

## COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

November 5, 2025

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://public.crohms.org/tmt/agendas/2025/>. 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 the official meeting minutes and facilitator's summary from October 22, following deletion of incomplete comments from Brian Marotz, MT, on page 6 of the minutes.

**Chum Operation** – Doug Baus, Corps, reminded the group of the chum operation coordinated at the October 22 meeting: starting November 1, a Bonneville Dam (BON) target tailwater elevation range of 10.5 feet – 11.2 feet, transitioning on November 4 to a range of 11.3 feet – 13.0 feet. He reported the operation is ongoing as coordinated (currently in the spawning phase) and coordination for the incubation phase will take place in December. Details on the operation are posted to the TMT website for reference.

BON at 0700 hours this morning had a total outflow of 133 kcfs with a tailwater elevation of 12 feet. The RFC inflow forecast over the next 10-day period ranges from a low of 115 kcfs on November 6 to a high of 136 kcfs today. So far this water year, which began October 1, precipitation in the Snake River Basin above Ice Harbor is above normal, with 2.2 inches (107% of normal); the upper Columbia River Basin above Arrow (ARDB) observed 5 inches (87%); the Columbia River mainstem above The Dalles (TDA) observed 2.8 inches (97%); and the Willamette River Basin above Portland observed 7.1 inches (103%).

Tony Norris, BPA, noted that Lake Roosevelt filled to almost 1,288 feet just prior to the start of the chum operation. Hamilton Creek had a sharp peak (~4 feet over gauge) then settled to about 2 feet over, with flows providing good access over the riffle. He observed Chinook spawning on the riffle, a chum entering Hamilton Creek, and about 4 chum with a couple coho in the Hamilton Springs channel. Precipitation trends are expected to continue to supply water to support the chum operation and lessen forecasted impacts to Lake Roosevelt elevations. Almost 200 chum have passed BON, tracking similar to 2023/2024.

Chris Runyan, Reclamation, emphasized that current and incoming precipitation is helping to support the chum operation and storage at Grand Coulee (GCL), which is just a bit above average for this time of year; conditions are very similar to last year at this time.

Charles Morrill, WA, added that chum are present and spawning, observed in the Ives/Pierce complex and Hamilton Creek and Grays areas. Updated ground survey results are pending and Charlie can provide them to TMT representatives prior to posting if desired.

### Operations Review

**Reservoirs** – Chris reported on Bureau of Reclamation projects:

- **Hungry Horse (HGH)**: the Flathead Basin received precipitation last week, about an inch at the project. 3-day average inflow was 1.14 kcfs, current outflow is 1.7 kcfs, and midnight elevation was 3,540.8 feet (19.2 feet from full); continues to draft (about 1-foot last week). HGH is operating to meet minimum flow requirements at Columbia Falls (3.41 kcfs) and below the dam

on the South Fork (0.71 kcfs), meeting Columbia Falls minimum flows yesterday at 3.6 kcfs. HGH has been able to reduce flows to conserve water in the reservoir for this spring, if needed.

- **GCL:** average inflows yesterday were 77.6 kcfs, with outflows of 91.3 kcfs, and a midnight elevation of 1,286.0 feet (4-feet from full). Storage is at 102% of average for this time of year. GCL is operating to meet the minimum tailwater elevation of 11.3 feet below BON for chum.

Catherine Dudgeon, Corps, reported on Corps of Engineers projects:

- **Libby (LIB):** current elevation is 2,442.99 feet, with average inflows yesterday of 4.8 kcfs and current outflows of 10 kcfs.
- **Albeni Falls (ALF):** current elevation is 2,052.0 feet, with inflows of 10 kcfs and outflows around 20.2 kcfs; the project is drafting to the winter operating band of 2,051 – 2,051.5 feet on November 15.
- **Dworshak (DWR):** current elevation is 1,513.2 feet, with average inflows yesterday of 2.5 kcfs and current outflows of 1.7 kcfs (minimum outflow continuing through November).
- **Lower Granite (LWG):** yesterday's average inflow was 17.6 kcfs.
- **McNary (MCN):** yesterday's average inflow was 109 kcfs.
- **BON:** yesterday's average inflow was 126 kcfs; average tailwater elevation is 11.7 feet, currently operating for chum.

*Water Quality* – Dan Turner, Corps, reported that water quality is generally looking very good, with all gauges reporting below 110% TDG.

*Fish* – A representative from NOAA was not available to present, so Charles reported on adult returns at LWG. Chinook and steelhead counts generally follow the 10-year average patterns but remain below desired population abundance levels. Wild steelhead are tracking similarly, and are well-below desired levels, a cause for concern from a fish perspective. Jonathan Ebel, ID, added that high temperatures over the summer seem to have shifted run timing, impacting conversion rates. Charles noted that a detailed summary from the Fish Passage Center (FPC) will be provided at the end of the season.

Smolt monitoring is complete for the year, and Tony noted unexpected chum have been observed over Willamette Falls. Tom Conning, Corps, added an [article describing fish counts at the falls](#) into the chat. Updated survey data are pending, it was noted that chum typically show up later (second week of November) at survey locations downstream of the Ives/Pierce area.

A representative from USFWS was not available to present on lamprey; Charles noted numbers are low, and trapping has ceased in some locations.

*Power System* – Tony noted significant water in the river and no temperature extremes or significant issues are expected.

**Questions or Comments from Non-TMT Members** – There were no questions or comments from members of the public.

**The next scheduled TMT meeting will be on November 19, 2025, 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 5, 2025**

Today's TMT meeting was held via Microsoft Teams and conference call, chaired by Doug Baus, Corps, and facilitated by Emily Stranz, DS Consulting. Minutes were collected by Andrea Ausmus, BPA (contractor, CorSource Technology Group). A list of today's attendees is available at the end of these minutes.

**1. Review Summary and Minutes**

a. October 22 Facilitator Summary and Minutes

- Brian Marotz, MT, said that there was a problem with the audio during the previous TMT meeting. He said that it came up in the meeting minutes as "audio drops" on page 6. Marotz said that he was comfortable with striking that segment because what he had said was not all that important. He said that he could write it up if anyone was interested, what he was trying to communicate. Stranz said confirmed that TMT would pull that section out of the notes.
- Notes were approved pending the above change.

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

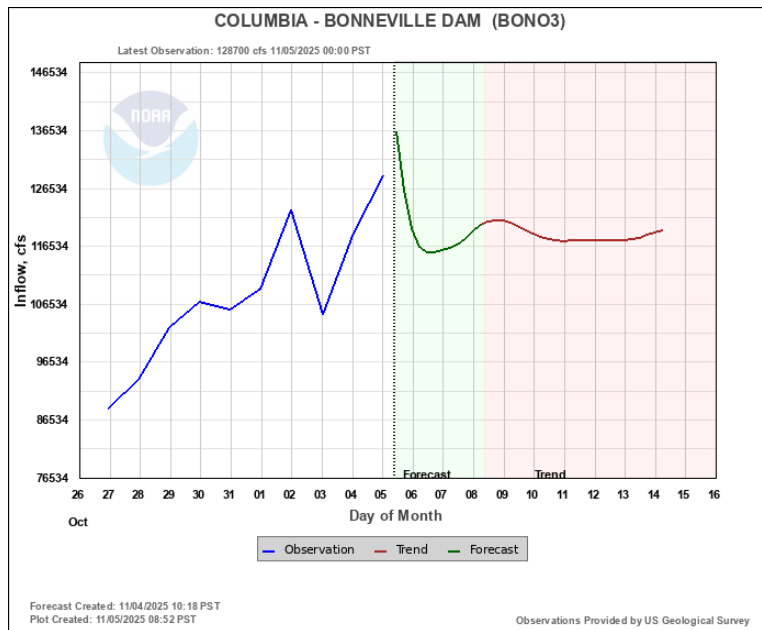
a. Chum Operation Coordination

- Chum Spawning Phase Operation was coordinated on October 22 and started on November 1 at 0600 hours with a Bonneville Dam minimum tailwater elevation of 10.5', with a transition on November 4 at 0001 hours to an elevation range of 11.3 – 13.0'.
- The Action Agencies (AA) implemented the operation to date.
- Reminder: Chum Operations have two phases: Spawning Phase (in now) and Incubation Phase (coordinated in December).
  - The steps that AA follow as project outflow increases were attached to the meeting's agenda ([1105 Chum Operation 1.pdf](#)). It was the same operation that was coordinated last year.

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

- Tailwater Elevation (Hour 7): 12.0 feet
- Outflow: 133 kcfs

c. NWRFC – BON Inflow Forecast (10-day) - *Baus*



- BON Inflow Forecasted:
  - Low: 115 kcfs (11/06)
  - High: 136 kcfs (11/05)

d. National Weather Service – Water Year Precipitation Table

- Current precipitation conditions throughout the Basin.
  - The water year just started, October 1, 2025.
- Snake River Basin above Ice Harbor Dam
  - Observed inches: 2.2 inches
  - Percent of Normal: 107%
- Columbia River Basin above Arrow Dam
  - Observed inches: 5.0 inches
  - Percent of Normal: 87%
- Columbia River Basin above The Dalles Dam
  - Observed inches: 2.8 inches
  - Percent of Normal: 97%
- Willamette River Basin above Portland
  - Observed inches: 7.1 inches
  - Percent of Normal: 103%

e. *Tony Norris, BPA*

- Filled Lake Roosevelt to 1288' prior to the start of the operation.
  - Precipitation came in right on time.
- Hamilton Creek had a sharp peak on November 1.
  - November 1 Hamilton Creek was 4 feet over the gauge.
    - Sharp peak resulting from precipitation from the previous days.
  - November 3 was at 2 feet over the gauge.
    - Settled down.
- Norris was out in the area on Monday and personally observed that with 2 feet over the gauge there was quite a lot of water coming out of Hamilton Creek.
  - Provided significant access at the last ripple just downstream of Hamilton Creek.
  - Chinook were spawning on the ripple and a Chum swimming into the creek.
  - In the Springs channel, which was full and flowing, there were about 4 Chum observed along with a couple Coho.
- The Precipitation is coming in, there is a “rinse and repeat” type of precipitation pattern that is going to contribute to the water that is needed to support the Chum Operation.
  - Impacts to Lake Roosevelt's elevation will not be as severe as forecasted earlier in the year before the precipitation showed itself in the forecast.
- Bonneville Dam
  - Almost 200 fish over Bonneville Dam so far.
  - Tracking 2023/2024

f. *Chris Runyan, Reclamation*

- Repeated that everything seems to be going well.
- Runyan said that he was unable to attend the last TMT meeting but thanked everyone for coordinating the incremental start to the season. He said that it seemed like a good middle ground for everyone.
- Runyan said weatherwise it was not looking too bad. There was some precipitation expected over the next couple of days, a small break, and then potentially another round of precipitation coming into the basin.
- Grand Coulee (GCL) is around a little above average storage for this time of year. Runyan noted that GCL is right around where it was last year.

g. *Chum Spawning Survey – Morrill*

- Morrill said at the October 22 TMT meeting he had shared and discussed the weather outlooks and concerns. He said at the October 21 FPAC meeting there was a detailed forecast provided by Kyle Dittmer, CRITFC's meteorologist. He said that there were no objections to going to 11.3 – 13.0' at that FPAC meeting. He

said that hindsight is 20/20, foresight is not. He said that Washington respected the requests and concerns expressed on October 22 from the TMT members and here we are.

**Chum Salmon Spawning Ground Surveys Below Bonneville Dam, 2025.**

Survey Area	Date	Lives	Dead*	Redds**	Visibility	
Ives/Pierce Island Complex	22-Sep-25	0	0	0	6.5 ft	
	29-Sep-25	NC	NC	NC	0 ft	Boat motor issue
	6-Oct-25	0	0	0	10.0 ft	
	17-Oct-25	0	0	0	5.5 ft	Bad wind chop
	20-Oct-25	0	0	0	12.0 ft	
	27-Oct-25	0	0	0	12.0 ft	

- Morrill said as Norris had reported from his observations, and he had also heard the same from Ricky on a phone call.
- Survey results have not been updated.
  - Ricky said that they were going out to Hamilton either today or tomorrow, the survey results would be updated after.
  - If TMT members are interested in a short post to the TMT website as the survey data becomes available Morrill offered to provide it.
- Grays
  - Chum showed up as expected.
- Bonneville
  - Surprisingly strong return over BON.
  - BON passage is not related to flows.
- Ives/Pierce Complex and Hamilton
  - Spawning is a question of water supply and tailwater elevation.
  - Morrill wanted to reaffirm that and understand that working with TMT and our colleagues means making some adjustments to what we believe is biologically desirable, not what we think but what we believe is biologically required for listed Chum Salmon to access spawning areas.

### 3. Operations Review

#### a. Reservoirs

*Reclamation – Chris Runyan*

- Hungry Horse Dam
  - Conditions:
    - Flathead Basin received precipitation over the last week, ~1 inch at HGH.
  - Inflows (3-Day Average): 1.14 kcfs
  - Outflows: ~1.7 kcfs
  - Midnight Elevation: 3540.8 feet

- From Full: 19.2 feet
  - Drafted: 1 feet last week.
- Current Operation:
  - Operating to meet minimum flow requirements.
  - Currently operating to meet the Columbia Falls minimum flows.
  - Current Columbia Falls Flows: 3.6 kcfs
  - Columbia Falls Min: 3.41 kcfs
  - Below HGH @ S. Fork Min: 0.71 kcfs
- Last Week's Operation:
  - Last week HGH was able to reduce outflows as the local flows came up.
  - Hopefully will conserve a little water in the reservoir in case the region has another dry Spring.
- Grand Coulee Dam
  - Inflows (11/04): 77.6 kcfs
  - Outflows (11/04): 91.3 kcfs
  - Midnight Elevation: 1286.0 feet
    - From Full: 4.0 feet
  - Current Storage: 102% of average
  - Current Operation:
    - GCL is being operated to meet minimum tailwater of 11.3' below BON for Chum Salmon.

Marotz asked for a reminder of the 3-day average QN at HGH was.

Runyan said that HGH got up to 1.14 kcfs and they were down at 0.5 kcfs the prior month. He said that they did finally get some precipitation up there. Runyan said that they kind of had a Chinook warm wind event up there that melted off some of the lower snow up there in Glacier but hopefully that would keep the flows elevated for a little bit at least.

Marotz said yeah that there was quite a lot of snow up there last week for a while and it seems to be melted.

Runyan said that he hoped that the next round would be cooler. He said that he thought it would be. He said that it would hopefully start building some snow up there for Montana.

*Corps – Catherine Dudgeon, Corps*

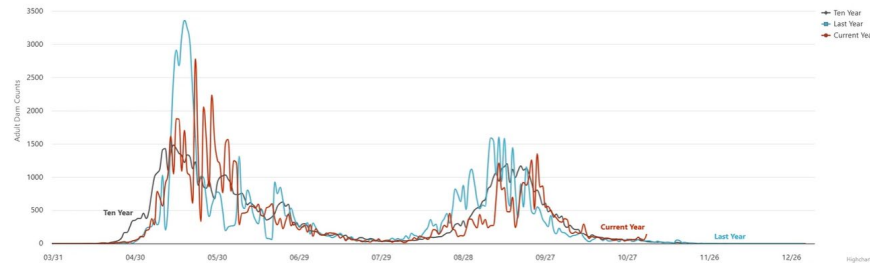
- Libby Dam (Lake Koocanusa)
  - Elevation: 2442.99 feet

- Inflows (11/04): 4.8 kcfs
  - Outflows (11/05): 10 kcfs
- Albeni Falls (Lake Pend Oreille)
  - Elevation: 2052.0 feet
  - Inflows (11/04): 10 kcfs
  - Outflows (11/05): 20.2 kcfs
  - Operations:
    - ALF is currently drafting to the Winter Operating Band of 2051 – 2051.5 feet by November 15.
- Dworshak Dam
  - Elevation: 1513.2 feet
  - Inflows (11/04): 2.5 kcfs
  - Outflows (11/05): 1.7 kcfs
  - Operations:
    - Minimum Outflow: 1.7 kcfs
    - Minimum outflow continues through November.
- Lower Granite Dam
  - Inflows (11/04): 17.6 kcfs
- McNary Dam
  - Inflows (11/04): 109 kcfs
- Bonneville Dam
  - Inflows (11/04): 126 kcfs
  - Average Tailwater Elevation: 11.7 feet
  - Operations:
    - BON is currently operating for the Chum Operation
- b. Water Quality – *Dan Turner, Corps*
  - TDG
    - Generally looking good
    - All are well below the 110% TDG.
- c. Fish

*Fish Update – Charles Morrill*

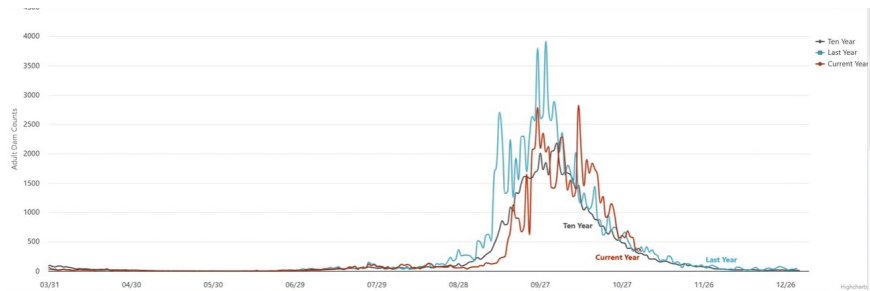
  - Lower Granite
    - Chinook Adults





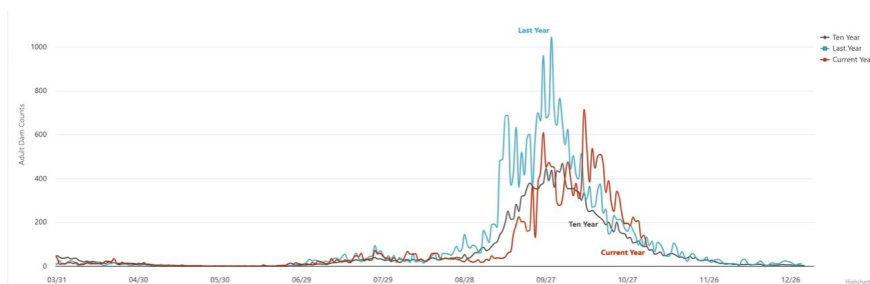
- The current year's pattern is typical compared to what we have seen in the 10 year, and not too different from last year.
- Numbers are not what were desired but are what they are.
- Chinook Adults are down to double digits at LGR and are expected to continue to follow last year's returns.

#### ○ Steelhead



- The current year is basically following what the ten-year average has been.
- Not the number's desired for a robust return and population status.
- The numbers are dropping to >100 a day over LGR and are expected to continue to decline moving further into the year.

#### ○ Wild (Unclipped) Steelhead



- Not all hatchery fish are clipped.
- The current year is similar to the last 10 years, some bumps – highs and lows above.
- Numbers are declining.

- This is a component of the population that the Fish/Salmon Managers are extremely concerned about like the Spring and Fall Chinook population.
- Smolt Monitoring
  - Complete for the year.

Norris said that Ricky passed on a piece of information that maybe whoever does the monitoring at Willamette Falls, but they are getting Chum over Willamette Falls.

Morrill said that was what Ricky had told him. He said that he thought that was interesting and an unexpected surprise. He said that if Erick Van Dyke was on he would have some comments about that.

Stranz said that she did not think that Van Dyke was on today.

Runyan said that he knew that Chum obviously spawn below BON, but he also knew that there are a few other locations. He asked if Morrill could give TMT a quick update on that again. He asked where the main locations were.

Morrill said the locations were kind of Multnomah\_ he said that his mind was drawing a blank. He said that Ricky and crew were out there yesterday. He said that there were a few Chum present, not many at this point in time but those Chum typically show up later. He said that the earliest ones that we have usually seen in the past have been in the Ives/Pierce area and the lower portions of the Hamilton Creek. He said at this point in time we are seeing Chum earlier into the Springs than we have in the past. He said they were out there Monday and Tuesday. He said that Ricky had given him the update yesterday. He said that it was his guess that were probably would not see a lot of Chum in the area below the Ives/Pierce until about the second week in November.

| Conning, E T (Tom) CIV USARMY CENWD (USA)9:28 AM

| *There is an article that mentions this: In addition to the 111 sockeye, so far this year ODFW has counted 20 chum salmon, seven smallmouth bass, six walleye, and one pink – probably a lost humpy from Puget Sound. The numbers are nowhere close to the Willamette fish that are most keenly watched by anglers and biologists – spring Chinook, winter and summer steelhead, and coho – but those for sockeye do help to tell a small part of a much larger story about efforts and effects of restoring native fish in the watershed.*

| <https://nwsportsmanmag.com/willamette-river-has-sockeye-over-100-counted-at-falls/>

Runyan said that Lisa Wright, Corps, was sharing a [webpage](#) (“Chum”). He asked if that was the page that would show numbers for those different spots.

Morrill said that he had not run that data on the traps this morning. He said that the surveys are conducted typically twice a week in the Ives/Pierce, and the others are about once a week. Ricky said that they have been out there, the data were not showing

up on the screen this morning but as he had said he could provide that information if someone was curious about it go ahead and give him a call. He said that it is an internal database, and it is not available until it is summarized by a number of steps in a process to get that information out and distributed. He said that he can go in a look at the data and he typically does so twice a week, both early and late, to stay up on what we are seeing and what we are not seeing and where.

Stranz pointed out that Tom Conning put some more information from Sportsman Magazine on the ODFW counts down at Willamette.

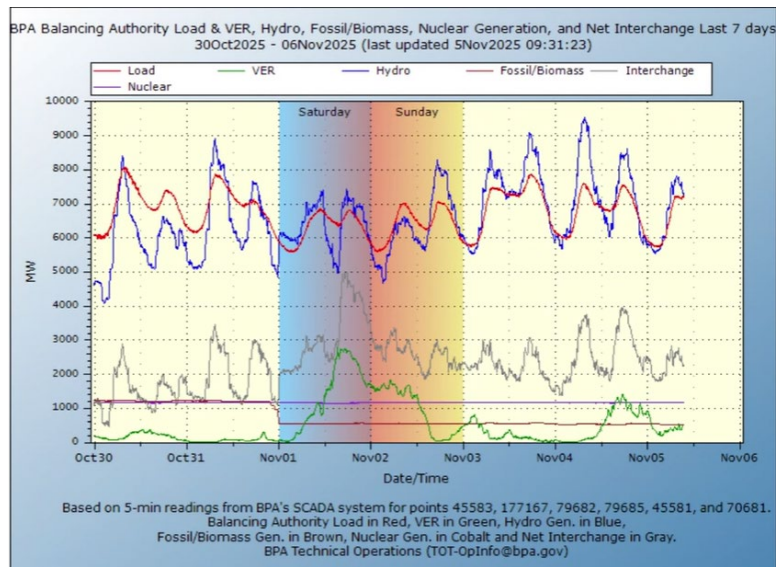
Jonathan Ebel, ID, added what he called a generic comment. He said that he wanted to remind TMT that as we close out the Late Summer and Fall Adult Runs, that are not Chum. He said that if you go back to the graph of [Wild Steelhead](#), he thought it shows it pretty well, that this past Summer, and the temperature issues that were occurring downriver, outside of the Snake, did move runs around so we did see pretty poor conversion of Fall Chinook and you can also see the effect on Steelhead which do wander around to use what cold water refuges that exist. What we see here and the fact that the “orange” line is showing that the run got moved later in the season and when it all comes together and we have the conversion rates this is going to be one from a fish management perspective and internation with potential operation what we want to make sure that we remember because it did deviate quite substantially from normals in terms of conversion rates and in this case what we are looking at is at least unclipped steelhead behavior. He said that you still need to pick this apart because you have a poor two ocean run this year, which influences particularly those fish moving up past LGR in October but in a strong A-run one ocean component. He said once we pick it apart we will see if there is something, but it looks like the patterns this year, so we do not forget that, the sustained high temperatures in the Lower river and its impacts on these later migrating anadromous fishes.

Morrill thanked Ebel for pointing that out, he had not gotten into that. He said that what he would share was that Gabe Scheer had provided memos to FPC and on the web, available to all. There will be a more detailed summary from FPC at the end of the season looking at the impact on temperature on all the species that have moved upriver in the Snake. He said that it took us until the middle of September to see temperatures really start to cool down. He said for the August period, all of the graphs show a similar spike in a drop in conversion during that time period. He said that Ebel was spot on with his comments and it was well worth sharing with TMT.

#### *Lamprey Update – Morrill*

- Numbers seem to be declining and trapping had stopped at some locations.
- Numbers are low at Lower Granite.
- Data were not available

d. Power System – *Tony Norris, BPA*



- Not much to report.
- Water is in the river now that we are moving water for Chum.
- No extreme temperatures.

4. Set agenda for next meeting – **Wednesday, November 19, 2025**

Meeting Location: Microsoft Teams

a. Chum Operation

**Today's Attendees:**

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

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

COE – Steven Lee, Leah Hamilton, Tom Conning,  
Chris Peery, Alexis Mills, Dan Turner, Catherine  
Dudgeon, Tiffany Stoeckig-Dixon

Washington Ecology – Thomas Starkey

Oregon DEQ – David Gruen

DS Consulting – Emily Stranz (Facilitator), Colby  
Mills

CorSource – Andrea Ausmus (BPA note taker,  
Contractor)

PSE – Jessica

Clearing Up – K.C. Mehaffey

NPCC – Kate Self

DRW – Stelzer

PGE – Phil DeVol

Energy EPS – Joshua Rasmussen

FPC – Erin Cooper, Noah Campbell

FID – Jeremy Lamb

Douglas PUD – Andrew Gingerich

GCPUD – Eva Stites

AVA – Patrick Maher, Steve Lentini, Mike Dillon

Unaffiliated – Shea Frantz, Mike Buchko,  
Kenneth Curtis, Eric Wood