

COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

October 9, 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 September 25 facilitator's summary; the official meeting minutes will be reviewed at the next TMT meeting.

Chum Operation – Tony Norris, BPA, noted that chum season is approaching. At present, forecasts show dry conditions, with below average to average stream flows for the year. There looks to be some precipitation in the 10–14-day outlook but nothing that is expected to significantly water-up Hamilton Creek. There are a variety of potential outcomes to augment chum flows from storage, and it is still too early to be definitive on any action. No chum have been observed yet over Bonneville (BON) this fall.

Chris Runyan, Reclamation, noted that Lake Roosevelt and CRS operations are included in Reclamation's WMP priorities; ensuring projects including Grand Coulee (GCL) are at their FRM in early April to maximize flows for spring migration. Currently GCL storage is about average for this time of year. In response to a query from Kelsey Swieca, NOAA, Chris confirmed that drum gate maintenance will occur at GCL this year if the FRM drives the project down to the 1,265 feet trigger. If it does not occur this year, it will be forced next year.

Charles Morrill, WA, noted that current long-range weather predictions could suggest a wetter fall and winter, and as others mentioned, it remains too early for action. Chum operations are outlined in the 2024 WMP, which targets an elevation of 11.3-11.5 feet on November 1, or within a week.

Doug Baus, Corps, noted that the chum operation would be coordinated at the next TMT meeting, on October 23. At 0700 hours today, BON outflow was 72.4 kcfs with a tailwater elevation of 6.9 feet. RFC inflow forecasts over the next 10-days show a slight increase in project inflows. The 10-day meteorological forecast is mostly dry, with some precipitation in NW Washington and the upper Columbia early on and possibly more after day 7. The 6–10-day temperature outlook shows a probability of above average temperatures and a probability of above average precipitation in the NW Columbia Basin; near normal precipitation in the central region; below average in SE Idaho and NW Montana.

Tony noted that streams are driven by precipitation this time of year and reminded the group that the Hood River gauge near Tucker Bridge is usually a good indicator of streamflow responses to precipitation events. Hopefully there will be some atmospheric rivers between now and the arrival of chum.

Operations Review - Reservoirs: Chris reported on Reclamation projects:

- **Hungry Horse (HH):** September precipitation came in at 64% of average, 90% for the full water year; the 3-day average inflow is about 60% of average for the week. Outflows were 2.7 kcfs with a midnight elevation of 3,540.2 feet (19.8 feet from full). The reservoir drafted about 1.4 feet since last week and the project is operating to Columbia Falls minimum flows (3.39 kcfs).
- **Grand Coulee (GCL):** inflows yesterday were 59.4 kcfs, or 80% of average for the last week. Outflows were 45.4 kcfs with a midnight elevation of 1,285.3 feet (4.7 feet from full). GCL is operating to conserve water in preparation for chum flow operations. The Lake Roosevelt

elevation is about average for today. Chris reiterated that drum gate maintenance will be done if there is an April 30 FRM of 1,265 feet or less.

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

- **Libby (LIB):** midnight elevation was 2,448.6 feet, with inflows of 4 kcfs and outflows of 6.5 kcfs. LIB drafted below the end of September draft target elevation of 2,449 feet and the project will continue to operate the fall draft holding at 6.5 kcfs until outflows increase in November.
- **Albeni Falls (ALB):** midnight elevation was 2,059.5 feet, with inflows of 16 kcfs and outflows of 20 kcfs. ALB is continuing fall draft, targeting to be within 0.5-foot of the minimum control elevation by November 15.
- **DWR:** midnight elevation was 1,517.6 feet, with inflows of 900 cfs and outflows of 1.8 kcfs. DWR will maintain outflows at 1.8 kcfs until further notice.
- **LWG:** midnight elevation was 736.8 feet, with inflows of 17 kcfs and outflows of 17 kcfs; the project is currently passing inflows.
- **McNary (MCN):** midnight elevation was 338.7 feet, with inflows of 74 kcfs and outflows of 70 kcfs.
- **BON:** midnight elevation was 75.1 feet, with inflows of 72 kcfs and outflows of 75 kcfs.

Water Quality: Dan Turner, Corps, reported that TDG levels are below criteria. USGS reported this morning that the membrane at the John Day (JDA) tailwater gauge has ruptured; observed values will spike as a result. USGS will work on repairing the gauge this week and the Corps will work to clean up the data in the meantime.

Fish: Kelsey reported a bump in sub-yearling passage at LWG and BON, not unusual for this time of year and could be related to wild fall Chinook abundance.

For adults, the fall Chinook run continues to wind down, with about 1,500 entering the system at BON each day; the run is near average YTD and 104% of the 10-year average. Fall Chinook jacks YTD at BON are 158% of the 10-year average. In the Snake River, fall Chinook YTD are at 98% of the 10-year average while jack counts YTD are at 68% of the 10-year average. Both coho and steelhead passage have slowed at BON over the past week; YTD coho is 168% of the 10-year average, steelhead 121%, and wild steelhead 118%.

Dave Swank, USFWS, reported that the adult lamprey run is essentially over, with some still trickling in at BON. Dave is working on an end of season update to distribute.

Charles posted an update from this week's TAC's meeting:

TAC updated the current in-season projection for the expected A-Index steelhead abundance at Bonneville Dam to 122,100 total fish (including 44,600 unclipped). E3TAC also updated the in-season projection for B-Index steelhead abundance and now expects 49,900 total B-Index fish (including 13,200 unclipped) to return to Bonneville Dam.

TAC updated the 2024 upriver bright and tule stock fall Chinook Bonneville Dam passage expectation. Given the information currently available, TAC now expects the Columbia River mouth return of adult-aged fall Chinook to total 635,650 adult fish. This total includes 342,800 URBs, 76,100 PUBs, and 118,000 BPH.

Passage of upriver early-stock coho at Bonneville Dam totaled 143,767 adults which was three times higher than the pre-season expectation. Passage of upriver late-stock coho began October 1.

TMT – October 9, 2024

Power System: Tony reported mild temperatures for this time of year.

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

The next scheduled TMT meeting is on October 23, 2024, at 9:00 AM.

**Columbia River Regional Forum
Technical Management Team
OFFICIAL MINUTES
Wednesday, October 9, 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. A list of today's attendees is available at the end of these minutes.

1. Review Summary and Minutes

a. September 25 Summary

- Approved

b. September Minutes will be available for next meeting to approve.

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

a. Current Outlook – *Norris*

- Dry conditions
 - Average to below average stream flows for this time of year.
- Precipitation
 - Precipitation is present in the 10 – 14-day outlook.
 - Not enough to drive Hamilton Creek to fill up and start moving water.
- Decisions may need to be made by October 23.
 - With a potential update on October 30.
 - Too early for any operation based on the Current Outlook.

b. Columbia River System Operations BOR POV – *Runyan*

- Runyan provided an overview of the Bureau's point of view of Lake Roosevelt and some of the Columbia River System Operations as priorities listed in their Water Management Plan (WMP).
- Prioritize Grand Coulee (GCL) at Flood Risk Management (FRM) in early April.
 - Will help max flows for Spring migration.
- Take Chum Flows and Spring Flow Augmentation into account when coming upon a dry scenario.
- GCL Storage
 - Looking about average for this time of year.

- But it is dry.
- c. WFDW Perspective on 2024/25 Chum Operation – *Morrill*
 - Morrill responded to Runyan’s assessment saying that his comments are spot.
 - NOAA Projecting 80 – 85% probability of going into La Nina.
 - Would anticipate (hope for) a wetter Fall/Winter.
 - At the FPAC meeting Kyle Dittmer noted that there would be significant precipitation in the Canadian portion of the Columbia over the next week when the new storm come in. Should be helpful.
 - Morrill agreed with Norris that it is still too early to do anything, but TMT should pay attention to the long-range outlook.
 - Operating under the 2024 WMP
 - Still targets November 1, 2024, elevation on 11.3 – 11.5 feet.
 - It is Washington’s hope that there will be sufficient water to meet that elevation on November 1.
 - Chum are present in the basin prior to November 1.
 - Acknowledging that there are many factors that play into this decision.

Kelsey Swieca, NOAA, asked if Norris or Runyan could provide their perspective on the likelihood of GCL needing drum gate maintenance this year.

Norris said that the trigger for this year is 1265’.

Swieca asked if it does not occur this year, it will be forced for next year (2025).

Norris said that this is correct. He said that as far as probability of doing drum gate maintenance goes up when we have a 1265’ trigger year. We have a 1265’ trigger because if it was deferred from 2025, it would be required in 2026.

➤ Baus requested that TMT come prepared on October 23, that is when TMT will plan on coordinating the start of the Chum Operation, that starts the first week of November or when chum arrive.

d. Bonneville Dam – Hourly Data – *Baus*

- Outflow (Hour 7): 72.4 kcfs
- Tailwater Elevation: 6.9 feet

e. NWRFC – Inflow Forecast

- RFC Inflow Forecast (Ten-Day)
 - Slight increase of project inflow is forecasted over the next ten-day period.

f. NWRFC 10-Day Meteorological Forecast

- Forecast is dry. Over the ten-day period it is very light in precipitation.
- Day 1
 - Some precipitation in Northwestern Washington and the Upper Columbia.
- Day 7
 - There is more precipitation forecasted to come in.
 - Continues for the rest of the period.

g. NWRFC Climate Forecast – *Baus*

- 6 – 10 Day Outlooks:
 - Temperatures
 - Probability of above average temperatures.
 - Precipitation
 - Probability of above average precipitation in the Northwestern portion of the Columbia Basin.
 - Probability of near normal near the Central Columbia Basin.
 - Probability of below average precipitation in SE Idaho and NW Montana.

h. NWRFC - Hood River Flow Forecast (Tucker Bridge) – *Norris*

- There is not much to say at this time.
- Streams are driven by precipitation at this time of year.
- The Hood River gauge will give a reasonable indication of what kind of streamflow responses we may get for any precipitation event.
- Hopefully we will see an atmospheric river (or two) before the start of Chum.

i. Bonneville Dam (BON) Adult Salmon Counts – *Swieca*

- Swieca shared that it looks like there are two chum over BON. Those are from the tail end of last year's chum run, in January 2024.

Norris asked if Swieca would explain her comment.

Swieca said that when you look at the data, there were a couple of chum, there was a really big chum year last year. A couple of them went over after the new year. The tallies run YTD, so starting January 1.

Norris said that the total is there, but we have not actually observed the chum yet.

Swieca said that was correct for this season.

Norris said that he wanted to correct the record, there have not been any chum past BON yet this fall. Norris said that he does track this over time (since 1998). The average for the first chum over BON is around October 7 and the average for the second chum over BON is October 19.

Morrill thanked Norris and said that he had not looked at the averages. He said that chum are typically past BON prior to the start up of tailwater elevations for chum spawning.

3. Operations Review

j. Reservoirs

Reclamation – Chris Runyan

- Hungry Horse Dam
 - Have not received much rain
 - Sept precipitation: 64% of average
 - 2024 Full water year: 91% of average
 - Inflows (3-day): .61 kcfs
 - Percent of Normal: 60% of average
 - Outflows: 2.7 kcfs
 - Midnight elevation: 3540.2 feet
 - Feet from Full: 19.8 feet
 - Drafted: 1.4 feet since last week.
 - Operations: Operating to Columbia Falls minimum flows
 - Columbia Falls: 3.39 kcfs
 - Yesterday flows: 3.5 kcfs
- Grand Coulee Dam
 - Inflows (10/17): 54 kcfs
 - Weekly average: 80% of average
 - Outflows: 45.4 kcfs
 - Midnight elevation: 1285.3 feet
 - Feet from Full: 4.7 feet
 - Refilled: .8 feet since last week.
 - Operations: Conserving water in preparation for Chum Operations.
 - Lake Roosevelt elevation for today is about average.
 - Drum gate will be done if GCL get an April FRM of 1265 feet or less.

Corps – Aaron Marshall, Corps

- Libby Dam (Lake Koocanusa)
 - Avg. Inflows: 4 kcfs
 - Avg. Outflows: 6.5 kcfs
 - Midnight elevation: 2448.6 feet
 - LIB drafted below the end of September draft target of 2449 feet this past week.
 - Operation: Holding 6.5 kcfs increasing outflows sometime in November.
- Albeni Falls (Lake Pend Oreille)
 - Avg. Inflows: ~16 kcfs
 - Avg. Outflows: ~20 kcfs
 - Midnight elevation: 2059.5 feet
 - Operation: Continuing its fall draft targeting to be within a half-foot of the minimum control elevation by November 15.
- Dworshak Dam
 - Avg. Inflows: 900 cfs
 - Avg. Outflows: 1.8 kcfs
 - Midnight elevation: 1517.6 feet
 - Operations: Outflows will remain at ~1.8 kcfs until further notice.
- Lower Granite Dam
 - Avg. Inflows: 17 kcfs
 - Avg. Outflows: ~17 kcfs
 - Midnight forebay elevation: 736.8 feet
 - Operations: Generally passing inflows.
- McNary Dam
 - Avg. Inflows: 74 kcfs
 - Avg. Outflows: 70 kcfs
 - Midnight reservoir elevation: 338.7 feet
- Bonneville Dam
 - Avg. Inflows: 72 kcfs
 - Avg. Outflows: 75 kcfs
 - Midnight elevation: 75.1 feet

k. *Water Quality – Dan Turner, Corps*

- TDG

- TDG are below the criteria that is tracked for this time of year. No red values.
- USGS Update
 - The membrane at JD tailwater gauge ruptured.
 - If looking at TDG data, there may be some spikes, but the Corps will be working to keep the data set clean.
 - USGS will be out to swap out the gauge later this week.

1. Fish

Salmon – Kelsey Swieca, NOAA

- Juveniles (Subyearlings)
 - Over the past week there was bump both in the Snake (LWG) and in the Lower Columbia (BON).
 - Bump is not atypical for the early to mid-October period.
 - These numbers pick up for likely a little bit before they bump back down.
- Adult Salmon Counts
 - Fall Chinook continues
 - Bonneville (Lower Columbia)
 - Fall Chinook:
 - Run continues to run down.
 - Yesterday count: 1500/day
 - 10-year YTD: 104% of average
 - Fall Chinook Jack
 - Counts are high.
 - 10-year YTD: 158% of average
 - Coho
 - Slowing down.
 - 10-year YTD: 168% of average
 - Steelhead
 - 10-year YTD: 121% of average
 - Wild Steelhead
 - 10-year YTD: 118% of average
 - Lower Granite (Snake)
 - Fall Chinook:
 - 10-year YTD: 98% of average

- Fall Chinook Jack:
 - 10-year YTD: 68% of average

Lamprey – Dave Swank, USFWS

- Adult Lamprey
 - Adult lamprey run is over
 - There is still a trickle at BON on some days.
 - Still working on getting an End of Season update.
 - Needs more work.
 - Lamprey data is messy for some years.

TAC Notes – Charles Morrill, WA

- Morrill posted TAC notes from Monday.
 - Provides expected returns of A/B run Steelhead, Coho, etc., to the BON and Columbia.

| *from Charles Morrill to everyone: 9:30 AM*

| *TAC updated the current in-season projection for the expected A-Index steelhead abundance at Bonneville Dam to 122,100 total fish (including 44,600 unclipped). TAC also updated the in-season projection for B-Index steelhead abundance and now expects 49,900 total B-Index fish (including 13,200 unclipped) to return to Bonneville Dam.*

TAC updated the 2024 upriver bright and tule stock fall Chinook Bonneville Dam passage expectation. Given the information currently available, TAC now expects the Columbia River mouth return of adult-aged fall Chinook to total 635,650 adult fish. This total includes 342,800 URBs, 76,100 PUBs, and 118,000 BPH.

Passage of upriver early-stock coho at Bonneville Dam totaled 143,767 adults which was three times higher than the preseason expectation.

Passage of upriver late-stock coho began October 1.

m. Power System – Tony Norris, BPA

- Mild temperatures as expected for this time of year.

Morrill asked for clarification about the juvenile bumps and juvenile abundance at Lower Granite.

Swieca said that if you look at the passage counts for juvenile sub-yearlings they have increased over the past couple of days at both Lower Granite and Bonneville. Going from ~20 to 720. Not atypical to see the bump in mid-October.

Morrill said that he agrees that it is not uncommon at all to see that bump and from his years of experience he shared that it is still a remnant of the wild fall chinook abundance, starting from when they were doing the initial smolt monitoring work in the early eighties. There are still a remnant of those fish still present.

4. Set agenda for next meeting – October 23, 2024

a. Chum Operations

Today’s Attendees:

Agency	TMT Representative(s)
NOAA Fisheries	Kelsey Swieca
Oregon	Erick Van Dyke
Washington	Charles Morrill
Kootenai Tribe	
Confederated Tribes of Colville Reservation	Dennis Moore
Umatilla Tribe	Tom Lorz (CRITFC)
Yakama Nation	Keely Murdoch
Bureau of Reclamation	Chris Runyan
Army Corps of Engineers	Doug Baus (Chair), Aaron Marshall
US Fish & Wildlife Service	Dave Swank
Idaho	Jonathan Ebel
Montana	Brian Marotz
Spokane Tribe	
Nez Perce Tribe	Jay Hesse
Warm Springs Tribe	
Confederated Salish and Kootenai Tribes	
BPA	Tony Norris, Ben Hausmann

Other Attendees (non-TMT members):

COE – Chris Peery, Tiffany Stoeckig-Dixon, Tom Conning, Alexis Mills, Catherine Dudgeon, Elizabeth Holdren

CRITFC - Pete McHugh

BPA – Tammy Mackey

Washington Ecology – Thomas Starkey

DS Consulting – Emily Stranz (Facilitator), Colby Mills

CorSource – Andrea Ausmus (BPA note taker, Contractor)

Clearing Up – K.C. Mehaffey

Columbia Basin Bulletin – Mike O’Bryant

Energy EPS – Josh Rasmussen

Chelan PUD – Jay Fintz