COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

August 13, 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 facilitator's summary from the August 6 meeting, the official meeting minutes from August 6 will be reviewed at the next TMT meeting.

Dworshak Operations – Jessika Solleder, Corps, reported on current operations at Dworshak Dam (DWR). Current reservoir elevation is 1,557 feet with inflows of approximately 750 cfs and outflows of approximately 9,600 cfs. The project is drafting a little over 1-foot/day.

Stream temperatures have warmed some in the upper system due to the current heat wave, with temperatures at Anatone ranging from 74-76°F and Orofino ranging from 74°F to almost 79°F. The Lower Granite (LWG) forebay has been cooling down over the past few days with the help of cool water releases from DWR; the pool shows good stratification at the 15-20-meter mark. DWR releases have also made a positive impact on the LWG tailwater, keeping temperatures below the 68°F threshold. Jessika reminded the group that water released from DWR takes between 8-10 days to reach as far as Ice Harbor (IHR), so cooling effects downstream may be observed with some delay.

Weather forecasts show the current heat wave subsiding in the Columbia River Basin with cooling temperatures over the weekend and slight chances of cloud cover and precipitation; temperatures will warm back up through the week and remain stable. The Lewiston area is experiencing high temperatures, with another 100°F day today, although nighttime temperatures remain relatively cool. Temperatures will drop significantly over the weekend, down to the high 70s°F, before rising back up into the low 90s°F through the end of the 10-day forecast.

Outflows at DWR were increased August 8-10 ahead of Doble testing at LWG, to bring the LWG tailwater back down below 68°F with the end of the relaxed temperature threshold. Fluctuations observed indicate the model reacting to the Doble testing, the Corps expects temperatures to remain under 68°F through the remainder of testing (ending August 13). Outflows will decrease on Friday to 8.6 kcfs for the remainder of August, based on remaining water supply and forecasted moderate temperatures through the end of the month.

Operations Review

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

- Hungry Horse (HGH): inflows yesterday were about 800 cfs, with outflows holding at 2.2 kcfs. Midnight elevation was 3,555.1 feet (4.9 feet from full) and the reservoir has drafted about 0.9 feet since last week. July had above-average precipitation, helping to maintain higher flows than previously projected; the project saw approximately 0.5 inches of precipitation one day during the past week. Columbia Falls flows were at 4.5 kcfs, above the minimum flow requirement of 3.4 kcfs. Operations will continue to target the end-of-September draft elevation of 3,548.3 feet. This elevation target will likely control HGH operations until the end of September.
- **Grand Coulee (GCL)**: inflows yesterday were 89.8 kcfs, with outflows of 102.2 kcfs. Midnight elevation was 1,282.74 feet and the project has drafted about 2.7 feet since last week to target the end of August elevation of 1,277 feet. GCL will continue to draft the reservoir while keeping flows in the lower system steady or slowly declining.

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

- **Libby (LIB)**: midnight elevation was 2,449.5 feet, with average inflows yesterday at 7.0 kcfs, and current outflow at 7.0 kcfs. LIB is operating at the bull trout minimum of 7 kcfs through August. The September 30 target is 2,446.7 feet.
- Albeni Falls (ALF): midnight elevation was 2,062.3 feet, with average inflows yesterday at 12.7 kcfs, and current outflow at 10.9 kcfs. ALF continues to operate to the summer operation band of 2,062-2,062.5 feet.
- **DWR**: midnight elevation was 1,556.5 feet, with average inflows yesterday at 0.7 kcfs, and current outflows at 9.6 kcfs.
- LWG: yesterday's average outflows were 25.8 kcfs. On the Snake River, the end of MOP will be August 15 (at midnight) for IHR, Lower Monumental (LMN) and Little Goose (LGS); September 1 for LWG. In response to a query, the Corps noted that details on the end of MOP can be found in the Fish Operations Plan (FOP) posted to the TMT website.
- McNary (MCN): yesterday's average outflows were 138.1 kcfs.
- **Bonneville (BON)**: yesterday's average outflows were 143.8 kcfs. Fall treaty fishing will take place at BON August 18-21 and 25-30, and September 1-6.

Water Quality – Dan Turner, Corps, reported some internal/external data system issues that will be fixed. The data the Corps are receiving show all TDGs at less than the current applicable criteria. A small bump of 116% was observed at LWG for Doble testing and the project's speed-no-load operation, but TDG is still below the 120% project tailwater standard.

Fish – Trevor Conder, NOAA, reported that sub-yearling Chinook passage numbers are continuing to decrease in the system: ranging between 1,200-400/day at LWG; 91-35 at LGS; and 100day at MCN (every other day index).

Adults at BON are starting to transition from summer to fall Chinook, ranging from 337 a week ago to 1,649 on August 12; a robust fall return is expected. Steelhead are ranging between 702-908 and are between the A and B runs; the A run is well above the 10-year average, with a hope for similar results in the B run. At MCN, fall Chinook have not been observed yet, with summer Chinook ranging from 153-359; steelhead ranging 196-291; a few individual sockeye; and shad also winding down. LWG has seen an uptick in Chinook adults ranging from 18 on August 6 to 114 yesterday, with steelhead ranging 51-117 and a few individual sockeye.

Charles Morrill, WA, emphasized that increasing tailwater temperatures at BON may affect fall Chinook passage and temperature impacts need to be watched closely.

Dave Swank, USFWS, reported that the lamprey run continues to be below average at BON for daytime window counts; over 16,000 YTD have passed BON, with a large number observed in nighttime video counts.

Power System – Tony Norris, BPA, reported that the recent warm weather has resulted in significant peaks in power usage in the NW; BPA has been able to meet the load with no incidents.

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 August 20, 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, August 13, 2025

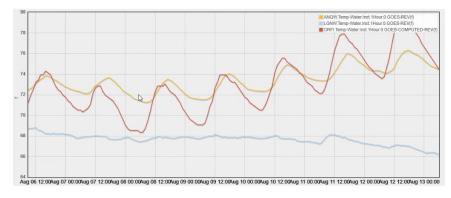
Today's TMT meeting was held via Microsoft Teams and conference call, chaired by Doug Baus, Corps, and facilitated by Emily Stranz, DS Consulting. Minutes were collected by Andrea Ausmus, BPA (contractor, CorSource Technology Group). A list of today's attendees is available at the end of these minutes.

1. Review Summary and Minutes

- a. August 6 Facilitator Summary
 - Minutes are still pending
 - Summary was approved
- 2. Dworshak (DWR) Operations Jessika Solleder, Corps-NWW
 - There were technical issues in connecting to the typical sites that the Corps provides for DWR updates. Solleder provided a presentation to cover some of the information.
 - a. Current Hourly Data

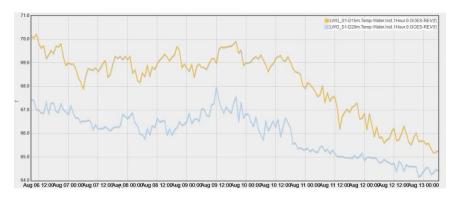
Forebay Elevation: 1557 feet
Inflow: 750 cfs
Outflow: 9.6 kcfs
Drafting: >1 foot/day

- b. Snake and Clearwater Rivers Temperature Data Query 2.0
 - Temperatures were heating up in response to the heat wave in the region.

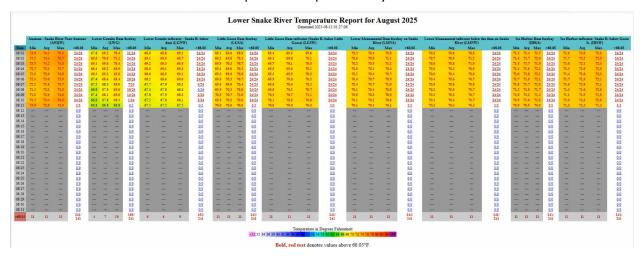


- Anatone (Snake River):
 - o Temperature: 74° 76°F
- Orofino (Clearwater Mainstem):
- o Temperature: 74° 79°F

- Lower Granite (LWG) Tailwater:
 - o Temperatures have been declining.
- c. Lower Granite Forebay Temperature String
 - The Corps looks at the 15-m and 20-m depths because it represents the depths at which the mechanics of mixing occurs at the dam.
 - This is another way to visualize stratification in the pool.



- o 15-meter
- o 20-meter
- Cool water sent down prior to LWG Doble testing had brought down the water temperatures in the pool, which was one of the key intended outcomes of the operation.
- d. Lower Snake River Temperature Report for July 2025



- Hot water from Anatone is entering the system and mixing with water from DWR, this positively impacted the Lower Granite forebay and tailwater bringing temperatures down.
- The cool water will continue to impact the rest of the system downstream as the days go on.

- Reminder: It can take up to 8 10 days for the water from DWR to reach as far as Ice Harbor (IHR).
- e. 10-Day Regional Weather Forecast for the Columbia River Basin
 - Temperature:
 - Entering into the end of the heatwave with temperatures cooling into the weekend.
 - o Into the week the temperatures heat up slightly and remain relatively stable.
 - Cloud Cover and Precipitation:
 - A slight chance of cloud cover with maybe some precipitation.
- f. Weather Forecast for Lewiston, ID
 - August 13
 - o 100°F with cooler nighttime temperatures.
 - August 14 18
 - Temperatures have a significant drop off reaching high-70s to high-80s
 - August 19
 - o Temperatures return to low-90s
- g. Water Temperature Analysis posted Tuesday, August 19, at 8:30am
 - Outflows through DWR were increased August 8 10 ahead of Doble testing to bring temperatures at the LWG tailwater back down to below 68°F in time for the termination of the relaxed temperature threshold period..
 - The water sent through DWR reached the system at the same time as the heatwave and helped keep things cool.
 - The fluctuations in LWG temperatures modeled are the model's reaction to Doble testing. It shows the temperatures undulating but the temperatures are expected to stay below 68°F.
 - Today is the last day of Doble testing and the graph shows temperatures starting to stabilize.
 - Friday the Corps is going to decrease outflows through DWR to 8.6 kcfs for the remainder of August based on the remaining water supply and the current forecast showing that we have more moderate temperatures through the remainder of August.

3. Operations Review

a. Reservoirs

Reclamation – Chris Runyan

- Hungry Horse Dam
 - o Inflows (08/12):

800 cfs

o Outflows: 2.2 kcfs

Midnight elevation: 3555.1 feet

■ From Full: 4.9 feet

Drafted: 0.9 foot since last week.

- Past Conditions:
 - Last week HGH picked up half an inch on one day otherwise it was dry.
 - July was above average precipitation which helped out the Flathead to keep flows higher than what was projected in May and June when it was much drier.
- Columbia Falls Flows: 4.5 kcfs
 - Still above minimum flow of 3.4 kcfs.
- o End of September Draft: 3548.3 feet
- o Operations:
 - HGH will continue to operate to the end of September.
 - This will control HGH operations through the end of September.

Brian Marotz, MT, added a comment. He said that things are turning out a lot better than we anticipated. He said good job on keeping the wheels on.

Runyan said yeah and that we had a little help from the weather too. He said that he agreed with Marotz that it did turn out all right this year. He thanked Marotz for his help during that process.

Grand Coulee Dam

Inflows (08/12): 89.8 cfs
 Outflows: 102.2 kcfs
 Midnight elevation: 1282.74 feet

Drafted: 2.7 feet since last week.

o End of August Elevation: 1277 feet

- Current Operation:
 - Continue targeting the end of August elevation while trying to keep flows in the lower system steady or slowly declining.

Corps – Catherine Dudgeon, Corps

• Libby Dam (Lake Koocanusa)

o Midnight Elevation: 2449.5 feet

Previous 1-Day Average Inflow: 7 kcfsOutflows: 7 kcfs

o End of September: 2446.7 feet

o Operations:

 Operating to the Bull Trout minimum of 7 kcfs through the end of August.

• Albeni Falls (Lake Pend Oreille)

Midnight Elevation (Hope): 2062.3 feet
 Previous 1-Day Average Inflow: 12.7 kcfs
 Outflows: 11.8 kcfs
 Current Outflows: 10.9 kcfs

Operations:

Operating at Summer Elevation Band of 2062 – 2062.5 feet.

Dworshak Dam

Midnight Elevation: 1556.5 feet
 Previous 1-Day Average Inflow: 0.7 kcfs
 Outflows: 9.6 kcfs

• Lower Granite Dam

Previous 1-Day Average Inflow: 25.8 kcfs

• Lower Snake River Projects

o End of MOP

August 15: Ice Harbor, Lower Monumental, and Little Goose.

September 1: Lower Granite

McNary Dam

Previous 1-Day Average Inflow: 138.1 kcfs

Bonneville Dam

Previous 1-Day Average Inflow: 143.8 kcfs

• Operation:

o Fall Treaty Fishing:

■ August 18 – 21

■ August 25 –30

■ September 1 – 6

Marotz asked for a reminder of the September 30 target at Libby.

Aaron Marshall, Corps, responded. He said that it was 2446.7 feet.

Erick Van Dyke, OR, thanked Dudgeon for the update and that it was helpful. He said that she had mentioned something about MOP ending in mid-August for the lower three Snake River dams. He asked for a reminder of where that was documented.

Dudgeon said it is in the FOP.

- b. Water Quality Dan Turner, Corps
 - Missing Data
 - o Having issues with internal system talking with the external system.
 - TDG
 - The internal system is showing all TDGs less than applicable criteria.
 - There was a bump in the LWG tailrace due to the Doble testing and the speedno-load generation operation, but it is still below the 120%.
 - o LWG Gas Cap (08/12): 116%
- c. Fish

Salmon - Trevor Conder, NOAA

- Juveniles
 - o Only have Subyearling Chinook in the system everything else has zeroed out.
 - Subyearling Chinook
 - Continuing to decline
 - Smolt Passage Index

• Lower Granite: 1200 - 400

• Little Goose: >100 (91 – 35)

- McNary: ~100/per day (every other day)
- Adult Salmon Counts
 - o Summer Chinook
 - Summer Chinook are transitioning to Fall Chinook.
 - Passage Index

• Lower Granite: 18 - 114

- o Fall Chinook
 - Looking forward to a robust Chinook return based on expectations this year and predictions.
 - Still are not seeing the Fall Chinook arrive at McNary Dam.
 - Passage Index

Bonneville (08/06): 337Bonneville (08/12): 1649

McNary: 153 – 359

- Steelhead
 - In the trough between the A-run and B-run.
 - The A-run was above the 10-year average.
 - Hoping that the B-run comes in with a similar force.
 - Passage Index

Bonneville: 702 – 908
 McNary: 196 – 291
 Lower Granite: 51 - 117

- Sockeye
 - Passage Index per day

McNary: few passingLower Granite: few passing

- o Chad
 - Passage Index per day

McNary: winding down.

Lamprey Update – Dave Swank, USFWS

- Adult Counts
 - Continues to be a below average year at Bonneville for the daytime window counts. Nighttime video counts have been higher than normal. Will see how it all shakes out at the end of the year.
 - Passage Index at Bonneville

• Daytime Counts: 16000

- d. Power System Tony Norris, BPA
 - There was a recent patch of warm weather and BPA was able to meet load without incident.
 - There were some pretty significant peaks in power usage in the Northwest.

4. Additional Discussion

Van Dyke said that he wanted to drop back to his MOP question he had earlier. He said that he was told that the August 15 date was in the FOP for the lower three Snake River Projects to quit using MOP, but he said that he was not finding that language. He said that he would like some help showing him where it is. He said that he saw that there was a statement for LWG and he also saw there was a statement about the Lower Snake River MOP being operated during Fish Passage Season, but he did not see this alteration with mid-August no longer using it.

Dudgeon said that this was in the Fish Operations Plan (FOP) every year. She said that this was pre-coordinated.

Lisa Wright, Corps, brought up the Fish Passage Plan (FOP-15).

"Little Goose, Lower Monumental and Ice Harbor dams will operate at MOP with a 1.5-foot forebay operating range and a 1.0-foot range soft constraint to the extent possible from April 3 until August 14, unless adjusted on occasion to meet authorized project purposes, primarily navigation, except as noted below."

Table 2.— Normal and minimum operating pool (MOP) elevation ranges and minimum tailwater elevations for lower Snake River projects. A

Project	Normal Operating Elevation Range (ft) ^B		MOP Elevation Range (ft) ^C		Project Tailwater (ft)
	Minimum	Maximum	Minimum	Maximum	Minimum
Lower Granite	733.0	738.0	733.0	734.5	633.0
Little Goose	633.0	638.0	633.0	634.5	537.0
Lower Monumental	537.0	540.0	537.0	538.5	437.0
Ice Harbor	437.0	440.0	437.0	438.5	337.0

A. Elevations provided in feet above mean sea level (NGVD29).

Van Dyke said what he was explicitly looking for was the August 15 date that was described to the extent possible from April 3 through the August 14. He asked if that was the language the Corps was using.

Dudgeon said right. She said that it ends on August 15 at one minute past midnight. So, we have MOP all the way through the 14th and then on the 15th at midnight is when it ends.

Van Dyke said that there are other statements in there that say that the MOP will be operated during the fish passage season. He said that there is some conflict, potentially between the language in a footnote and within the table here. He said that he was not sure what the biological significance of August 14th was for this decision to modify MOP earlier then it had been in his previous recollection. He said that this might be an offline topic.

Marshall said that he could add some detail to this. He said that the operations documented in the FOP were part of the operation that was outlined in the 2020 EIS and ROD and then that was carried over into the RCBA Appendix B Operations. It is something that has been in place for a few years now.

Van Dyke thanked Marshall for the additional insight.

Charles Morrill asked if someone could pull up the Bonneville tailrace temperatures from the FPC website. He said that he would like to noted that those temperatures continue to climb. He said that if we continue to see the spike that shown over the past couple of days, those temperatures could be high enough to slow steelhead passage down over Bonneville. He said that the A-run did look good and the counts are dropping

B. August 15 - April 2, except at Lower Granite (September 1-April 2).

C. April 3 – August 14, except at Lower Granite (April 3 – August 31). Projects will be operated within a 1.0-foot range to the extent possible (referred to operationally as a "soft constraint").

off a little bit but if that temperature continues to climb those counts may drop off even more.

5. Set agenda for next meeting – Wednesday, August 20, 2025

Today's Attendees:

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

Other Attendees (non-TMT members):

COE – Jessika Solleder, Tom Conning, Michelle Yuen, Steven Lee, Christopher Peery, Daniel Turner, Catherine Dudgeon, Alexis Mills

BOR - Ryan Fosness

BPA – Tammy Mackey

NOAA - Darren Ogden

Oregon DEQ – David Gruen

DS Consulting – Emily Stranz (Facilitator), Colby

Mills

CorSource – Andrea Ausmus (BPA note taker,

Contractor, recording only)

EKI – Eve James

CHPM - Lance Beyer, Jay Fintz

FPC - Noah Campbell, Erin Cooper

PGE - Phil DeVol

Clearing Up – K.C. Mehaffey

EAS - Shawn

AVA – Patrick Maher, Steve Lentini

Energy EPS – Joshua Rasmussen

GCPUD – Eva Stites

PSE – John Chandler

Unaffiliated – Charles Pace