

COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

November 18, 2020

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/2020/>.

Review Meeting Summaries & Minutes

TMT Members approved the official minutes and facilitator's summary for the November 4 meeting, pending clarification on a statement from Sheri Sears, Colville, regarding spill impact on resident fish.

- ACTION: Emily will connect with Sheri regarding her statement. Pending that clarification, the minutes and summary are approved.

Chum Operation

Doug Baus, Corps, reported on chum operations, as coordinated on October 21 (posted on the TMT website). Current hourly data puts operations at step #2 (tailwater range of 11.5-13 feet during daytime hours) and step #3 (up to 16.5 feet during nighttime hours) with a project tailwater elevation of 14.7 feet at 0500 hours, and outflow of 158.4 kcfs. Doug noted that the Tanner Creek gauge, reported in the hourly data as "Project Tailwater Elevation" in the far right column, is the gauge used to measure the tailwater elevation for the chum operation.

The RFC inflow forecast for Bonneville over the next 10-day period shows flows ranging from 125-155 kcfs; with a low of 125 kcfs today, November 18, and a high of 155 kcfs on November 20.

Claire McGrath, NOAA, reported on adult counts and chum surveys. Chum passage has picked up at Bonneville, with 6-20 per day, and 134 YTD (as of yesterday), which is 153% of the 10-year average. WDFW survey data from the Ives/Pierce area on November 10 counted 37 live chum, 1 dead, and 14 redds; this is not far off from last year's counts at this time. Chinook are showing in stronger numbers. Claire noted that field crews continue to monitor fish access to spawning channels.

Charles Morrill, WA, presented Columbia River chum survey summary data (posted on the TMT website) that will be updated every other week. Surveys show a substantial amount of redds in the tributaries below I-5, with nearly 3,000 live chum, and very few dead fish; Charles noted that some lives could have been double counted. Most of the tributaries below Bonneville also show chum distribution, and Charles noted a sea lion presence outside of the Ives/Pierce area.

Operations Review

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

- **Hungry Horse** is releasing 1,000 cfs in the South Fork. With good runoff over the last week, Columbia Falls has been hanging around 4,000 cfs. Recent rains have reduced releases, providing opportunity to store water. Snowpack is looking healthy with lower temperatures.
- **Grand Coulee** is supporting chum operations, keeping releases high to save space. The project expects significant inflow in December, and will continue to draft slowly through the end of this month.

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

- **Libby:** midnight elevation was 2,442.9 feet, with average inflows of 4.7 kcfs and outflows of 20.0 kcfs;
- **Albeni Falls:** midnight elevation was 2,051.3 feet, with average inflows of 19.6 kcfs and outflows of 16.5 kcfs;

- **Dworshak:** midnight elevation was 1,521.9 feet, with average inflows of 2.6 kcfs and outflows of 1.7 kcfs;
- **Lower Granite:** average outflows of 19.7 kcfs;
- **McNary:** average outflows of 130.9 kcfs; and
- **Bonneville:** average outflows of 148.9 kcfs.

Water Quality: Dan Turner, Corps, had nothing significant to report, noting that TDGs are near saturation levels.

Fish: Claire notified the TMT that she will stop posting fish summary reports on the TMT website as passage season comes to an end. If TMT Members find the summaries useful, she will provide them again in the spring.

The last smolt monitoring project data for the year were collected October 31-November 1, and Claire noted that FPAC is having conversations on potential effects of zero generation operations. PIT-tag data for first 2 weeks of November in the lower Columbia show very low numbers of detection for juvenile Chinook, coho and steelhead, while PIT-tag detection in the lower Snake is mostly Chinook sub-yearlings. Total detections in the juvenile bypass systems from November 1-16 were: 127 at Lower Granite, 89 at Little Goose, 13 at Lower Monumental, and 2 at Ice Harbor. The spillway PIT detector at Lower Granite is showing continued passage of juvenile Chinook; with 1-12 detections during each 4-6-hour operation of offseason spill.

For adults, offseason spill operation PIT-tag detections in the Lower Granite spillway have been mostly steelhead; with 1-5 detections per spill period with a few Chinook and a single coho since November 1. For adult passage in the mainstem, there are visual counts at Bonneville and video counts at Lower Granite. As expected, overall, there are declining numbers of fall Chinook, coho and steelhead passing the lower to mid-Columbia and lower Snake River projects.

At Bonneville, YTD fall Chinook adult and jack counts are 75% of the 10-year average; total steelhead YTD is 48% of the 10-year average, with wild steelhead YTD at 53% of the 10-year average; Coho YTD is 131% of the 10-year average, with jack coho at 368% of the 10-year average. Chum are passing almost daily at the project. At Lower Granite: YTD adult fall Chinook passage is 65% of the 10-year average, with jacks at 82%; YTD total steelhead is 49% of the 10-year average, with wild steelhead at 60%; YTD coho is 151% of the 10-year average, with coho jacks at 293%.

Charles added that PIT-tag detection for juvenile fall Chinook passing Lower Granite (RSW and the bypass facility) are all Clearwater origin fish, which was expected as these fish are known to pass later.

Power System: Tony reported bouts of cold weather, with below average temperatures and some above average temperatures. Wind generation has increased, and a fair amount of water is coming down the river.

Jay Hesse, Nez Perce, asked about zero generation operations usage since Oct 15. Tony reported that, since the operation began on October 15, zero generation has only been used 8 times at Lower Granite, Little Goose and Lower Monumental; and 5 times at Ice Harbor. Over this 30-day window, most operations have been either 5 hours in duration, some at 4 hours, and a couple at 6 hours.

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 the virtual Year End Review, on December 2 at 9:00 AM.

The meeting agenda is posted to the TMT website.

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, November 18, 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 Emily Stranz, DS Consulting. See the end of these minutes for a list of attendees.

1. Review of Meeting Minutes

Scott Bettin, BPA, had a question regarding a statement Sheri Sears, Colville Tribe, made during the November 4 TMT meeting. He wanted to clarify what she meant when she said over 400,000 non-anadromous fish are lost each year, since that number is too high to be a yearly figure. The minutes and summary will be approved after Emily Stranz, DS Consulting, reaches out to Sheri for clarification.

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, which were coordinated at the October 21 TMT meeting. The coordinated operation is available on the TMT website and is being operated in steps #2 and #3 per hourly data, which states:

“During all hours, operate project outflow to provide a tailwater elevation in the range of 11.5-13.0 feet. 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.”

Baus reminded TMT that the tailwater elevation used for the chum operation is reported in the hourly data as “Project Tailwater Elevation” in the column on the right. There are two tailwater elevations reported for different locations and the chum operation manages to the Tanner Creek gauge data in that column.

At 0500 this morning, the Bonneville Dam tailwater elevation was 14.7 ft. and outflow was 158.4 kcfs. The RFC inflow forecast for Bonneville Dam calls for inflows of 125-155 kcfs over the next 10 days with a high of 155 kcfs on November 20 and a low of 125 kcfs today.

Claire McGrath, NOAA, reported on adult chum passage, which has picked up. As of yesterday, 134 chum had passed Bonneville Dam, which is 78% of last year and 153% of the 10-year average. WDFW's November 10 survey counted 37 live chum, 1 dead chum, and 14 redds in the Ives/Pierce Islands Complex below Bonneville Dam. McGrath noted that this is not too far off from last year's counts and that she hopes to see the number increase over the next two weeks. She also reported that recent rain should mean there is adequate access to the spawning channel; however, field crews will continue to monitor water depth at the weir to ensure chum have access to the channel.

Charles Morrill, WA, reported on lower Columbia River survey data, which show that it is still early in the run. Almost 3,000 live chum have been counted in the tributaries downstream of I-5 since November 4, though Morrill says some of those may have been double counted. Only a few chum have been reported dead. Morrill will continue to update the TMT weekly with survey results during the chum incubation period.

3. Operations Review

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

Hungry Horse – releasing 1,000 cfs. The area saw good runoff over the past week and releases have been reduced. Columbia Falls is storing and releasing 4,000 cfs. There is a healthy snowpack thus far.

Grand Coulee – supporting chum and continuing to draft through the end of the month.

Libby Dam – Midnight elevation 2,442.9 ft., yesterday's average inflows 4.7 and outflows 20 kcfs.

Albeni Falls – Midnight elevation 2,051.3 ft., inflows 19.6 kcfs and outflows 16.5 kcfs.

Dworshak Dam – Midnight elevation 1,521.9 ft., yesterday's average inflows 2.6 kcfs and outflows were 1.7 kcfs.

Lower Granite – Yesterday's average outflows were 19.7 kcfs.

McNary Dam – Yesterday's average outflows were 130.9 kcfs.

Bonneville Dam – Yesterday's average outflows were 148.9 kcfs.

3b. Water Quality – Dan Turner, Corps

Nothing to report.

3c. Fish – Claire McGrath, NOAA

Juveniles – November 1-16 PIT-tag data show low numbers of Chinook (1-3 total), coho (0-2 total), and steelhead (0-6 total) in the Lower Columbia. Detections in the Lower Snake have been higher with 127 juvenile Chinook at Lower Granite, 89 at Little Goose, 13 at Lower Monumental and 2 at Ice Harbor. The spillway PIT detector at Lower Granite is reported 1-12 detections since November 1 including 1-5 steelhead, several Chinook, and a coho.

At this time, counts are visual at Bonneville and video at Lower Granite. Overall, there are declining numbers of fall Chinook, coho, and steelhead passing lower Columbia, mid-Columbia and Lower Snake projects.

Adults – at Bonneville, fall Chinook YTD are at ~75% of the 10-year average; coho are at 131% of the 10-year average; coho jacks are at 368% of the 10-year average; steelhead are at ~48% of the 10-year average; and wild steelhead are at 53% of the 10-year average.

For Lower Granite, fall Chinook are at ~65% of the 10-year average. Jacks are at 82% of the 10-year average. Coho are at 151% of the 10-year average; jack coho are 793% of the 10-year average. Steelhead are at 49% of the 10-year average. And, wild steelhead are at 60% of the 10-year average.

FPAC is having conversations on the potential effects of zero generation operations.

3d. Power – Tony Norris, BPA

There have been a mix of conditions including patches of cold weather with instances of above average temperatures. Fronts coming through have resulted in increases in wind generation.

Jay Hesse, Nez Perce, asked about the zero generation operation. Norris reported that since its implementation began on October 15, it has been used at Lower Granite, Little Goose, and Lower Monumental 8 times. At Ice Harbor, it has been used 5 times so far. Most implementations were 5 hours, though some were 4 and one or two were 6 hours.

4. Next TMT

The next regular TMT will be a call on December 16. The YER is scheduled for December 2.

Today's Attendees:

Agency	TMT Representative
Army Corps of Engineers	Doug Baus, Julie Ammann, Lisa Wright
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	Absent
Warm Springs Tribe	Jen Graham
Kootenai Tribe	Absent
Spokane Tribe	Absent

Other Attendees (non-TMT members):

Corps – Aaron Marshall, Jon Roberts, Willow Walker

DS Consulting – Emily Stranz (Facilitator), Colby Mills

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