To: WEI Technical Working Group members

From: Jayson Kurtz and Jennifer Carter

**Date:** July 7, 2021

Re: Summary of TWG meeting held Wednesday, July 7, 2021, 9:00 am to 12:00 pm

# Attendees:

• Dan Sneep (DFO)

- Maria Sotiropoulos (DFO)
- Stephen Dery (UNBC)
- Phillip Krauskopf (FLNRORD)
- Andy Lecuyer (RT)
- Rahul Ray (EDI)
- Jayson Kurtz (Ecofish Research Ltd.)
- Jennifer Carter (Ecofish Research Ltd.)
- Katie Healey (Ecofish Research Ltd.)
- Wayne Salewski (Nechako Environment and Water Stewardship Society)

Meeting Objective: discuss PMs for the next MT meeting and brainstorm remaining interests.

#### Agenda:

- Discuss PM calculation exercise for the next MT meeting.
- Discuss preliminary side channel mapping.
- TWG discussion on issues ready to be refined topics to discuss include flooding, fish and recreation.
- Discussion on PMs for the next MT meeting.

# Summer schedule/time off

- Andy gone end of September and last week of July.
- Dan gone last 3 weeks in August and Maria's time off overlaps one week with Dan's.
- Stephen is gone next week but generally available. Less available in the fall.
- Phillip is not available July 24<sup>th.</sup>
- Rahul no August MT meeting and moved Sept meeting.
- Jenn and Katie available.
- Jayson not available last week of July.

#### **NWSRI** update (Andy)

- RT presentation on flows.
- Discussed infrastructure, T2 (minimal change to operations summer 2020), coldwater release.
- Assurance that WEI flow changes based on science, with stakeholders.

### Bathymetry work update

- Bathymetry work has started this week and data will be coming in over the next few weeks.

### Water temperature update

- Abnormal high water temperature occurring due to heat wave. Concern from UFFC regarding river temperature low 20°C in upper Fraser, mid 20°C (25°C) Nechako @ Fraser, above 25°C in upper Stuart, 13.5°C in the reservoir, 25.5°C in Ness Lake (typical August temperature), and warm in the Nautley River.
- STMP starts July 12<sup>th</sup> to meet timing requirements July 20<sup>th</sup> to Aug 20<sup>th</sup>.
- Current flows are higher than normal.
- UNBC has water loggers in place.
- Large diurnal cycle.

# Big Bar update

- Nature-like fishway in place
- Fish passing (confirmed by SONAR)

# Fire update

- 600 ha fire near Kenney Dam

# PM exercise calculations discussion

- We haven't yet incorporated more recent versus historic years but will likely look into this when we complete the actual modeling.
- It is critical to incorporate climate change into these models.
- Idea is to have consensus on tradeoffs in the end but sometimes there ends up being a vote.
- Effective spawning area PM looking across flow history during spawning and depth of redds and eggs could be used to refine PM for spawning and incubation.

### Cottonwood observations (Wayne)

- 3 days on upper Nechako River summer/fall canoe trip w/ KOH-Learning with the purpose of:
  - Map cottonwood recruitment
  - Beaver lodge counts
  - Noting channel connectivity
- Observed mature cottonwood trees and recruitment from Cheslatta to Fort Fraser.
- Some side channels fully wetted, some just backwatered.
- Clean gravels in Upper Nechako and downstream of agricultural area has finer sediment.

- Side channels in the agricultural area have less gravel and more cows inhabit them.
- Intense heat, a lot of game in river (no fawns observed)

# Preliminary side channel mapping discussion

- Upper Nechako riparian generally healthy
- Private land/ranching impacts are apparent.

# Meeting summary:

• Review of issues scoping and refine draft PMs. To be continued at next meeting.