

## COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

November 17, 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 official meeting minutes for the September 1, 15, and 22 meetings; as well as the facilitator's summary from the November 3 meeting (pending an addition to Reclamation's Hungry Horse update on page 2, to clarify that the project is currently releasing to South Fork minimums).

### Chum Operation

Doug Baus, Corps, reported on the chum operations; complete operational steps are posted to the TMT website. On November 17, project tailwater elevation has been within the range of 11.3 – 13.0 feet at all hours. On Monday, tailwater elevation at 1900 hours was up to 13.5 feet, peaked at 14.3 feet and was back down to 13.3 feet at midnight. Project outflows were lower on Tuesday.

At Bonneville, the RFC inflow forecast for the next 10-days is between 125-140 kcfs; current precipitation is expected to bring inflows up, followed by a recession back down to 125 kcfs.

RFC weather forecasts for the next 10-days show things drying up through the entire Columbia River Basin. The 10-day and 5-day QPF shows well below average precipitation throughout the basin. Monthly precipitation for October, however, was above average: the Snake River Basin above Ice Harbor Dam had 122% of normal precipitation; the Upper Columbia River Basin above Arrow observed 111% of normal; the Columbia River mainstem above The Dalles observed 117% of normal; and the Willamette River Basin above Portland observed 115% of normal precipitation. However, even with all the precipitation, Oregon is still experiencing drought conditions.

Tony Norris, BPA, noted there may be a day or so where the project exceeds 16.5-foot tailwater at night as water is moved through system. He reported that Grand Coulee has been filling because the flows required from Bonneville were less than normal, as the Willamette River hit almost 50 kcfs due to heavy precipitation. BPA is not seeing any issues in continuing to meet the chum operation flows. Tony also noted that Hamilton Creek received precipitation; during the peak of the rainy period, the water surface reached 7 feet over the gauge. Water levels are currently back down to what is expected with normal precipitation and should recede to somewhere under 22 feet.

Charles Morrill, WA, reported that chum are present, although poor conditions in the Ives/Pierce area prevented surveying there this week. Weekly surveys will continue as conditions allow. In the Duncan Creek Seeps there were 30 lives and 11 redds; Multnomah had 96 lives and 17 redds; St. Cloud had 18 lives and 4 redds; Horsetail had 1 live; and Marker 85 had 3 lives and 1 redd. Last Wednesday there were 43 chum observed above the weir at Hamilton Creek and 22 below.

Claire McGrath, NOAA, noted that historically this is the week when chum ramp up at Ives; hopefully the next surveys will reflect increasing numbers. At Bonneville, chum YTD is 150, or 113% of the 10-year average. Doug added that TMT will need to coordinate the transition from the chum spawning phase to chum incubation at the next TMT business meeting on December 15.

### **Zero Generation**

Tony reported that zero generation operations will begin when the rolling 3-day average counts for adult wild and combined steelhead counts at Lower Granite Dam drop below 10 for wild and 20 for combined counts, on or after December 1. He noted that this does not usually occur until water temperatures drop to around 40-41 degrees F, and conditions are not yet there.

Managers will continue monitoring adult counts and when they drop below the criteria NOAA (Claire) will email the Corps (Doug and Lisa Wright) and BPA (Tony and Scott Bettin) to notify them that the criteria have been met for zero-generation operations. Claire will also notify Co-Managers upon reaching the trigger. Tony will provide updates to TMT on the usage of zero generation operations from December through February.

→ **ACTION**: Claire will notify Doug, Lisa, Tony, and Scott when wild and combined steelhead counts at Lower Granite Dam drop below 10 and 20, respectively (no earlier than December 1). Claire will also notify Co-Managers upon reaching the trigger.

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

**The TMT Year End Review (YER) will be held on December 1, 2021.**

**The next scheduled TMT meeting is a conference call on December 15, 2021, at 9:00 AM.**

## **Columbia River Regional Forum**

### **Technical Management Team**

### **OFFICIAL MINUTES**

**November 17, 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 minutes from the 9/1, 9/15, and 9/22 meetings were approved with no additional edits. Regarding the 11/3 Facilitator Summary, Joel Fenolio, Reclamation provided clarity on flows out of Hungry Horse and the South Fork Flathead. High flows out of the North and Middle Fork resulted in flows above the Columbia Falls minimums, noted Fenolio. This was not due to turbine capacity, but flows. The summary was approved pending a clarification from Fenolio to this language.

#### **2. Chum Operation – Doug Baus, Corps; Joel Fenolio, Reclamation; Claire McGrath, NOAA; Tony Norris, BPA; and Charles Morrill, WA**

Doug Baus, Corps updated the TMT on chum operations, which were coordinated at the October 27 TMT meeting. The operation began Monday, November 1 at 0600. The coordinated operation is available on the TMT website. Bonneville Dam is being operated within the range of 11.3-13 ft and up to step #3 as needed, which states:

3. Then, if necessary to increase project outflow, the tailwater may be operated up to 16.5 feet during nighttime hours (1700-0600). Concentrate highest elevations around 2400 hours.

The Corps will update the TMT on the chum operation through November and December, then coordinate with TMT to transition to the incubation phase of the operation.

Looking at current hourly project data, the Bonneville Dam tailwater elevation has been 11.3-13 ft. at all hours. On Monday, the tailwater increased to 13.5 ft. at 1900 and peaked around 14.3 ft. before dropping down to 13.3 ft. at midnight. Outflows were lower on Tuesday.

The RFC inflow forecast for Bonneville Dam calls for inflows of 125-140 kcfs over the next 10 days. Precipitation should help flows over the next few days, then they will drop off to ~125 kcfs toward the end of the 10-day period.

The 10-day weather forecast calls for below average precipitation in the Columbia Basin.

Baus highlighted some water year precipitation totals. In the Snake River Basin above Ice Harbor Dam, observed precipitation was 122% of average (3.6 inches). In the Upper Columbia Basin above Arrow Dam, precipitation was 111% of normal (10.1 inches). The mid-Columbia Basin mainstem above The Dalles Dam saw 4.7 inches of precipitation (117% of normal). In the

Willamette Basin above Portland, observed precipitation was 12.1 inches (115% of average). Precipitation in October was strong, but the state of Oregon is still in drought conditions.

Tony Norris, BPA, reported on Hamilton Creek and Springs. Precipitation has been good for the springs. As the water from the last few days of precipitation makes its way through the system, the Bonneville tailwater may rise to 16.5 ft. or higher during nighttime hours. Since the Willamette River hit highs of 50 kcfs, less water was needed out of Grand Coulee and the Action Agencies were able to fill Grand Coulee instead of drafting it. Norris does not expect that any issues will impact the chum operation.

Charles Morrill, WA, reported that Hamilton Creek was surveyed last Wednesday and 43 chum were observed above the weir and 22 below. At Duncan Creek, there were 30 lives and 11 redds; Multnomah had 96 lives and 17 redds; St. Cloud had 18 lives and 4 redds; Horsetail had 1 live; and Marker 85 had 3 lives and 1 redd. No dead chum were reported.

McGrath said this is typically the week chum pick up at the Ives/Pierce Island Complex. At Bonneville Dam, 150 chum have been counted passing thus far this year, which is 113% of the 10-year average. About 80% of the typical run has passed Bonneville. The next survey should show increased numbers of chum, she said.

Baus added that the chum operation has both a spawning and incubation phase. For the next TMT (December 15), the Corps would like to start discussing the transition to incubation.

### **3. Zero Generation - Norris; Claire McGrath, NOAA; and Baus**

Norris shared that per the Agreement related to the stay of litigation, zero generation will begin no earlier than December 1 when the adult steelhead abundance trigger is met (rolling 3-day average counts at Lower Granite of less than 20 total adult steelhead and less than 10 wild steelhead). The drop in steelhead counts is usually not observed until water temperatures drop to 40-41°F. Typically, when both criteria are met, NOAA sends an email or memo to the Corps notifying the Action Agencies that they can proceed with zero generation operations. NOAA is OK with this coordination process and will follow it. Norris added that as previously requested by NOAA, BPA will provide zero generation reports to the TMT from December to February.

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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
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

<b>Agency</b>	<b>TMT Representative</b>
Umatilla Tribe/CRITFC	Tom Lorz
Colville Tribe	Absent
Warm Springs Tribe	Jen Graham
Kootenai Tribe	Absent
Spokane Tribe	Absent

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

Corps – Alexis Mills, Aaron Marshall, Chris Peery, Catherine Dudgeon, Ashlynn Tate

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

DS Consulting – Emily Stranz (Facilitator), Colby Mills

Chelan PUD – Jay Finch

Unidentified – Felix Haung