

## COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

October 8, 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 September 10.

**Chum Operation** – Doug Baus, Corps, reminded the group that the chum operation is coordinated for the first week of November, or when chum arrive, and coordination will be finalized at the October 22 meeting.

Bonneville Dam (BON) at 0600 hours this morning had a total outflow of 99.8 kcfs with a tailwater elevation of 9.3 feet. The RFC inflow forecast over the next 10-day period ranges from a low of 90 kcfs today to a high of 92 kcfs on October 9. Both the 10-day and 5-day QPF show a range of below average to above average precipitation throughout the entire basin: below and above average in the Columbia Basin, below average in the Olympic Peninsula, average in central Idaho, and above average in southeastern Idaho. The 6-10-day climate forecast shows a probability of below normal temperatures in the Columbia Basin; a probability of near average temperatures and precipitation in the 14-day outlook.

Tony Norris, BPA, reported that Hamilton Creek is not currently flowing, hopefully conditions will be present for chum by the end of October. The first chum has not arrived over BON yet and based on historical averages this should happen in the next week or so. Tony noted that conditions and potential impacts to chum should be clearer by the October 22 TMT meeting.

Charles Morrill, WA, added that while it's still early to predict conditions, chum are a listed species, and WA supports a BON tailwater elevation of 11.3 feet on November 1 assuming that conditions and TMT members are supportive. Jonathan Ebel, ID, asked about the status of Canadian (CAN) reservoirs to better understand early water year and flood control storage space for water management decisions. Tony and Aaron Marshall, Corps, clarified that while some data are included in the ESP median forecasts, specific Flood Risk Management (FRM) details are not available until January. The Corps website has current data on CAN reservoir elevations and outflows, and the following links were added to the meeting chat for reference:

- <https://www.nwrfc.noaa.gov/rfc/>
- [Arrow Dam - Water Data - U.S. Army Corps of Engineers](#)
- <https://water.usace.army.mil/map>
- [Daily Water Level Data Availability for LOWER ARROW LAKE AT NEEDLES \(08NE046\) - Water Level and Flow - Environment Canada](#)

### Operations Review

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

- **Hungry Horse (HGH):** 3-day average inflow was 0.28 kcfs, outflow yesterday was 2.6 kcfs, and midnight elevation was 3,545.5 feet (14.5 feet from full); the project has drafted 1.4 feet since last week. HGH is operating to meet Columbia Falls minimum flow (3.41 kcfs), currently at 3.5 kcfs.

The project met its end of September draft requirement earlier this year, on September 23. Chris noted that 2025 WY supply is between 70-72% of average, reflecting dry conditions.

- **Grand Coulee (GCL):** inflow yesterday was 66.5 kcfs, outflow was 69.7 kcfs, and midnight elevation was 1,283 feet (4.3 feet from full). The reservoir has filled about 8 feet since the last TMT meeting and is targeting above 1,283 feet for resident fish considerations and in preparation for the chum operation. Drum gate maintenance is required this year, so the reservoir will be down to 1,255 feet by mid-March, followed by 8 weeks of maintenance. 2025 WY supply is 77-81% of average.

Leah Hamilton, Corps, reported on Corps of Engineers projects:

- **Libby (LIB):** current elevation is 2,445.25 feet, with inflows of 3.3 kcfs and outflows of 4 kcfs (drafting slowly).
- **Albeni Falls (ALF):** current elevation is 2,059.4 feet, with inflows of 7.2 kcfs and outflows around 15 kcfs (drafting slowly).
- **Dworshak (DWR):** current elevation is 1,515.9 feet, with inflows of 0.7 kcfs and outflows of 5 kcfs (drafting slowly).
- **Lower Granite (LWG):** yesterday's average inflow was 22 kcfs (between 20-22 kcfs today and expected to rise with power peak).
- **McNary (MCN):** yesterday's average inflow was 87.8 kcfs.
- **BON:** yesterday's average inflow was 92.25 kcfs.

Leah noted that the 2025 WY supply for The Dalles (TDA) was 76-77% of average.

*Water Quality* – Dan Turner, Corps, reported all TDG levels are below 110% in the tailwater gauges.

*Fish* – A representative from NOAA was not available to present, so Charles reported that fall Chinook passage is improving compared to earlier in the season, however, as expected at this time in the season, passage is declining. Coho counts are reasonable for this time of year, with recent daily counts over 10,000 at BON. Juvenile sub-yearling counts continue to decline, less than 100/day at LWG and Little Goose (LGS), with occasional bumps from later migrations. He reminded the group that these are Clearwater-origin naturally produced sub-yearlings. BON has a few fish being collected and will continue to sample until the end of November; LWG and LGS continue to sample through the end of October.

USFWS was not available to present on lamprey; Charles noted that lamprey numbers are typically low this time of year and Fish Managers are not aware of any passage problems at this time. River temperatures are decreasing; however, some temperature differentials have been observed in the fish ladders at LWG.

*Power System* – Tony reported that cooling temperatures are expected to lead to morning peaks in power usage associated with increased home heating demand with the upcoming seasonal changes.

**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 October 22, 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, October 8, 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. September 10 Facilitator Summary and Minutes

- Approved

**2. Chum Operations – *Doug Baus, Corps NWD; Tony Norris, BPA; Charles Morrill, WDFW***

a. Chum Kickoff – *Baus*

- Reminder: October 22 TMT Meeting to finalize coordination.

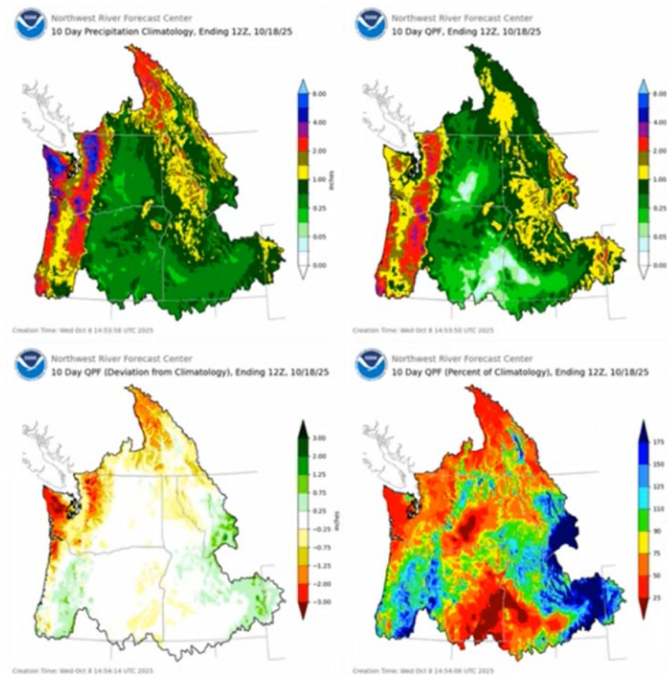
b. Current Bonneville Dam (BON) – Hourly Data – *Baus*

- Tailwater Elevation (Hour 6): 9.3 feet
- Outflow: 99.8 kcfs

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

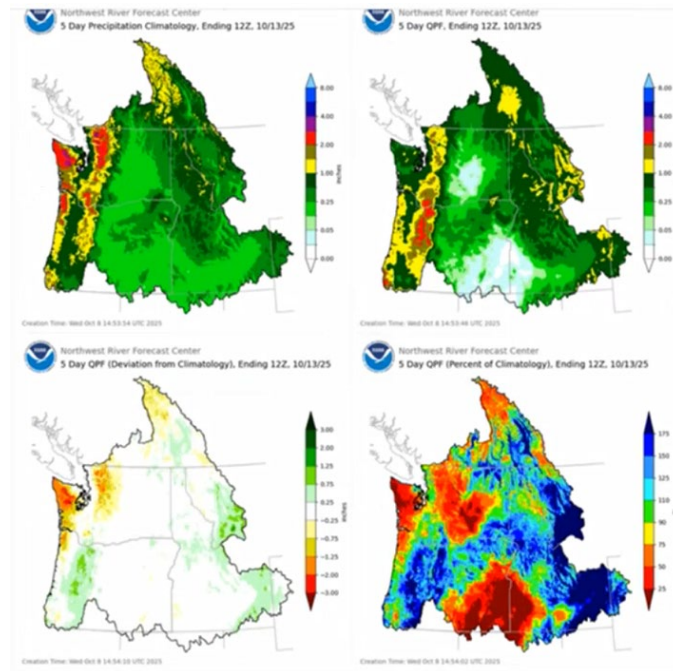
- BON Inflow Forecasted:
  - Low: 90 kcfs (10/08)
  - High: 92 kcfs (10/09)

d. NWRFC 10-day Forecast



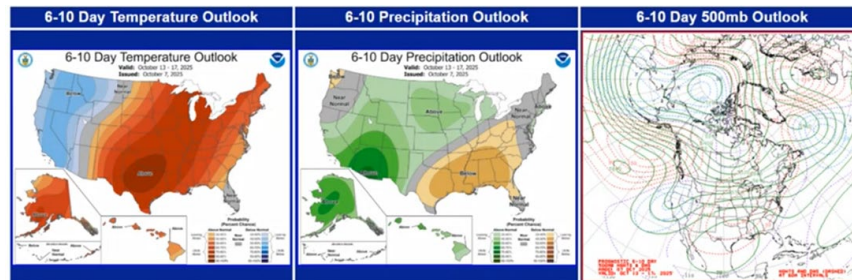
- Upper Left: Precipitation Climatology
- Lower Left: 10-Day QPF (deviation from climatology)
- Lower Right: 10-Day QPF
  - Regarding the Columbia Basin there is a diversity of both below normal and above normal precipitation.
  - Western Washington: The Olympic Peninsula is expected to have below average precipitation.
  - Central Idaho and other green locations: Forecasted to have near normal precipitation
  - Southeastern Idaho: Forecasted to have above average precipitation

e. NWRFC 5-day Forecast



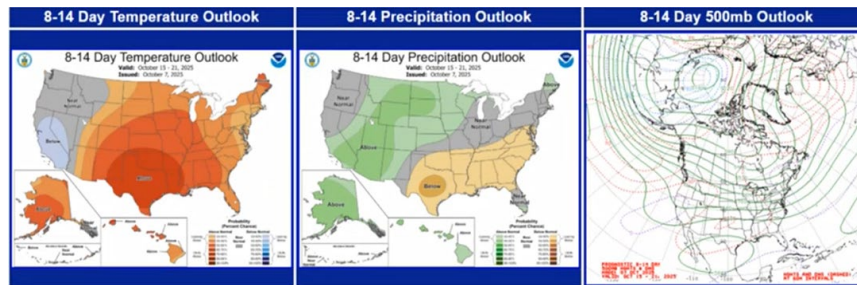
- Lower Right: 5-Day QPF Percent of Climatology
  - Wide range of below-average, average, and above-average precipitation forecasted for the Columbia Basin.

f. Climate Forecast: 6 – 10-day Outlook



- Temperatures: Probability of being below normal.
- Precipitation: Diversity of below-normal and above-normal precipitation forecasted depending on where you are in the basin.

g. Climate Forecast: 8 – 14-day Outlook



- Temperatures: Probability of near normal
- Precipitation: Probability of near normal

h. BPA Update – *Norris*

- Hamilton Creek is not flowing
  - Hope to see conditions present when October comes around.
- No chum over Bonneville Dam
  - Expect to see them based on historical averages in the coming days.

By the October 22 TMT meeting, we should have a better idea of what conditions look like and the potential impacts of augmenting for the Chum Operation

i. Washington Update – *Morrill*

- It is still early, we will see what transpires over the next 20 days and have a better ability to look at what the weather pattern brings.
- Chum are a listed species. Washington's position is if we have the water and agreement and concurrence of their colleagues at TMT that they would like to see the 11.3 feet on November 1, understanding that it hinges on the many things that are going on.

Jonathan Ebel, ID, apologized for being late and asked as we move toward trying to make a recommendation for chum, if the Action Agencies (AA) provided the status of the Canadian reservoirs and if they did not, could they.

Norris asked what Ebel meant.

Ebel asked where the reservoirs were at in terms of storage relative to where they need to be or will be for flood control space.

Norris said that was all reflected in the ESP median that gets sent to the Salmon Managers (SM). He said that the current forecast for Canadian outflows and subsequently Grand Coolie (GCL) inflows are inclusive in the run that SM see each week. He said that was the status.

Ebel said no. He asked how much vacant space there was in Canadian reservoirs relative to their requirements. He said the ESP does not tell him that. He asked the AA if they understood why he was asking that question.

Ebel said it was because if we are looking at supporting chum in a tail race elevation and those reservoirs, or that reservoir, is well below its assured flood control space, then the amount of water coming from that area of the basin into GCL will be low. He said that was why he was asking.

Norris said that the November to December timeframe inflow to GCL is forecasted based on the Treaty Storage Regulation Operation guided by the Columbia River Treaty.

Ebel said that he was just asking for the status.

Norris said that he was not sure Ebel understood what he was asking.

Ebel said that he did, he was asking for a volume.

Stranz said that folks were just trying to get information, and she was wondering if that was public information that we can get somewhere online so that Norris does not have to try to understand where Ebel was coming from right now. She asked Norris if he knew if that was available.

Ebel said that would be great.

Norris said that they maybe would need to have an offline conversation.

Stranz asked if anyone at TMT knew if it was publicly available information that could be looked up.

Aaron Marshall, Corps, said that they do have the data available on the Corps' public website so we could look there. He added that they would not have FRM requirements out until January. Once those are published then we can talk WSF and FRM.

Stranz said okay FRM data will be available in January and then the data on the Canadian storage in on the Corps' website. She asked if Lisa Wright could drive us there visually so that we can see where it is.

Ebel said that he was trying to find it now. From his perspective in Idaho, he thought that you need to understand where you are on October 1 at all the reservoirs to be able to make a decision on early draft whether it was for fish or other things.

Stranz asked if Wright could show where the information was on the Corps' website so Ebel could dig into it.

Wright said that she was looking around and asked if Marshall could drop it in the chat or she could continue to dig and drop it as she found it.

Stranz thanked Wright and thanked Ebel for the added perspective of why this is information that he would like to have.

Morrill said that he thought that he understood what Ebel was asking. He said we know what the elevation of GCL is right now, and we know the elevation of all the Projects in the Federal Hydro systems. He said that he thought that it would be interesting to see what the current elevations of the Canadian reservoirs are at this point in time as a



starting point, if that information is available. He said that was really the key to the question that Ebel was asking, at the first of the water year what is the elevation. He said that he did not think that we know what Canada's target elevation would be for the end of November or December, but he thought that was the point. You could go back and look at, for example, if we are at 2400 feet at one of the Canadian Projects, where were we at last year, and what does it look like compared to prior years. He said that he thought that process was his take from what Ebel was asking. He asked Ebel if he captured that correctly.

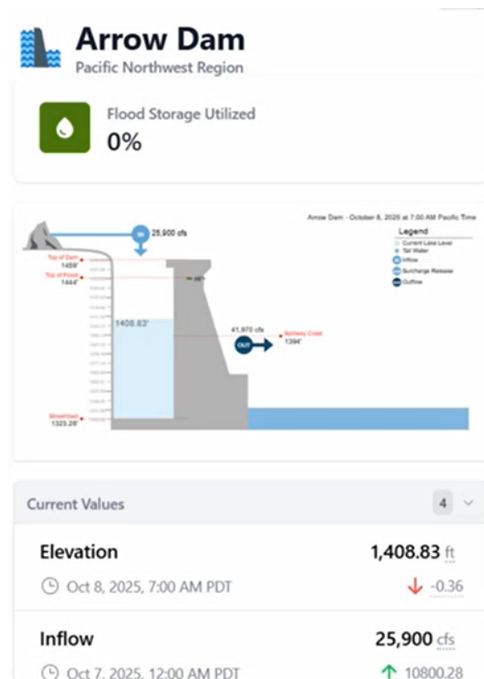
Ebel said yes; in order to make informed recommendations, we need to know the state of play.

| Turner, Daniel F CIV USARMY CENWD (USA)9:19 AM

| <https://water.usace.army.mil/map>

| Tony Norris, BPA (Unverified)9:20 AM

| [Arrow Dam - Water Data - U.S. Army Corps of Engineers](#)



Stranz pointed out that TMT had some links in chat, and thanked Norris and Turner. She also thanked Wright for putting it up on the screen, you can see Arrow Dam. She recommended to copy the links so that you can look at it on your own and get a good sense of what the entire basin is looking like right now and then come January we can learn more about the FRM numbers. She asked Ebel if that was enough information for right now.



Ebel said that it was interesting, and that it was a new website to him. He said that it was great and thank you.

| Tony Norris, BPA (Unverified)

| You can also see the status of Canadian reservoirs on the NWRFC website...

| <https://www.nwrfc.noaa.gov/rfc/>

Stranz said more to come at the next TMT meeting on October 22.

*[conversation continued after Operations Review's 'Reservoirs' updates]*

Morrill said that he really appreciated the interesting websites. He asked about the time series charts. He said that the charts that were available only went back to last month. He said what he would be interested in, given Ebel's question, and he thought that it was a good one, would be a series that goes back more than a year so that we can get an idea of where they were last year with the weather conditions, and where they were before. He said that he presumed that it was available, but he had no idea where to go to look for that. He said that he wondered if somebody had the skillset, or knowledge, to guide us or provide that type of information where you are able to look at a time series over one or more years. He said that if you open the windows on the right side of, for example Duncan Dam, you can see "Timeseries Charts" and they only go "last 7 days", "last 14 days" and "last month". He said that he presumed that the data was available to look at beyond those time series, but it was not available, at least visually, to those of us looking at the website now.

Stranz asked if anyone knows if that was available, she said that she was not hearing any responses and did not see anything in chat so we may need to circle back on this one. She said that we may need to do some digging. She said that there were three links, she was not sure that Morrill had looked at all three links in the chat.

Morrill said yeah, he did. He said that his question was for Marshall or Wright or someone to reach out or guide SM where they might, who they might and how they might ask that question to look at prior years for the timing series.

Ebel seconded the request.

Stranz asked if anyone from the Corps had information they could share right now on the spot.

Marshall said that they would have to look into that and get back to the SM.

| Tony Norris, BPA (Unverified)9:32 AM

| [Daily Water Level Data Availability for LOWER ARROW LAKE AT NEEDLES \(08NE046\) - Water Level and Flow - Environment Canada](#)

Stranz thanked Marshall and noted that Norris had just put another link in chat. She thanked everyone for sharing information.

*[conversation continued after Operations Review's 'Power System' updates]*

Morrill thanked Norris, the link that he shared appears to let us look at the summary data over the course of years. He said that it was a good find. He said that he would explore that and if he had questions he knew who to call.

| Jonathan Ebel, 9:38 AM

| Does Norris's link only go to 1968?

### 3. Operations Review

#### a. Reservoirs

*Reclamation – Chris Runyan*

- Hungry Horse Dam
  - 3-day Average Inflow: 0.28 kcfs
  - Outflows: 2.6 kcfs
  - Midnight Elevation: 3545.5 feet
    - From Full: 14.5 feet
    - Drafted: ~1.4 feet last week.
  - Columbia Falls Minimums: 3.41 kcfs
  - Columbia Falls (10/07): 3.5 kcfs
  - Operations:
    - Operated to meet Columbia Falls minimums.
  - HGH met their end of September Draft Requirement earlier than typical on September 23. By the end of September HGH was one foot below the requirement due to the Columbia Falls flow controlling the operation. It was just how quickly inflows dropped off this year.
  - WY2025 Water Supply
    - April – July: 70% of average
    - October – September: 72% of average
- Grand Coulee Dam
  - Average Inflows (10/07): 66.5 kcfs
  - Outflows: 69.7 kcfs
  - Midnight Elevation: 1285.7 feet
    - From Full: 2.3 feet
    - Filled (since 09/10): ~8 feet
  - Current Operation:

- Targeting to remain above the 1283 feet for resident fish considerations.
- Preparing for Chum Operations.
- Overall, in a pretty good spot at GCL coming into November.
- Note:
  - Due to requirement of drum gate maintenance to be completed once every three years, maintenance will be required this year.
  - GCL reservoir elevation required: 1255 feet
  - Reservoir at elevation by mid-March and GCL will need 8 weeks for maintenance of the gates.
- WY2025 Water Supply
  - April – July: 77% of average
  - October – September: 81% of average

*Corps – Leah Hamilton, Corps*

- Libby Dam (Lake Koocanusa)
  - Elevation: 2445.25 feet
  - Inflows: ~3.3 kcfs
  - Outflows: 4 kcfs
  - Conditions:
    - Slowly drafting.
- Albeni Falls (Lake Pend Oreille)
  - Elevation: 2059.4 feet
  - Inflows: 7.2 kcfs
  - Outflows: 15 kcfs
  - Operations/Conditions:
    - Slowly drafting.
    - ALF is bringing the outflow up a little.
- Dworshak Dam
  - Elevation: 1515.9 feet
  - Inflows: 0.7 kcfs
  - Outflows: ~5 kcfs
  - Operations/Conditions:
    - Drafting slowly.
    - Bring outflows up a bit on October 8.

- Lower Granite Dam
  - 10/07 Average Outflows: 22 kcfs
  - 10/08 Average Outflows: 20 kcfs
  - Operations/Conditions:
    - Outflows will likely go up slightly as power peak happens.
- McNary Dam
  - 10/07 Average Outflows: 87.8 kcfs
  - Operations/Conditions:
    - Expect the same outflows for today.
- Bonneville Dam
  - 10/07 Average Outflows: 92.5 kcfs
- WY25 Percent of Average
  - The Dalles: ~76 – 77 %

b. Water Quality – *Dan Turner, Corps*

- TDG
  - Nothing to report.
  - All levels are below 110% TDG in the tailwater gauges.

c. Fish

Stranz said that she did not think that NOAA was with TMT this morning. She asked if there were any SM available to give an update on fish.

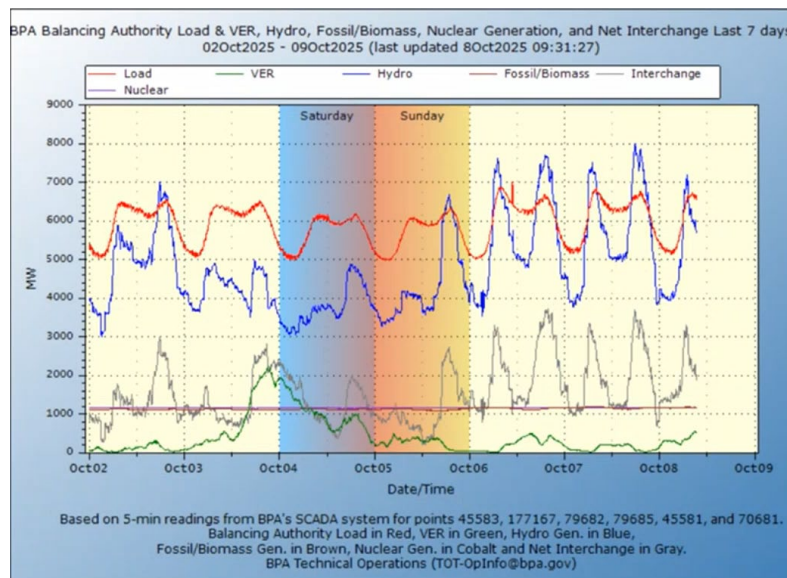
Ebel said that he did not think that we had considered NOAA not being here. He said that fish are passing the dams.

*Washington Update - Morrill*

- Fish Movement
  - The numbers of fish are slowly declining.
  - Fall Chinook are moving better than they were earlier in the season.
- Warm Water Impacts
  - Still questions of the impacts of warm water temperatures on the Fall Chinook migration.
  - Impacts for Steelhead are unknown, but the adult counts seem to be coming along.
  - The Coho counts look pretty good, relatively speaking, for this time of year. The Coho counts we are seeing are nothing like they could be, but we are seeing Coho present. There was a count of over 1000 Coho at Bonneville on one of the days last week.

- Juveniles Numbers
  - Numbers of juveniles continue to decline.
  - Number of subyearlings at LGR and LGS are typically less than 100 per day.
  - Sometimes we would see a bump in those numbers during the month of October as later migrants move through.
  - Reminder: These are Clearwater naturally produced subyearlings that are moving through at BON at this time of year.
- Sampling
  - There are a few fish being collected
  - BON will continue to sample until the end of November.
  - LGR and LGS continue to sample until the end of October.
- Lamprey
  - Numbers are typically low at this time of year.
- Passage Problems
  - Not aware of passage problems.
  - Temperatures are finally declining.
  - Still seeing temperature differentials at LGR on the ladders but things are looking much better than a month ago.

d. Power System – *Tony Norris, BPA*



- Temperatures have finally cooled off.
- Next week the blue line starts to show morning peaking due to the start of residential home heating.

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**4. Set agenda for next meeting – *Wednesday, October 22, 2025 (+Process)***

Meeting Location: Microsoft Teams

**Today's Attendees:**

<b>Agency</b>	<b>TMT Representative(s)</b>
NOAA Fisheries	
Oregon	Erick Van Dyke
Washington	Charles Morrill
Kootenai Tribe	
Confederated Tribes of Colville Reservation	Dennis Moore
Umatilla Tribe (CRITFC)	Pete McHugh, Tom Lorz
Yakama Nation	
Bureau of Reclamation	Chris Runyan
Army Corps of Engineers	Doug Baus (Chair), Aaron Marshall, Lisa Wright
US Fish & Wildlife Service	
Idaho	Jonathan Ebel
Montana	
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 – Tom Conning, Eric Chow, Steven Lee,  
Michelle Yuen, Chris Peery, Leah Hamilton, Dan  
Turner, Willow Walker, Tiffany Stoeckig-Dixon,  
Alexis Mills

BOR – Ryan Fosness

Washington Ecology – Thomas Starkey

Oregon DEQ – David Gruen

DS Consulting – Emily Stranz (Facilitator), Colby  
Mills

CorSource – Andrea Ausmus (BPA note taker,  
Contractor)

AVA – Mike Dillon, Steve Lentini, Patrick Maher

Clearing Up – K.C. Mehaffey

PGE – Phil DeVol

PSE – John Chandler

FPC – Erin Cooper, Noah Campbell

Energy EPS – Joshua Rasmussen

EKI – Eve James

Unaffiliated – Kenneth Curtis, Miguel Verduzco,