COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

September 10, 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.

Review Meeting Summaries & Minutes – TMT Members approved the official meeting minutes and facilitator's summary from August 27.

Fall/Winter Spill Priority List (SPL) – Dan Turner, Corps, presented the <u>2025 Fall/2026 Winter SPL</u>, noting that changes to the list can be considered at any time throughout the season. Erick Van Dyke, FPAC Chair/ODFW, reported that FPAC reviewed the list and has no suggested changes at this time.

Operations Review

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

- Hungry Horse (HGH): 3-day average inflow was 0.34 kcfs, outflow yesterday was 2.4 kcfs, and midnight elevation was 3,550.7 feet (9.3 feet from full); the project has drafted 1.3 feet since last week. HGH is operating to the end of September target of 3,548.3 feet and currently to Columbia Falls minimum flows; streamflow yesterday was 3.51 kcfs and minimum flow requirement is 3.41 kcfs. The project may come under the end of September target depending on weather, precipitation is forecasted for almost every day over the next 10 days.
- **Grand Coulee (GCL)**: inflow yesterday was 69.4 kcfs, outflow was 43.1 kcfs, and midnight elevation was 1,277.6 feet. GCL met the end of August draft a couple weeks ago and is now operating to refill the reservoir to 1,283 feet no later than mid-October.

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

- Libby (LIB): midnight elevation was 2,447.9 feet, yesterday's inflow was 4.85 kcfs, and current outflow is 6.2 kcfs.
- Albeni Falls (ALF): midnight elevation was 2,062.28 feet, yesterday's inflow was 8.7 kcfs, and current outflow is 10.10 kcfs. ALF continues to operate in the summer elevation band of 2,062-2,062.5 feet through September 21.
- **Dworshak (DWR)**: midnight elevation was 1,525.85 feet, yesterday's inflow was 0.2 kcfs, and current outflow is 6.5 kcfs.
- Lower Granite (LWG): yesterday's average inflow was 19.9 kcfs.
- McNary (MCN): yesterday's average inflow was 76.8 kcfs.
- **Bonneville (BON)**: yesterday's average inflow was 73.9 kcfs; Fall Treaty Fishing continues this week and next week (September 15-19) at the project, no additional extensions have been requested.

Water Quality – Dan reported some missing data at The Dalles (TDA) due to a ruptured membrane on sensor, the issue has been resolved and data are being recorded. The Cascades Island gauge (CCIW) was taken out of service, as planned, as it does not represent full river conditions due to its location directly downstream of the BON spillway and often shows values above 110%. Dan also noted that earlier in the month there was an exceedance in the MCN tailwater (111% on September 6), which appears to be due to higher water temperatures in the basin.

Air temperatures have been very warm; NWRFC data from September 1-9 show the entire basin about 6°F above normal for this time of year, with similar elevated temperatures observed from May-August. The very warm air appears to be significantly affecting river temperatures. Dan reviewed graphs showing rising water temperatures (daily averages) along the Columbia River (from the Canadian border), reaching highs of 73.5°F at John Day (JDA); tributaries are also running hot. TDA recorded a daily average temperature of 73.6°F on September 4, about 4°F higher than average for that day. Dan noted that the Snake River's temperature was unexpectedly lower than the mainstem Columbia in some locations. Warmer-than-average daily maximum temperatures and warmer-than-average daily low temperatures reflect a trend of less cooling off at night for September.

Charles Morrill, WDFW, posted an FPC Memorandum into the meeting chat that summarizes temperature impacts and potential implications for fall Chinook passage: chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.fpc.org/documents/memos/28-25.pdf

Fish – Kelsey Swieca, NOAA, reported sub-yearling Chinook passage continuing in relatively low numbers at LWG and Little Goose (LGS), the only 2 projects that are sampling.

For adults, fall Chinook passage at BON has seen a notable uptick at 105%, although conversion upstream is quite low (TDA 58%, JDA 34%) relative to 10-year averages. NOAA expects that high water temperatures in the region are likely affecting fish passage and survival.

Dave Swank, USFWS, reported the adult lamprey run is pretty much over; the run looks to be below average although results from tagging studies are still pending. He also reported an unusual sighting of a bull trout recorded through BON at the Washington shore ladder on August 29.

Regarding a query if fish harvest numbers are accounted for in conversion rates, it was clarified by Fish Managers that harvest has been low this year and does not appear to be a significant factor in reduced fish conversions. Harvest efforts in Zone 6 fisheries is well below average. From a fish perspective, higher temperatures causing fish delays are the major factor impacting conversion. It was noted that although conversion rates presented now are not corrected for harvest; harvest is accounted for in TAC's postseason run reconstructions.

Power System – Tony Norris, BPA, reported low water conditions and mild temperatures.

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 September 24, 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, September 10, 2025

Today's TMT meeting was held via Microsoft Teams, 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. August 27 Facilitator Summary and Minutes
 - Approved

2. Fall/Winter Spill Priority List – Dan Turner, Corps-NWD

• The Fall/Winter Spill Priority List was presented a few weeks ago and Turner reminded Salmon Managers (SM) that it is always open to changing the project order to what the SM think is best.

Erick Van Dyke, OR/FPAC Chair, said that the SM took some time to take a quick look at it and there were no additional edits recommended.

3. Operations Review

a. Reservoirs

Reclamation – Chris Runyan

Hungry Horse Dam

Inflows (3-day): 0.34 kcfs
 Outflow (09/09): 2.4 kcfs
 Midnight elevation: 3550.7 feet
 From Full: 9.3 feet
 Drafted: 1.3 feet

Operations:

Operating to the End of September Flow Augmentation.

■ End of September Target: 3548.3 feet

At this point HGH is operating to Columbia Falls Minimum Flows.

Columbia Falls Streamflow: 3.51 kcfsColumbia Falls Minimum Flow: 3.41 kcfs

Expectations

 Runyan estimated that HGH may come under the End of September by a half foot, depending on the weather.

- Future Conditions:
 - Precipitation is in the forecast almost every day at HGH for the next ten days.
- Grand Coulee Dam

Inflows (09/09): 69.4 kcfs
 Outflows: 43.1 kcfs
 Midnight elevation: 1277.6 feet

- Past Operations:
 - Met end of August draft a few weeks ago.
- o Current Operation:
 - Operating to refill GCL to 1283' no later than mid-October.

Corps – Catherine Dudgeon, Corps

Libby Dam (Lake Koocanusa)

Midnight Elevation: 2447.9 feet
 Average Inflow (09/09): 4.85 kcfs
 Current Outflow: 6.2 kcfs

Albeni Falls (Lake Pend Oreille)

o Midnight Elevation: 2062.28 feet

Average Inflow (09/09): 8.7 kcfsCurrent Outflow: 10.1 kcfs

- o Operations:
 - Operating to the Summer Elevation Band of 2062 to 2062.5 feet through September 21.
- Dworshak Dam

o Midnight Elevation: 1525.85 feet

Average Inflow (09/09): 0.2 kcfsCurrent Outflow: 6.5 kcfs

Lower Granite Dam

o Average Inflow (09/09): 19.9 kcfs

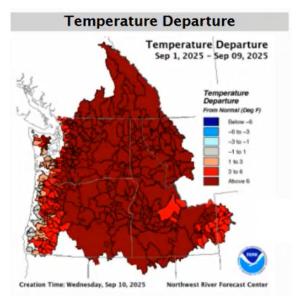
McNary Dam

Average Inflow (09/09): 76.8 kcfs

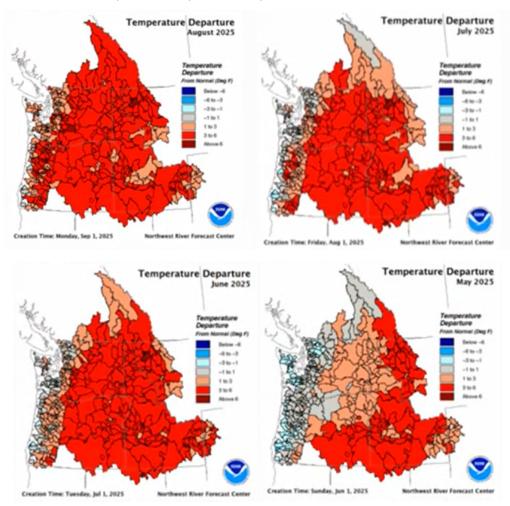
• Bonneville Dam

o Average Inflow (09/09): 73.9 kcfs

- Operations:
 - Fall Treaty Fishing continues through this week and next week (September 15 19). No word about extensions.
- b. Water Quality Dan Turner, Corps
 - TDG
 - The Dalles Tailwater (TDDO)
 - Missing data (black dots) was due to a ruptured membrane on the sensor that has been replaced.
 - Data have started to come in again.
 - Bonneville Tailwater at Cascades Island (CCIW)
 - Gauge was taken out of service as planned.
 - The higher values shown above 110% TDG were due to the location of the gauge.
 - The gauge is located directly downstream of the spillways at Cascades Island and is not influenced by powerhouse flows.
 - When spill rates are reduced the fish ladder generates TDG above 110% and is captured at the gauge and it is not reflective of the full river conditions.
 - McNary Tailwater (MCTW)
 - September 6 there was an exceedance at 111% TDG, this appears to be due to the high temperatures seen in the basin.
 - Temperature
 - o The air temperature has been very warm.



- The NWRFC September 1 September 9 map shows that the entire basin is about +6°F above normal.
 - Similar for entire water year
- o Temperature Departure the past 4 months:



Columbia River, daily average flow and temperature: 09/09/2025

Water Temperature, °F

Water Temperature, °F

Wethow R. 72.5F 0.6kcfs 0.2kcfs

Ockanogan R. 772.5F 0.6kcfs 0.2kcfs

Ockanogan R. 772.5F 0.5 o.9F 0.2kcfs

Ockanogan R. 772.5F 0.5 o.9F 0.2kcfs 0.5 o.9F 0.2kcfs

Ockanogan R. 772.5F 0.5 o.9F 0.2kcfs 0.5 o.9F 0.5 o.9F 0.2kcfs 0.5 o.9F 0

 Warm above average air temperatures have had an effect on water temperatures.

Graphical Depiction of the Columbia River

Deschutes R. 64.5F 4kcfs

- Color Water Temperature.
- Polygon Width Flow Rate.
- Temperatures Yesterday

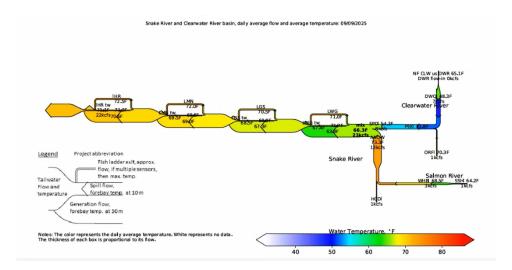
Willamette R. 71.3F 7kcfs

 Warms as the water moves downstream and starts to cool at The Dalles and Bonneville.

Snake River

- Tributaries are also running hot, shown in the Okanogan River, Yakima River, and the Willamette River.
- There may be some relief in the Deschutes River, the Deschutes and Methow Rivers are the only ones that might be a little lower.
- Snake River temperatures are cooler then the Pasco gauge, similar but it is unusual because the Snake is typically hotter than the Columbia Mainstem.
- The Dalles at 73.6°F is +4° above average for this time of year.
- Turner typically looks are daily averages for air and water temperatures
 - Not only have we seen warmer then average daily maximum temperatures, we have seen warmer than average low temperatures for the day, it is not cooling off at night as is typically seen in September.

Charles Morrill, WA, said that he appreciated the presentation and the update. He said that he really appreciated the figures that Turner shared. He said that it was a very nice way to capture the temperature changes as we move downstream. He asked if Turner had something that goes up in the Snake, including Hells Canyon, Clearwater, and Anatone.



Morrill said that he really appreciated that approach to sharing the temperature and what is going on. He shared that there is a document on FPC memorandum (<u>Fall</u> Chinook Conversion in the Mid-Columbia River in 2025 Versus Historical Years). He said that FPC put together a summary of the temperatures impacts and what perception is of what we are seeing in the way of passage issues for Fall Chinook. It follows along well with the temperature depiction, high temperature. He asked if it was the daily 24-hour average temperatures depicted on the Sankey figures shown.

Turner said that was correct.

Morrill said great. He said that the FPC Memorandum gives more insight into the impact of temperature, both Project temperature and the likely accumulation of thermal stress for Fall Chinook going through that experience.

c. Fish

Salmon – Kelsey Swieca, NOAA

- Juveniles
 - Subyearling Chinook
 - Continuing to see passage in relatively low numbers, a couple of hundred at most over the past couple of days at both Lower Granite (LWG) and Little Goose (LGS).
 - LGW and LWG only projects that are sampling. Will only have these for the next couple of weeks.
- Adult Salmon Counts
 - Fall Chinook
 - Notable uptick in passage at Bonneville Dam.
 - But conversion from Bonneville up through the subsequent Projects appears to be quite low.

- The region is experiencing high temperatures in the reaches and NOAA anticipates that it is having an impact on that conversion.
- Ten-year YTD Average:

Bonneville: 105%The Dalles: 58%John Day: 34%

Lamprey Update – Dave Swank, USFWS

- Adult Counts
 - o Run is over at this time of year.
 - o It will be a below average run.
 - Waiting on tagging study results to see what happened with passage routes and percent passage at Bonneville.

Bull Trout Update - Swank

- An Adult Bull Trout was recorded passing through the Bonneville Dam Washington Shore Ladder on August 29.
 - Unusual, especially at this time of year.
 - Bonneville Tailwater Temperature: >73°F
 - Potentially the warmest day of the year for water temperature, which is not the typical preferred range.
 - Not the first time Bull Trout have been seen at Bonneville Dam.
 - Couple of records of the PIT-tagged Juvenile Bull Trout passing downstream
 - One record of Bull Trout showing up in the Smolt monitoring facility in 2005.
 - First time Bull Trout passed through ladder and were observed in the counting window.
 - Hoping that someone got a video or a photo and realized how unusual this was but Swank had not received word back about that yet.

Swank said that it just goes to show that fish can still surprise us.

Tony Norris, BPA, said that he was curious, he said that we were talking about the conversion numbers, he said that we know that there is some harvest going on. He asked if harvest was subtracted from what would have otherwise shown up as conversion.

Morrill said that he believed it does, but he would want to double check because if it was not included there would be a real bias to it. He said that he believed it did because Gabe looked at both PIT-tag passage and adult counts, so those adult counts would reflect harvest as well.

Erin Cooper, FPC, said that the numbers for harvest are a really small fraction of what is missing, so it is included but it is not a big impact in the conversion rates. She said that she knew that it was an easy sell, but sorry.

Morrill thanked Cooper.

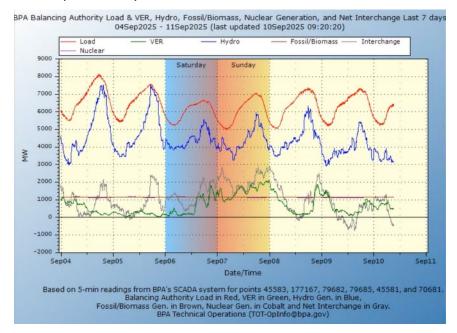
Tom Lorz, Umatilla/CRITFC, said that he would follow up on that as well since CRITFC is the head of the harvest folks for reporting that. He said that the harvest this year has been very low partly because of that and when fish do not move, they do not get caught in nets very easily. He said that while harvest is something that people like to point to, their indication and review of the data this year is that harvest is not the problem and looking at the adult passages in the Snake as temperatures came down, we saw big numbers start moving again at LWG and LGS. He said that there is no real net harvest or much harvest going on there anyway so the thought that harvest is the culprit is not well supported.

Jonathan Ebel, ID, said that he felt like Norris' question was not adequately answered as clear as he asked it. He said that the analysis is not corrected for harvest. He said it was just as if you were to pull up the DART passage tool, which we had not looked at because we do not do that for Fall Chinook but that also is not corrected for harvest. But if you want to see the extent look at the real-time or cohort-based conversion rates from BON to MCN. He said that it is pretty ugly. But to answer the question, no, these conversion rates are not corrected for harvest. He said that is done by TAC in their run reconstructions post-season.

Pete McHugh, Umatilla/CRITFC, said to put a slightly finer point on harvest not being a plausible explanation. He said, for contrast, this year, effort in the Zone 6 Treaty Fisheries running below average relative to the last few years and catches have been less then half of what we have see in the last few years on average for year to date. So, the fish are stuck and waiting for colder water. He said that they are potentially sitting outside the Deschutes, who knows, but there definitely appears to be kind of the biggest delay between The Dalles and John Day.

Morrill said that the comments from everyone were really good. He said that he also wanted to add that there will be an update on the reconstruction effort. He said that we will have a much better picture of this at the End of the Year, probably when we have the summaries available. He said that the point is that temperature does play a critical role and the information that we have in the passage indices certainly show the impact that temperature can have both physical daily temperatures, peak afternoon ladder differentials, both on passage and on survival.

d. Power System – Tony Norris, BPA



- Norris left a message in chat; he was unable to unmute for his presentation.
- Low water conditions and mild temperatures
- 4. Set agenda for next meeting Wednesday, September 24, 2025 (+Process)

Meeting Location: Microsoft Teams

Today's Attendees:

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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 (CRITFC)	Pete McHugh, Tom Lorz
Yakama Nation	
Bureau of Reclamation	Chris Runyan
Army Corps of Engineers	Doug Baus (Chair), Lisa Wright
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	
Bonneville Power Administration	Tony Norris

Other Attendees (non-TMT members):

COE – Jessika Solleder, Charles Barnes, Chris Peery, Dan Turner, Catherine Dudgeon, Leah Hamilton

BPA – Tammy Mackey, Carolina Andes

Washington Ecology – Thomas Starkey

DS Consulting – Emily Stranz (Facilitator), Colby Mills

CorSource – Andrea Ausmus (BPA note taker, Contractor)

EKI – Eve James

PSE – Jessica Lam

PGE – Phil DeVol

AVA – Steve Lentini, Patrick Maher

Energy EPS – Joshua Rasmessen

FPC – Erin Cooper, Noah Campbell

Chelan PUD – Lance Beyer, Jay Fintz, Carl Bertilson

Unaffiliated – Eric Wood, Kenneth Curtis,