

## COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

December 16, 2020

DRAFT Facilitator's Summary

Facilitator: Nancy Pionk; 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/2020/>*

### Review Meeting Summaries & Minutes

TMT members approved the official minutes and facilitator's summary from the 11/18 meeting. The minutes and summary from the TMT YER will be reviewed at the next TMT meeting.

### Chum Operation

Doug Baus, Corps, reported on chum operations, as coordinated on October 21 (posted on the TMT website). At 0700 hours this morning, Bonneville outflows were 125.4 kcfs, with a project tailwater elevation of 12.2 feet.

The RFC inflow forecast shows outflows ranging from 129-157 kcfs over the next 10-day period, with a low of 129 kcfs on December 20, and a high of 157 kcfs on December 22.

Claire McGrath, NOAA, reported that chum passage has dropped off significantly, with YTD passage at 190, or 150% of the 10-year average.

Charles Morrill, WA, reviewed chum salmon spawning ground survey data below Bonneville (posted on the TMT website) and noted diminishing numbers with yesterday's Ives/Pierce Island complex counts at 27 live, 3 dead, and 43 redds. Other notable counts are from Woods, with 94 live chum and 52 redds. The most recent tributary update is from December 9 & 10 and Charlie expects to have more recent data from the lower portion of Hamilton Creek soon. The ground surveys are from a WDFW internal database, and Charlie will ensure they are posted to the TMT website.

The current chum spawning operation is underway and will soon transition to the chum incubation operation. Action Agencies requested coordination from the TMT to prepare for operational logistics, and to identify a start date, time, and elevation for the Bonneville Dam minimum tailwater during all hours.

Key discussion points and concerns include:

- WA advised that the spawning operation should continue until all chum spawners are done; surveys to confirm this are scheduled for next Tuesday, December 22.
- WA indicated that an elevation of 11.8 feet would provide operating room. NOAA supported an 11.8 feet elevation, with goal of achieving 12 feet.
- TMT members considered whether to set a start date for the incubation operation at today's TMT meeting or to wait until after survey data is received. Action Agencies suggested identifying a start date at today's TMT meeting in advance, and if new survey data suggests chum are still present, the date can be changed.
- OR raised multiple concerns and noted that actions in recent years have been focused on spawning, incubation, and emergence operations. OR is interested in maintaining the operations that protect fish at all stages of these different actions.
- OR did not support setting a date to move to a new operation before spawning is completed and recommended continuing to monitor the present situation, and if spawners were present, to maintain an operation that protects their spawning activity. OR supported pre-planning; however, it did not support making a decision to change the operation before the end of spawning was confirmed.

- NOAA agreed with OR's view that spawning should be completed before the incubation operation begins. Based on information from surveys, there was an expectation that spawning should be finished by next Tuesday. NOAA recommended setting a date for the incubation operation, with implementation contingent on new survey data, and to extend the date for implementation if spawners remain. NOAA was supportive of setting a tentative date (December 23 or 24), with actual implementation of the operation based on survey data.
- BPA noted that starting the incubation operation does not mean that chum will be precluded from access to spawning habitat. The incubation operation would transition to a 24-hour minimum instead of a daytime tailwater range and would prevent chum from spawning in places where they cannot be protected.
- It was noted that the recommendation to set a tentative date at this meeting is based on anticipated scheduling challenges during the holidays next week, and to allow for logistical pre-coordination.
- The Corps noted that the safety of survey crews and forecasted inclement weather are other important logistical factors: there is limited opportunity to conduct surveys, and they could possibly be delayed due to inclement weather.
- WA does not want to move to the incubation operation without the survey data, and can be available by phone to coordinate and assess the status next week.

Doug confirmed:

- The tentative plan for the incubation operation is as follows: Effective Wednesday, December 23, at 1600 hours to maintain a Bonneville Dam minimum tailwater elevation of 11.8 feet during all hours. The operating range would be limited from 11.8 – 13 feet.
- Charlie will coordinate with NOAA and OR regarding the results of the December 22 survey and then report those survey results to the Corps and BPA by COB Tuesday.
- The Corps and BPA will wait to hear the survey report from Charlie (in coordination with NOAA and OR), before implementing the above operation plan. If the survey information reports no chum, the operation can become effective immediately. If chum are still present, or there are challenges with conducting the survey, the group will reassess the start date for the operation.
- OR indicated it would not support changing to the incubation operation if there are still fish spawning.

→ **ACTION:** Charlie will gather December 22 survey results and coordinate on Tuesday afternoon with NOAA and OR regarding the results. Charlie will update the Corps and BPA via email regarding the survey results by COB on December 22.

## Operations Review

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

- **Hungry Horse** is currently operating to the Columbia Falls minimum, maintaining 3,600 cfs. The project has been slightly drafting over the month after storing 2.5 feet last month from high inflows in Flathead Basin. The Columbia Falls operation is expected to continue through end of this month. Later this week, the project will look at drafting down to 3,525 feet to accommodate dam maintenance in the beginning of April.
- **Grand Coulee** has been storing a bit over the last couple days, and should be starting to see storage increase over the next week from anticipated December high flows. Joel noted that upcoming weather events and colder temperatures look like decent snow builders over the next week.

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

- **Libby:** midnight elevation was 2,422.3 feet, with average inflows of 6.4 kcfs, and outflows of 23.2 kcfs;

- **Albeni Falls:** midnight elevation was 2,051.4 feet, with average inflows of 17.6 kcfs, and outflows of 13.2 kcfs;
- **Dworshak:** midnight elevation was 1,524.3 feet, with average inflows and outflows of 1.7 kcfs;
- **Lower Granite:** average outflows of 23 kcfs;
- **McNary:** average outflows of 137 kcfs; and
- **Bonneville:** average outflows of 140 kcfs.

*Water Quality:* Dan Turner, Corps, had nothing significant to report, noting that the Ice Harbor tailwater gauge was showing a piece of bad data that has yet to be corrected.

*Fish:* Claire reported that the juvenile passage season is over. Fish Managers noted considering zero gen operations in the lower Snake River, as the Lower Granite bypass was open and detecting low numbers of Snake River fall Chinook through December 8.

Very low numbers of adults are being detected for all species; fall Chinook at Bonneville are passing 1-2 per day at 392,000 YTD, or 75% of the 10-year average; low numbers of coho with YTD passage at 130% of the 10-year average; total steelhead at 114,294 YTD, or 48% of the 10-year average. Steelhead counts have remained around 50% at most projects.

At Lower Granite, low numbers of steelhead continue to pass at a total range of 7-29 per day, at 58,353 YTD, or 49% of the 10-year average; wild counts are slightly better at 61% of the 10-year average.

*Power System:* Tony Norris, BPA, reported mild temperatures ahead, with a fair amount of water in the system, resulting in a fair bit of wind. High pressure will remain when the wind drops off.

Zero gen operations have been utilized in the Snake River approximately 1/3 of the days, between October 15 - December 15, using a total of 400 hours across all four projects which is approximately 15.5-16% of the hours available. This last week (December 9 – December 16), zero gen was used 4 days at LWG, LGS, LMN, and ICH. This has been a useful tool for Action Agencies to manage the system economically.

In response to questions from Jay Hesse, Nez Perce, Tony noted that there are periods when zero gen is not used, and periods when it is used more frequently. There was little use in October, and more use in mid-November to mid-December; and the number of hours used averaged at 5 hours (some 6-hour, some 4-hour days).

→ **ACTION:** Moving forward, in future power system reports, Tony will include a summary of how zero gen has been used over the past week at each of the projects

**Questions and 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 January 6, 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](mailto:colby@dsconsult.co).*

**Columbia River Regional Forum**  
**Technical Management Team**  
**DRAFT OFFICIAL MINUTES**  
**Wednesday, December 16, 2020**  
**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 Nancy Pionk, DS Consulting. See the end of these minutes for a list of attendees.

**1. Review of Meeting Minutes**

The November 18 facilitator's summary and official TMT minutes were approved with no requested changes.

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

Doug Baus, Corps, updated the TMT on chum operations that were coordinated at the October 21 TMT meeting.

At 0700 this morning, the Bonneville Dam tailwater elevation was 12.2 ft. and outflow was 125.4 kcfs. The RFC inflow forecast for Bonneville Dam calls for inflows of 129-157 kcfs over the next 10 days with a high of 157 kcfs on December 22 and a low of 129 kcfs on December 20.

Claire McGrath, NOAA, reported on chum passage, which has dropped off over the past few weeks. As of yesterday, 190 chum had passed Bonneville Dam this year, which is 60% of last year and 150% of the 10-year average.

WA's survey, as reported by Charles Morrill, showed 27 live chum, 3 dead chum, and 43 redds in the Ives/Pierce Islands Complex below Bonneville Dam yesterday. Morrill commented that numbers are diminishing. He added that in the Woods area, there were 94 live and 52 redds. Morrill expects to have data on the upper portion of Hamilton Creek later, as a survey was completed yesterday.

This is the time of year that the TMT typically coordinates transitioning from the chum spawning operation to chum incubation protection. Last year, incubation began on December 24 with a minimum tailwater at all hours of 11.3 ft.

From a biological standpoint, chum spawning is near the end of its season, noted Morrill. There is another survey scheduled for next Tuesday, which should confirm this. At this time in the year, there can be issues getting survey teams out in the water. Morrill suggested that spawning end next Wednesday, December 23 (there is no scheduled TMT next week). Morrill suggested a minimum tailwater elevation of 12 ft. to protect redds but noted that a tailwater of 11.8 ft. would provide adequate real time elevation for protection. NOAA supported the 11.8 ft. elevation, noting that it would be with the ideal goal of 12 ft. and suggested that a good start date for incubation would be following the December 22 survey, on December 23 or 24.

Erick Van Dyke, OR, voiced concern over forecasting an end date to spawning. He noted that over the years, the actions have focused on spawning and incubation and emergence operations. The point of this, he said, is to protect stages in cycle of the chum. A minimum elevation of 12 ft. would not protect spawners, he said. It is important to label the operation for what it is protecting and at this time, that is spawners, which are still present.

Norris noted that the fish would still be able to spawn after December 23 and they are not precluded from access to the habitat. Transition does not mean chum will not be able to spawn. It just sets a 24-hour minimum tailwater instead of a daytime minimum and maximum tailwater elevation.

The group agreed to tentatively transition to incubation on 12/23 at 1600 with an 11.8 hard constraint minimum tailwater at Bonneville. The Action Agencies will wait for official word from salmon managers following Tuesday's survey. If no spawning chum are observed and spawning activity is completed, WA will recommend the transition to the incubation phase effective immediately. In the meantime, to ensure the redds are covered, the current teletype will be modified to adjust the bottom end of the daytime operating range to reflect the recommended protection level of 11.8 feet.

### **3. Operations Review**

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

**Hungry Horse** – Operating to Columbia Falls minimums and drafting slightly after storing 2.5 ft. last month. Maintaining 3,600 cfs. At the end of the month, Reclamation will likely start drafting to 3,525 ft. to accommodate selective withdrawal maintenance in April.

**Grand Coulee** – has been storing over the past few days. There may be snow in the area next week.

**Libby Dam** – Midnight elevation 2,422.3 ft., yesterday's average inflows 6.4 and outflows 23.2 kcfs.

**Albeni Falls** – Midnight elevation 2,051.4 ft., inflows 17.6 kcfs and outflows 13.2 kcfs.

**Dworshak Dam** – Midnight elevation 1,524.3 ft., yesterday's average inflows 1.7 kcfs and outflows were 1.7 kcfs.

**Lower Granite** – Yesterday's average outflows were 23 kcfs.

**McNary Dam** – Yesterday's average outflows were 137 kcfs.

**Bonneville Dam** – Yesterday's average outflows were 140 kcfs.

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

Nothing significant to report except that the Ice Harbor tailwater gage is showing incorrect data on December 2. Turner says it takes a while for it to update and get corrected.

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

**Juveniles** – passage season is over. Fish managers have been considering impacts of zero generation operations in the lower Snake River. The Lower Granite bypass is detecting low numbers of PIT-tagged Snake River fall Chinook.

**Adults** – there have been low numbers of passage over the past week. At Bonneville, fall Chinook are passing at 0-2 per day and YTD ~392,000, which is 142% of last year and ~75% of

the 10-year average; coho are at ~166 of last year's YTD and ~130% of the 10-year average; steelhead are at ~48% of the 10-year average.

For Lower Granite, only low numbers of steelhead are passing. 7-29 per day. Steelhead are at 49% of the 10-year average. Wild steelhead are at 61% of the 10-year average.

### ***3d. Power – Tony Norris, BPA***

There is a good amount of water in system and mild temperatures in the forecast.

Jay Hesse, Nez Perce, asked about the zero generation operation. Norris reported that since its implementation was allowed starting on October 15, it have been used at Lower Granite, Little Goose, and Lower Monumental 400 hours across all 4 projects. To date, it has been used about 1/3 of the days and BPA has used 15-16% of the hours available to it. Norris commented it has been a useful tool to manage the system economically.

Hesse asked if the hours have been equally distributed or clumped together. Consistent to historical use, there have been periods where it was used more frequently and periods when it has not been used. Overall, usage was low in October and the first week of November and then more frequent between November 15 and December 15. Hesse asked if Norris could report on Zero Generation Operations at each TMT. Norris said he can do that. Claire McGrath, NOAA affirmed that usage was consistent with historical use.

## **4. Next TMT**

The next TMT will be a call on January 6.

### **Today's Attendees:**

<b>Agency</b>	<b>TMT Representative</b>
Army Corps of Engineers	Doug Baus, Lisa Wright, Julie Ammann
Bonneville Power Administration	Scott Bettin, Tony Norris
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	Absent
Nez Perce Tribe	Jay Hesse
Umatilla Tribe/CRITFC	Tom Lorz
Colville Tribe	Sheri Sears
Warm Springs Tribe	Absent
Kootenai Tribe	Absent
Spokane Tribe	Absent

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

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

Corps – Aaron Marshall, Dan Turner, Alexis Mills, Chris Peery, Catherine Dudgeon

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DS Consulting – Nancy Pionk (Facilitator), Colby Mills

FPC – Erin Cooper

Unidentified: Mark Kruzel, Liz Oberhausen, Rob Allerman

Pacific States Marine Fisheries Commission (PSMFC) – Allen Martin