawning in the Nechako River, and

Whereas: The Nechako White Sturgeon is listed as a species at risk under the Species at Risk Act., and

Whereas: the cause of the failure of successful spawning is (a) silted-in gravel spawning beds, and (b) inadequate flow volumes, and (3) radical, unseasonal flows hydrograph, and

Whereas: All of the above accumulatively represents the desecration of the Nechako White Sturgeon's habitat.

Question 1 – Why are the federal government (i.e. DFO) and the Province government (i.e. FLNRORD) not all over this crisis to prevent the Nechako White Sturgeon from becoming extinct?

Question 2 – What exactly is the barrier within the federal and provincial government that we have to overcome to mobilize the appropriate action to restore the Nechako White Sturgeon habitat in the mainstream Nechako River, in order to ensure a robust, healthy population of resident Sturgeon?

WEI Workplan 2019-2020

Problem #1: Multi-accounts cost-benefits analysis:

Question: What is the trade-off cost of moving 30 CMS out of Rio Tinto's water license to downstream Nechako?

<u>Problem #2:</u> Flow volume and annual hydrograph is required to reestablish a vibrant, healthy, self-sustaining Nechako River White Sturgeon population.

Question: How much water is needed to achieve the above?

<u>Problem #3:</u> Vanderhoof high-water events concerns in regards to flooded homes – direct conflict with Problem #2.

Question: How much will it cost to move low-lying homes to higher-land subdivisions?

<u>Problem #4:</u> Nechako Canyon – Kenney Dam downstream to Cheslatta Falls.

Question: What is the estimated cost of the removal of woody debris and beaver dams, and how do we do it?

<u>Problem #5:</u> Cheslatta Fan - 9 km downstream from Kenney Dam. Millions of tons of sand/silt/gravel/stones were deposited in the

Nechako main stream above "The Neck" by a 1960's Murray/Cheslatta system blowout.

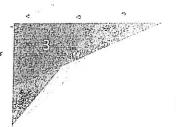
<u>Question:</u> How do we deal with this obvious "silting downstream" barrier immediately after Kenney Dam spillway releases?

<u>Problem #6:</u> The accumulated silt deposits over a period of six to seven decades in the Nechako River mainstream is severe.

Question: How do we design a hydrograph to "clean" the old silt out without simply transferring the silt to other downstream sites?

This workplan takes the following into consideration:

- A. A surface spillway will be built at Kenney Dam (Rio Tinto/ First Nations partnership)
- B. First Nations will assume responsibility for Murray/ Cheslatta rehabilitation.
- C. In spite of less distance from the Kenney Dam spillway to the Finmoore temperature target, insufficient water volume will result to achieve #2 above (sufficient water for the sturgeon).



- D. The interests and concerns regarding the current "state of the Nechako River flow regime" as expressed throughout the WEI meetings are essentially the same as those studied by the Nechako Watershed Council (1998-2012).
- E. The data from answers to the six questions posed in this workplan is critically important for decision-makers to understand the consequences of the present Nechako River flows management regime.