

COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

May 19, 2021

DRAFT Facilitator's Summary

Facilitator: Emily Stranz; Notes: Colby Mills

The following Facilitator's Summary is intended to capture basic discussion, decisions, and actions, as well as point out future actions or issues that may need further discussion at upcoming meetings. These notes are not intended to be the "record" of the meeting, only a reminder for TMT members. Official minutes can be found on the TMT website: <http://pweb.crohms.org/tmt/agendas/2021/>.

Review Meeting Summaries & Minutes

TMT Members approved the official minutes for the April 21 meeting (April 21 facilitator's summary was approved at the May 12th meeting).

Weekly Native Non-Salmonid GBT Report

Doug Baus, Corps, presented the May 10-13 native non-salmonid GBT report (posted to the TMT website), noting that there were no new updates since last week's report. Action Agencies are coordinating with Oregon and Washington, and they will report back to the TMT as things progress. Tony Norris, BPA, added that the GBT rate currently remains below the criteria for action. Charles Morrill, WA, noted that the "read me" tab on the report is helpful to explain the data in the spreadsheet columns, and further questions can be directed to Leah Sullivan, BPA, or USGS.

Operations Review

Reservoirs: Joel Fenolio, BOR, reported on Bureau of Reclamation projects:

- **Hungry Horse:** midnight elevation was 3,535.6 feet; the project has been filling over the past couple days and is releasing Var-Q flows now through the weekend.
- **Grand Coulee:** slowly starting to refill, targeting 1,278-1,282 feet by the end of the month.

Upper Snake Flow Augmentation Update: Releases have started at Milner and are currently at 5,000 cfs; ramping up to 1.2 kcfs for flow augmentation out of the Boise River. Changes in flow can be viewed on Reclamation's website (link available via the TMT website). Joel noted that flows from the Boise River are for both irrigation and flow augmentation, so will look higher than just augmentation flows.

Lisa Wright, Corps, reported on Corps of Engineers projects:

- **Libby:** midnight elevation was 2,408.5 feet, with average inflows of 39.5 kcfs, and outflows of 25 kcfs;
- **Albeni Falls:** midnight elevation was 2,057.8 feet, with average inflows of 47.1 kcfs, and outflows of 37.9 kcfs;
- **Dworshak:** midnight elevation was 1,557 feet, with average inflows of 18.7 kcfs, and outflows of 1.6 kcfs;
- **Lower Granite:** average outflows of 88 kcfs;
- **McNary:** average outflows of 209 kcfs; and,
- **Bonneville:** average outflows of 215 kcfs.

Water Quality: Dan Turner, Corps, reported that TDG is well below the 125% TDG target, although it has been creeping up recently; 124% was observed just downstream from Little Goose Dam. Spill reached the spill cap at Lower Granite this morning, but is not expected to hold, as flows are forecasted to recede.

Temperatures are being closely monitored with the current low flows in the system. Dan noted that the Ice Harbor Dam tailrace gauge is showing conditions similar to 2015, although it's too early to determine

what air temperatures will do. There is an increased risk of higher water temperatures if there are heat waves in May and June combined with low flows. Charles added that FPAC remains concerned and will continue to monitor the weather and its effect on water temperatures.

Fish: Claire McGrath, NOAA, reported that the Salmon River trap at White Bird and the Snake River trap at Lewiston were both pulled last week while large numbers of sockeye passed; they plan to be back sampling this week. The yearling Chinook index continues to decrease at most of the traps and Snake River projects, as well as at Rock Island. The passage index is holding steady at the Grande Ronde trap and Lower Columbia River projects.

Sub-yearlings are low but increasing at lower Snake River projects; low numbers at Rock Island and fairly steady in the Lower Columbia River.

Coho are at the Grande Ronde trap and have increased in the Snake after a previous dip. Smolts are increasing at Rock Island and are fairly steady in the lower Columbia. Steelhead are generally decreasing throughout the system, except at Bonneville where passage is steady.

Sockeye are largely done at the traps, although continue to pass in low numbers at projects in the Snake and Columbia. Claire noted that FPAC has been discussing this year's smolt passage index at Lower Granite relative to previous years. Lower indices have been observed than recent years, particularly at Snake River projects; FPAC is working with the FPC to recalibrate to account for new operations and low flows. Claire will bring an update if any there are any developments on this work.

At Bonneville, adult spring Chinook YTD passage is 54% of the 10-year average; Chinook jacks at 71% of the 10-year average; total steelhead at 37% of the 10-year average; wild steelhead at 41% of the 10-year average; and shad at 76% of the 10-year average.

At Lower Granite, spring Chinook YTD passage is 59% of the 10-year average; Chinook jacks at 59% of the 10-year average; total steelhead at 37% of the 10-year average; and wild steelhead at 51% of the 10-year average. Claire noted that adult counts at mid-Columbia projects are showing a lag of about 3 days. Counts are generally above last year, and are between 40-60% of the 10-year average.

Dave Swank, USFWS, reported that adult lamprey have started to come in, with a few in the last week or so.

Power System: Tony reported a fair bit of wind in the system with recent weather events coming through; things are still fairly mild, with below average temperatures.

Questions or comments from members of the public: there were no questions or comments from members of the public.

The next scheduled TMT meeting is a conference call on May 26, 2021 at 9:00 AM.

This summary is respectfully submitted by the DS Consulting Facilitation Team. Suggested edits are welcome and can be sent to Colby at colby@dsconsult.co.

Columbia River Regional Forum

Technical Management Team DRAFT OFFICIAL MINUTES

Wednesday, May 19, 2021

Minutes: Melissa Haskin, BPA (contractor, FLUX Resources)

Today's TMT meeting was held via conference call and webinar, chaired by Doug Baus, Corps, and facilitated by Emily Stranz, DS Consulting. See the end of these minutes for a list of attendees.

1. Review of 4/21 Official Minutes

The April 21 official minutes were approved with no additional edits.

2. Weekly Native Non-Salmonids GBT Report, May 3-6

Baus directed the TMT to a Weekly Native Non-Salmonids GBT Report for May 10-13, available on the TMT website. Similar to last week, this week's report shows GBT on some species of native non-salmonids below Ice Harbor, McNary, and Bonneville, and levels remain below the threshold that would require action. The Action Agencies are coordinating with Oregon and Washington, and they will report back to the TMT.

Brian Marotz, MT, asked if the folks doing the GBT sampling are developing equations for dosage or duration of gas. Charles Morrill, WA, offered that there is a significant amount of information reported in the spreadsheet (agenda item 2.c), including holding times, electrofishing times, temperature, etc. He recommended taking a look at that and directing any further questions to Leah Sullivan with BPA or to USGS.

3. Operations Review

3a. Reservoirs – Joel Fenolio, Reclamation; Lisa Wright, Corps

Reclamation projects:

- **Hungry Horse** – Midnight elevation 3,535.6 feet. The area is experiencing warm weather and the project is maintaining VarQ flows through the weekend.
- **Grand Coulee** – Slowly refilling to target of 1,278-1,282 feet by the end of the month.
- **Upper Snake Flow Augmentation:** Augmentation flow started at Milner Dam and is at 5,000 cfs. On the Boise River, augmentation ramped up over the past few days and is now at 1.2 kcfs. Dave Swank, USFWS, asked if this information is available online. Fenolio responded yes, Reclamation's Hydromet website has a storage reservoir map (also referred to as "teacup map"). The site is linked on the TMT homepage under "Related Links – USBR". He added that the website shows both augmentation and irrigation flows.

Corps Projects:

- **Libby Dam** – Elevation 2,408.5 feet, yesterday's average inflows 39.5 kcfs and outflows 25 kcfs.

- **Albeni Falls** – Elevation 2,057.8 feet, yesterday’s average inflows 47.1 kcfs and outflows 37.9 kcfs.
- **Dworshak Dam** – Elevation 1,557 feet, yesterday’s average inflows 18.7 kcfs and outflows 1.6 kcfs.
- **Lower Granite** – Yesterday’s average outflows were 88 kcfs.
- **McNary Dam** – Yesterday’s average outflows were 209 kcfs.
- **Bonneville Dam** – Yesterday’s average outflows were 215 kcfs.

3b. Water Quality – Dan Turner, Corps

TDG across the system is well below the 125% standard at the fish passage projects but increasing at some projects. Little Goose tailrace TDG is 124%. Spill reached the spill cap this morning at Lower Granite, but flows are forecasted to recede. At Ice Harbor, water temperature conditions seem similar to 2015, but it is too early to tell how it will impact conditions later in the year. Since there are low flows, there is increased risk of high water temperatures should a heat wave come in. The fish managers are also concerned and watching the weather.

3c. Fish – Claire McGrath, NOAA

Juveniles: The traps on the Salmon River at White Bird and on the Snake River at Lewiston were pulled last week due to increasing sockeye. They should be back online this week. There will be a data gap.

Yearling Chinook passage is decreasing at most of the traps and Snake River projects, as well as at Rock Island. The passage index is holding steady at the Grande Ronde trap and Lower Columbia River projects.

Subyearling passage is low but increasing at the Snake River projects. Numbers are low at Rock Island but fairly steady on the Lower Columbia.

Coho are showing at the Grand Ronde trap and increasing at Rock Island, following a recent dip. Smolts numbers are fairly steady on the Lower Columbia.

Steelhead are generally decreasing throughout the system, except at Bonneville where passage is steady.

Sockeye are wrapping up their season, but still passing Snake and Columbia River projects.

Fish managers have noticed that this year’s smolt passage index at Lower Granite relative to previous years is low and are working with FPC staff to see if the indices need to be recalibrated. McGrath will update TMT on any changes.

Adults: At Bonneville, spring Chinook have been passing at 1,225 – 3,700 per day, with YTD totals of ~55,000, which is above last year and 54% of the 10-year average. About 395– 1,100 jack Chinook have been counted per day over the last week at the project and YTD counts are 85,073, which is 280% of last year and 71% of the 10-year average. Steelhead have been in the 1– 10 per day range over the last week with YTD numbers at 45% of last year and 37% of the

10-year average. Unclipped steelhead are 32% of last year and 41% of the 10-year average. Shad are beginning to pass the project and are at 76% of the 10-year average.

At Lower Granite, spring Chinook passage is ranging from 300– 1,500 per day with YTD count at 13,890, which is 189% of last year and 59% of the 10-year average. Jack Chinook are passing at 20– 160 per day and at 59% of the 10-year average. Steelhead are 117% of last year and 37% of the 10-year average. Wild steelhead at 138% of last year and 51% of the 10-year average.

Adult counts at mid-Columbia projects are showing a lag of about ~3 days.

It is still early in lamprey season, but they are beginning to show up at the projects.

3d. Power – Tony Norris, BPA

There has been significant wind on the system. Temperatures have been somewhat below average but mild.

Today’s Attendees:

Agency	TMT Representative
Army Corps of Engineers	Doug Baus (Chair), Lisa Wright, Julie Ammann
Bonneville Power Administration	Tony Norris, Scott Bettin
Bureau of Reclamation	Joel Fenolio
NOAA Fisheries	Claire McGrath
US Fish & Wildlife Service	Dave Swank
Washington	Charles Morrill
Oregon	Erick Van Dyke
Idaho	Jonathan Ebel
Montana	Brian Marotz
Nez Perce Tribe	Jay Hesse
Umatilla Tribe/CRITFC	Absent
Colville Tribe	Absent
Warm Springs Tribe	Absent
Kootenai Tribe	Absent
Spokane Tribe	Absent

Other Attendees (non-TMT members):

Corps – Dan Turner, Aaron Marshall, Alexis Mills, Chris Peery, Jon Roberts, Willow Walker,

DS Consulting – Emily Stranz (Facilitator), Colby Mills

BPA (contractor, FLUX Resources) – Melissa Haskin (Notetaker)

Clearing Up – K.C. Mehaffey

Portland General Electric – Ruth Burris