

## COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

October 6, 2021

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; it is not intended to be the "record" of the meeting. Official minutes can be found on the TMT website: <http://pweb.crohms.org/tmt/agendas/2021/>. Suggested edits for the summary are welcome and can be sent to Colby at [colby@dsconsult.co](mailto:colby@dsconsult.co).*

### Review Meeting Summaries & Minutes

TMT Members approved the official meeting minutes for the July 14, 21, and 28 meetings, and the facilitator's summaries for the September 15 and 22 meetings.

### Draft Water Management Plan

Doug Baus, Corps, reported that the draft 2022 Water Management Plan (WMP) has been posted. The feedback process and coordination will be the same as last year; any requested changes on the draft can be emailed to Action Agency representatives, Joel Fenolio (BOR), Scott Bettin and Tony Norris (BPA), and Doug Baus (Corps). The first round of suggested edits is due October 31 (draft 2 suggested revisions due November 25), and all comments submitted will be posted online.

Action Agencies will reach out as needed to seek clarifying information on any recommendations. The December 15 TMT process meeting will be reserved for discussion around priority edits for which TMT members would like to hear rationale for why the edit was/was not incorporated. Emily Stranz will coordinate with TMT members on which edits/issues should be discussed at the December process meeting. TMT Members are also invited to contact AA representatives for one-on-one conversations regarding concerns around accepted/not accepted edits.

### Operations Review

*Reservoirs:* Joel reported on Bureau of Reclamation projects:

- **Hungry Horse:** midnight elevation was 3,548.4 feet and the project is operating to Columbia Falls minimums. Releases have been between 2,200-2,300 cfs over the last couple days, with inflows averaging 460 cfs, which Joel noted is in the bottom 3<sup>rd</sup> percentile relative to the last 30 years.
- **Grand Coulee:** midnight elevation was 1,283.6 feet, with general operations to fill over the month. Releases have been averaging 57,000 cfs and inflows 66,000 cfs.

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

- **Libby:** midnight elevation was 2,449.3 feet, with average inflows of 5.4 kcfs, and outflows of 4.0 kcfs;
- **Albeni Falls:** midnight elevation was 2,059.5 feet, with average inflows of 10.4 kcfs, and outflows of 21 kcfs;
- **Dworshak:** midnight elevation was 1,519.1 feet, with average inflows of 0.7 kcfs, and outflows of 1.6 kcfs;
- **Lower Granite:** average outflows of 17.8 kcfs;
- **McNary:** average outflows of 91.7 kcfs; and
- **Bonneville:** average outflows of 89.2 kcfs.

*Water Quality:* Dan Turner, Corps, reported on the October 1 start of spill for adult steelhead passage (4 hours/day, 3 days/week) per the 2020 BiOp. There have been TDG exceedances at Lower Granite the 3 times the operation has been implemented. Dan noted that with spill going over the surface weir, there is less control over the spill rate, so the Corps is trying different operations to reduce TDG at the project. Yesterday the 4-hour block was split into 2-hour blocks, which proved unsuccessful; they will try this approach again on Thursday to see if environmental conditions are impacting results.

In response to a query from Erick Van Dyke, OR, Dan clarified that the Corps is looking into multiple operational adjustments, including reservoir management, as forebay elevation, tailwater elevation, and increasing powerhouse

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flows all impact TDG. Erick appreciated the Corps' consideration of multiple alternatives. Claire McGrath, NOAA, noted that NOAA does not want to see an operation with less than 2 hours/day, as it would not be enough time for fish to cue and pass the project. NOAA was appreciative of the Corps' communication on the issue, and operational efforts to both to meet passage opportunities, as well as water quality criteria.

Charles Morrill, WA, encouraged the Corps to reach out to WA Department of Ecology (WDOE) and OR Department of Environmental Quality (ODEQ) to see if the 1-hour exceedance is a concern from their regulatory perspective. It was noted that last year's steelhead passage operation resulted in similar TDG levels, however, no action was taken to reduce; Dan noted that the Corps was applying the wrong standard during operations last year. Tom Lorz, Umatilla, urged the Corps to review the waiver language around "fish passage spill" noting that the temporary exceedance might not be an issue. Additionally, Umatilla, OR, and WA representatives all recommended that the Corps reach out to the State water quality agencies to check in on standards and waiver language. Charlie noted that WDFW will also be reaching out to WDOE on the matter.

*Fish:* Claire McGrath, NOAA, reported juvenile passage sampling ended at Lower Monumental and McNary dams at the end of September, and is continuing at Lower Granite, Little Goose, and Bonneville dams through this month. As expected, the passage index shows low numbers of sub-yearling Chinook and lamprey.

At Bonneville, adult fall Chinook, Coho, steelhead, pink salmon and lamprey passage is declining. There is one chum reported past Bonneville so far this year. Fall Chinook YTD passage is 68% of the 10-year average and jacks are 74% of the 10-year average. Steelhead passage is still historically low for recorded counts (and skewed later than average), total YTD is 34% of the 10-year average, with wilds at 33% of the 10-year average. Coho YTD is 273% of the 10-year average, and jacks are over 200% of the 10-year average. Pink salmon YTD is 308, and Claire noted that a few have moved surprisingly far upriver, as far as Rocky Reach in the Columbia, and 1 at the Lower Granite trap in the Snake.

At Lower Granite, fall Chinook are at the end of their run, while Coho are near their peak, and steelhead on the later side of their peak. Fall Chinook YTD passage is 92% of the 10-year average; total steelhead YTD is almost 42% of the 10-year average, with wilds at 42% of the 10-year average. Coho YTD is 300% of the 10-year average, and jack Coho is 192% of the 10-year average. Claire noted that there was a video review of ladder counts in September; counts have been corrected on the FPC and DART websites and can be viewed at a link on DART website.

Charles noted a couple of chum have been seen at Bonneville, and WA will continue to monitor surveys. He also provided TAC's summary from October 4 on run sizes and harvest plans for upriver fall Chinook, summer steelhead and Coho:

*Based on Chinook passage at Bonneville Dam through October 3 and projected lower river harvest through December 31, TAC updated the total run-size of upriver stocks at the Columbia River mouth to 386,000 adult Chinook (82% of the preseason forecast). This total includes 49,800 BPH tules, and 293,900 URB and 42,300 PUB brights.*

*As of October 3, the cumulative steelhead passage at Bonneville Dam since July 1 is the lowest on record (64,222), and the cumulative unclipped steelhead passage (22,699) is the lowest since clipped/unclipped counting began in 1994. The clipped steelhead passage is 41,523 to date. The projected total A-Index steelhead passage is expected to be 57,000 (clipped A = 35,600, and unclipped A = 21,400). The projected total B-Index steelhead passage is expected to be 10,500 (clipped B = 8,600, and unclipped).*

*Power System:* Tony Norris, BPA, reported a shift towards cooler weather, noting morning peaks of higher energy use on the regional load that will continue through fall and winter for heat generation.

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

**The next scheduled TMT meeting is a conference call on October 20, 2021, at 9:00 AM.**

## **Columbia River Regional Forum**

### **Technical Management Team**

### **OFFICIAL MINUTES**

**October 6, 2021**

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

Today's TMT web meeting was 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 Official Minutes and Summaries**

Official meeting minutes for 7/14, 7/21, and 7/28, and facilitator summaries for 9/15 and 9/22 were approved with no additional edits.

### **2. Draft Water Management Plan - Doug Baus, Corps-NWD**

The draft 2022 Water Management Plan is posted to the TMT website. The schedule matches that of previous years. TMT members should send suggested changes by the end of the day October 31, 2021 to Doug Baus and Lisa Wright at the Corps, Joel Fenolio at Reclamation, and Tony Norris and Scott Bettin at BPA. Specific language and changes are preferable to general critiques that require interpretation. Use of the "Track Changes" feature in Microsoft Word is encouraged. The Corps will compile and post comments online as well as a new draft. Draft 2 comments will be due on November 25.

If members have any suggested changes to the process of the annual Water Management Plan update, they should plan to discuss them at the December 15 TMT process meeting.

### **3. Operations Review**

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

**Reclamation projects: Hungry Horse** – Midnight elevation 3,548.4 ft. Operating to Columbia Falls minimums. Releases have been 2.2-2.3 kcfs over the past few days. Inflows have been around 460 cfs, which is low for this time of year. **Grand Coulee** – The forebay hit 1,283.6 ft. on October 2. Releases have been averaging 5.7 kcfs and inflows have been around 6.6 kcfs.

**Corps Projects: Libby Dam** – Midnight elevation 2,449.3 ft., yesterday's average inflows 5.4 and outflows 4 kcfs. **Albeni Falls** – Midnight elevation 2,059.5 ft., inflows 10.4 kcfs and outflows 21 kcfs. **Dworshak Dam** – Midnight elevation 1,519.1 ft., yesterday's average inflows 0.7 kcfs and outflows 1.6 kcfs. **Lower Granite** – Yesterday's average outflows 17.8 kcfs. **McNary Dam** – Yesterday's average outflows 91.7 kcfs. **Bonneville Dam** – Yesterday's average outflows 89.2 kcfs. Flows are low across the system, commented Wright.

#### ***3b. Water Quality – Dan Turner, Corps***

Spill for adult steelhead at McNary and the Lower Snake projects began October 1. Spill is for 4 hours in the morning, 3 days per week, per the 2020 BiOp. Each time the operation has been

implemented thus far at Lower Granite, the tailwater has exceeded the 110% TDG water quality standard. Since spill is going over the surface weir, there is less control compared to spill through conventional spillways. The Corps is trying different operations to reduce TDG. Yesterday, spill was split into two 2-hour blocks instead of 4 consecutive hours, but TDG still exceeded 110%. To confirm environmental conditions were not at play, they will try again tomorrow. The Corps is also considering other options, such as spilling 2 hours per day for 6 days a week. Jonathan Ebel, ID, wondered if NOAA had evaluated if this is in line with the terms and conditions of the 2020 BiOp. NOAA is looking into it and discussing it at the policy level. NOAA does not want to see spill for less than 2-hour blocks. There was some discussion among fish co-managers about if there is leftover acoustic equipment from last year at the project to evaluate passage. Unfortunately, there was only equipment at McNary Dam and that has been removed.

Erick Van Dyke, OR, wondered what additional actions the Corps is considering, specifically related to reservoir elevation and management since that can impact TDG. Dan Turner, Corps, noted that the TDG is impacted by barometric pressure, temperature, flow rates, and the closing and opening of the RSW. Additionally, the Corps is aware that forebay elevation influences how much TDG is produced. It is harder to control that, he noted, adding that another factor the Corps is looking at is powerhouse flows. Increasing powerhouse flows can provide relief at downstream projects due to mixing.

Tom Lorz, Umatilla Tribe/CRITFC, asked why the Corps sees the exceedance as an issue this year when the agency did not see it as an exceedance last year. Turner replied that, in short, the Corps made an error in their interpretation of the state standard language last year. Lorz, Van Dyke, and Charles Morrill, WA, asked for additional details on what changed and pushed for the issue to be addressed further. The three also noted they would like the Corps to connect with WA's Department of Ecology (WDOE) as well as OR's Department of Environmental Quality (ODEQ) to see if the 1-hour exceedance is a regulatory concern or issue and to determine how the error was made. Turner noted he would pass along all concerns noted at today's TMT to the Corps policy and legal teams.

### ***3c. Fish – Claire McGrath, NOAA***

**Juveniles:** Juvenile sampling ended at Lower Monumental and McNary at the end of September. It will continue at Lower Granite, Little Goose, and Lower Monumental through the end of this month. The passage index is showing low numbers of subyearling Chinook and lamprey.

**Adults:** At Bonneville, fall Chinook have been passing at 940 to 3,400 per day, with YTD totals of ~330,000 at the project, which is above last year's count and 68% of the 10-year average and 90% of last year's count. YTD jack counts are 52,000, which is 97% of what was seen last year and 74% of the 10-year average. Steelhead counts remain markedly low. Last year by this time about 97% of steelhead had passed the project. This year, the run is later than average but will likely end near when it historically does. YTD numbers coming in at a little over 67,000, which is 60% of last year and 34% of the 10-year average. Unclipped are at an YTD of 24,000, which is 54% of last year and 33% of the 10-year average. Coho counts are coming in stronger than other species with an YTD of 190,000 adults, which is 195% of last year and 273% of the 10-year average. Jacks are also over 200% of the 10-year average. Early Coho (those passing before September 30) this year were the second highest on record with passage counts at 182,000. Pink

salmon are at YTD of 308. McGrath commented that they are moving surprisingly far this year. So far, 43 passed McNary Dam and some have been spotted as far up as Rocky Reach. They have also been spotted on the Snake River at Lower Monumental and Little Goose. One made it all the way to Lower Granite.

At Lower Granite, fall Chinook are nearing the end of their run. Coho is near its peak and steelhead are starting to decline. Passage for fall Chinook is ranging from 150-366 per day with ~29,000 YTD, which is 92% of the 10-year average. Daily steelhead counts have ranged from 643 to 1,500. Total steelhead to-date are at ~28,000, which is 82% of last year and 42% of the 10-year average. Wild counts are at 42% of the 10-year average. Coho have passed at 340-1,200 per day. YTD counts are ~7,400 adults, which is almost 300% of the 10-year average. Jack Coho are at 192% of the 10-year average.

A video review of ladder counts resulted in corrected fish counts. Some fall Chinook were counted as Coho. This has been corrected on FPC and DART. A note is available on the DART website with a summary of the changes.

Morrill noted WA has observed some chum in the lower Columbia River above Bonneville Dam. He also shared the most recent report from TAC:

“Based on Chinook passage at Bonneville Dam through October 3 and projected lower river harvest through December 31, TAC updated the total run-size of upriver stocks at the Columbia River mouth to 386,000 adult Chinook (82% of the preseason forecast). This total includes 49,800 BPH tules, and 293,900 URB and 42,300 PUB brights. As of October 3, the cumulative steelhead passage at Bonneville Dam since July 1 is the lowest on record (64,222), and the cumulative unclipped steelhead passage (22,699) is the lowest since clipped/unclipped counting began in 1994. The clipped steelhead passage is 41,523 to date. The projected total A-Index steelhead passage is expected to be 57,000 (clipped A = 35,600, and unclipped A = 21,400). The projected total B-Index steelhead passage is expected to be 10,500 (clipped B = 8,600, and unclipped.”

Morrill also shared that over the past 6 or 7 years most of the native steelhead have not been replaced. He voiced concern for this and added that his fish co-managers are also concerned. ID has noticed a disturbing decline. ID has published several reports on the issue and encourages people to look at those for additional information, should they be interested.

### **3d. Power – Tony Norris, BPA**

Cooler weather will likely lead to morning peaks for power demand as people heat their homes. When people are cooling their homes in the summer, the spikes tend to be in the afternoons, commented Norris.

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#### **Today’s Attendees:**

<b>Agency</b>	<b>TMT Representative</b>
Army Corps of Engineers	Doug Baus (Chair), Lisa Wright, Julie Ammann
Bonneville Power Administration	Tony Norris, Scott Bettin
Bureau of Reclamation	Joel Fenolio

Agency	TMT Representative
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	Absent
Umatilla Tribe/CRITFC	Absent
Colville Tribe	Absent
Warm Springs Tribe	Jen Graham
Kootenai Tribe	Absent
Spokane Tribe	Absent

**Other Attendees (non-TMT members):**

Corps – Dan Turner, Alexis Mills, Aaron Marshall, Chris Peery, Jon Roberts, Scott St. John  
 DS Consulting – Emily Stranz (Facilitator), Colby Mills  
 BPA – Melissa Haskin (CONTR, FLUX Resources, Notetaker)  
 Clearing Up – K.C. Mehaffey  
 Portland General Electric – Ruth Burris  
 Chelan PUD – Jay Finch  
 Leslie Bach – NPCC