

COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

November 6, 2024

Facilitator's Summary

Facilitation Team: Emily Stranz & Colby Mills, DS Consulting

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: <https://pweb.crohms.org/tmt/agendas/2024/> Suggested edits for the summary are welcome and can be sent to Colby at colby@dsconsult.co.

Review Meeting Summaries & Minutes – TMT Members approved the official meeting minutes and facilitator's summary from October 23, pending a revision from Charles Morrill, WA, to his statement at the bottom of page 1, "However, with forecasted precipitation providing sufficient ground flow to initiate upwelling and sufficient water to meet the 11.3-13.0 tailwater elevations, WA believes chum should be able to access the spawning area on 1 November."

Chum Operation – Doug Baus, Corps, provided an overview of the current conditions and forecasts at Bonneville Dam (BON) during the start of chum operations. As coordinated by the TMT, chum operations started on November 1 at 0700 hours with a project tailwater elevation of 11.6 feet, and a total outflow of 127.7 kcfs (details posted to the TMT website).

The RFC inflow forecast over the next 10-days shows a low of 119 kcfs on November 9, and a high of 127 kcfs on November 15. Tony Norris, BPA, added that BON is operating within the coordinated operation; there are no expected changes to any previous assumptions. Kelsey Swieca, NOAA, reported that 323 chum have been counted over BON for the year, one of the largest counts in recent years at 533% YTD compared to the 10-year average. The first 3 chum were observed in spawning ground surveys in the Ives Pierce area on November 1. Charles added that this year's chum runs in many areas of Lake Washington and the lower Columbia are better than expected.

Operations Review – Reservoirs: Chris Runyan, Reclamation, reported on Reclamation projects:

- **Hungry Horse (HGH):** the basin received about an inch of rain last week, with another 1.5-3 inches expected over the next 10-days starting this weekend. Inflows are low, with the 3-day average inflow was 0.77 kcfs, at 41% of average. Outflows yesterday were 2.6 kcfs, with a midnight elevation of 34.7 feet (25.3 feet from full). The project continues to draft (1.3 feet since last week) and continues to operate to meet minimum flows at Columbia Falls until January when first forecasts come in and Columbia Falls flow will be adjusted.
- **Grand Coulee (GCL):** inflows yesterday were 89.9 kcfs (101% of average last week), with outflows of 83.1 kcfs and a midnight elevation of 1,286.5 feet (3.5 feet from full). GCL drafted about 6/10 of a foot last week, staying near flat. Storage in Lake Roosevelt is 102% of average for this time of year. The project continues to conserve water to meet the tailwater requirements for chum below BON.

Aaron Marshall, Corps, reported on Corps of Engineers projects:

- **Libby (LIB):** midnight elevation was 2,446.5 feet, with inflows of 5 kcfs and outflows of 15 kcfs. The project is load shaping this week with outflows ranging from 10-15 kcfs, targeting the end of November elevation of 2,435 feet.
- **Albeni Falls (ALF):** midnight elevation was 2,052.6 feet, with inflows of 11 kcfs and outflows of 20 kcfs. The project is drafting down to the normal winter 0.5-foot band from 2,051-2,051.5 feet, reaching elevation by November 15.

- **Dworshak (DWR):** midnight elevation was 1,524.5 feet, with inflows of 1.8 kcfs and outflows 1.8 of kcfs. The project will continue operating near minimum outflows.
- **Lower Granite (LWG):** midnight elevation was 736.8 feet, with inflows of 17 kcfs; inflows are expected to remain below 20 kcfs for the 10-day forecast period.
- **McNary (MCN):** midnight elevation was 338.2 feet, with inflows of 111 kcfs and outflows of 111 kcfs.
- **BON:** midnight elevation was 73.9 feet, with inflows of 121 kcfs and outflows of 128 kcfs. The project is operating to around 11.6 feet to target a range within 11.3-13 feet.

Water Quality: Dan Turner, Corps, reported that TDG values are less than the water quality criteria.

Fish: Kelsey reported that the last couple days before sampling ended on November 1 showed relatively low numbers of sub-yearling fall Chinook (majority of the sample).

For adults at BON, low numbers of fall Chinook and steelhead continue to pass, with coho also passing. Chum passage is picking up (323 over BON), with relatively high numbers for this time of year as noted earlier. Fall Chinook YTD at BON is 103% of the 10-year average, steelhead at 120%, and chum at 533%. At LWG, fall Chinook YTD are at 96% of the 10-year average and steelhead are at 127% YTD.

Dave Swank, USFWS, noted that the lamprey run is essentially over, at about 53% of the 10-year average for daytime window counts; a significantly below-average year. Final corrected counts from the lamprey passage structures are still pending.

Power System: Tony reported that the power system is meeting load with no surprises.

Draft Water Management Plan (WMP) – Doug reported that TMT comments on the draft WMP have been posted to the TMT website; the next draft should be posted on November 12.

TMT Year End Review (YER) – Emily noted that the regular format for YER is shifting to an in-person training facilitated by DS Consulting for TMT Members and alternates. The training will likely be held at a DSC process meeting, in January 2025.

Questions or Comments from Non-TMT Members – there were no questions or comments from non-TMT Members.

**The next scheduled TMT meeting is on November 20, 2024, at 9:00 AM.
A DS Consulting Process Meeting will follow the TMT Business Meeting.**

**Columbia River Regional Forum
Technical Management Team
OFFICIAL MINUTES
Wednesday, November 6, 2024
Minutes: Andrea Ausmus, BPA (contractor, CorSource Technology Group)**

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

1. Review Summary and Minutes

a. October 23 Summary and Minutes

- Charles Morrill, WA, had edits for the Summary:

| *from Charles Morrill to everyone: 8:58 AM*

| *Kelsey Swieca, NOAA, clarified that 17 chum have passed over BON, with 15 over past couple of days (2 chum passed in June and July, not in January as previously stated). Zero chum have been observed via WDFW surveys in the Ives/Pierce area. Charles Morrill, WA, added that chum won't be observed at Ives/Pierce with the current low water levels in that area, even though chum are expected to be present, they cannot access the channel. However, with forecasted precipitation providing sufficient ground flow, chum should be able to access the spawning area.*

Should instead read:

| *from Charles Morrill to everyone: 8:59 AM*

| *However, with forecasted precipitation providing sufficient ground flow to initiate upwelling and sufficient water to meet the 11.3-13.0 TW elevations WA believes chum should be able to access the spawning area on 1 November.*

- With these edits TMT approved the Summary and Minutes.

2. Chum Operations - Tony Norris, BPA; Chris Runyan, BOR; Kelsey Swieca, NOAA; Charles Morrill, WA; Doug Baus, Corps-NWD

- TMT coordinated the start date of the Chum Operation at the October 23 meeting.
- Start Date: November 1

a. Bonneville Dam (BON) – Hourly Data – Baus

- Tailwater Elevation (Hour 7): 11.6 feet
- Total Outflow: 127.7 kcfs

b. NWRFC – BON Inflow Forecast - *Baus*

- BON Inflow Forecasted:
 - Low: 119 kcfs (November 9)
 - High: 127 kcfs (November 15)

c. BPA Update – *Norris*

- Operating within the coordinated operation.
- No expected changes to any previous assumptions.

d. NOAA Chum Update – *Swieca*

- Have chum over BON
 - Fish Count: 323 Chum YTD
 - First three were observed in the spawning areas.
- Morrill had noted in the chat that the first three chum were observed in the Ives-Pierce area on November 1.

e. WDFW Chum Update – *Morrill*

- The count of 323 chum is one of the largest counts we have had in recent years.
 - It is a surprise to see that large of a return over BON.
- This year the Puget Sound chum run came in much stronger.
 - Morrill said that he was not aware of an association of the strength in chum runs with those in Puget Sound.
 - Coincidental or not, it appears that this year's chum run in many areas of Washington and the Lower Columbia are better than expected.

f. TMT Coordinated Chum Operation

1. Effective Friday, November 1, at 0600 hours, and until further notice, operate the Bonneville Dam tailwater in the following order of operating ranges as project outflow increases.
2. During all hours, operate project outflow to provide a tailwater elevation in the range of 11.3 - 13.0 feet.
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.
4. Then, if necessary to increase project outflow, the tailwater may be operated up to 18.5 feet during nighttime hours (1700-0600).
5. Then, if increasing river flow precludes the ability to manage the tailwater within the steps above, operate to provide a tailwater in the range of 13.0-16.5 feet during daytime hours (0600-1700) and up to the maximum within project 24-hour ramp rate limits during nighttime hours (1700-0600).

3. Operations Review

a. Reservoirs

Reclamation – Chris Runyan

- Hungry Horse Dam
 - Conditions:
 - Rain last week: 1 inch
 - Ten-Day: 1.5 – 3 inches
 - Inflows (3-day average): 0.77 kcfs
 - Percent of Normal: 41% of average
 - Outflows (November 5): 2.6 kcfs
 - Midnight elevation: 3534.7 feet
 - Feet from Full: 25.3 feet
 - Drafted: 1.3 feet since last week.
 - Operations: HGH continues to operate to minimum flows at Columbia Falls until January when the Columbia Falls flow is adjusted.
 - Columbia Falls (11/5): 3.5 kcfs
 - Minimum: 3.39 kcfs
- Grand Coulee Dam
 - Inflows (11/5): 89.9 kcfs
 - Percent of Normal: 101% of average
 - Outflows: 83.1 kcfs
 - Midnight elevation: 1286.5 feet
 - Feet from Full: 3.5 feet
 - Drafted: 0.6 feet since last week.
 - Lake Roosevelt Storage: 102% of Average
 - Operations: Continues to conserve water and then meet the tailwater requirements for chum below BON.

Corps – Aaron Marshall, Corps

- Libby Dam (Lake Koochanusa)
 - Avg. Inflows (11/5): ~5 kcfs
 - Avg. Outflows (11/6): 15 kcfs
 - Current elevation: 2446.5 feet
 - Operation: LIB is doing load shaping this week with outflows ranging from 10 – 15 kcfs.

- Targeting end of November elevation: 2435 feet
 - Albeni Falls (Lake Pend Oreille)
 - Avg. Inflows (11/5): 11 kcfs
 - Avg. Outflows: ~20 kcfs
 - Midnight elevation: 2052.6 feet
 - Operation: Drafting to the normal winter half foot band from 2051 – 2051.5 feet. Targeting this elevation by November 15.
 - Dworshak Dam
 - Avg. Inflows (11/5): 1.8 kcfs
 - Current Outflows: 1.8 kcfs
 - Current elevation: 1514.5 feet
 - Operation: Continue operating near minimum outflows until further notice.
 - Lower Granite Dam
 - Avg. Inflows (11/5): 17 kcfs
 - Current elevation: 736.8 feet
 - Toward the end of the ten-day forecasts show a rise to inflows but expect inflows to remain below 20 kcfs. Low flows in the Snake for this forecast period.
 - McNary Dam
 - Avg. Inflows (11/5): 111 kcfs
 - Current Outflows: ~111 kcfs
 - Midnight elevation: ~338.2 feet
 - Bonneville Dam
 - Avg. Inflows (11/5): 121 kcfs
 - Current Outflows: 128 kcfs
 - Current elevation: 73.9 feet
 - Operation: Operating to maintain minimum tailwater for chum spawning.
 - Current elevation: 11.6 feet
 - Target range: 11.3 – 13.0 feet
- b. Water Quality – *Dan Turner, Corps*
- TDG
 - TDG values are less than the Water Quality criteria
- c. Fish

Salmon – Kelsey Swieca, NOAA

- Juveniles
 - Smolt Monitoring Program (SMP) completed sampling on November 1. Data cuts off after November 1.
 - As expected in the last couple of days before sampling ended, sampling showed relatively low numbers of Fall Chinook, the majority of the sample.
- Adult Salmon Counts
 - Bonneville (Lower Columbia)
 - Low numbers of Fall Chinook and Steelhead continuing to pass. Coho are also passing at BON. Chum passage is picking up and BON is seeing relatively high numbers of chum passing for this time of year.
 - Fall Chinook:
 - 10-year YTD: 103% of average
 - Steelhead
 - 10-year YTD: 120% of average
 - Chum
 - 10-year YTD: 533% of average
 - Lower Granite (Snake)
 - Fall Chinook:
 - 10-year YTD: 96% of average
 - Steelhead:
 - 10-year YTD: 127% of average

Lamprey – Dave Swank, USFWS

- Adult Lamprey
 - The adult run is essentially over.
 - Zero counted on most days.
 - One lamprey was going the other direction at BON.
 - Day Time Window Counts: 53% of average
 - Below average year.
 - Waiting for the final corrected counts from the lamprey passage structures.

d. Power System – *Tony Norris, BPA*

- Meeting load and managing the system, no surprises.

4. Draft Water Management Plan - *Baus*

- Baus thanked Salmon Managers (SM) for submitting comments to the Draft Water Management Plan.

- These comments are posted on the website.
- If the comments are not posted on the website, please let Baus know.
- Current Steps:
 - Action Agencies (AA) posted the SM comments.
 - AA are working through the comments currently.
 - AA plan to have a new draft posted on November 12.

5. TMT Year End Review

- Annual TMT Year End Review Cancelled.
- TMT members will do additional training through DS Consulting.
 - Likely be in January at the Process Meeting instead of in December.
- Quite a few members were not going to be able to make it on December 4.

6. Set agenda for next meeting – November 20, 2024

- a. Chum Operations

Today’s Attendees:

Agency	TMT Representative(s)
NOAA Fisheries	Kelsey Swieca (NMFS), Trevor Conder
Oregon	Erick Van Dyke
Washington	Charles Morrill
Kootenai Tribe	
Confederated Tribes of Colville Reservation	Dennis Moore
Umatilla Tribe	Tom Lorz (CRITFC)
Yakama Nation	Tom Iverson
Bureau of Reclamation	Chris Runyan
Army Corps of Engineers	Doug Baus, Lisa Wright, Aaron Marshall
US Fish & Wildlife Service	Dave Swank
Idaho	
Montana	
Spokane Tribe	
Nez Perce Tribe	
Warm Springs Tribe	
Confederated Salish and Kootenai Tribes	
Bonneville Power Administration	Tony Norris

Other Attendees (non-TMT members):

- COE – Dan Turner, Chris Peery
- DS Consulting – Emily Stranz (Facilitator), Colby Mills
- CorSource – Andrea Ausmus (BPA note taker, Contractor)