

COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

June 4, 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 May 28 meeting, official meeting minutes from May 28 will be reviewed at the next TMT meeting.

Lower Monumental Dam (LMN) Operations for Transport Update – Erick Van Dyke, FPAC Chair/ODFW, provided an update on spill and transport operations at LMN, reviewing within-day flow fluctuations as a result of fish transport operations (project graphs/links on the [TMT agenda](#)). He noted that the monitored flow fluctuation trends below LMN and at Ice Harbor (IHR) are consistent with previous patterns. Erick added that the Fish managers will be taking a deeper look at the five-minute dataset post-season.

Flow Augmentation – On behalf of FPAC, Erick reported no change in the recommended flow augmentation operation since the last TMT meeting. Tony Norris, BPA, confirmed that Action Agencies (AAs) continue to release the maximum May/June flow, with the remaining flow augmentation scheduled for release July 6-12 (a total of 1.0 maf). Flow Augmentation updates will remain on the TMT agenda for continued monitoring.

Operations Review

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

- **Hungry Horse (HGH):** above average temperatures and very little precipitation were observed last week, with mid-80s at the dam and only about 0.5 inches of rain at higher elevations. This week will cool to average temperatures with a predicted 10-day dry period followed by warm weather at the end of the weekend. Snowpack is near average at the highest elevations, with low elevations and higher elevations on the east side melted out. The final June Water Supply Forecast (WSF) should be released later today, indicating a large drop in the forecast since mid-May.
 - Inflows yesterday were 8.8 kcfs, with average outflows of 1.5 kcfs. Midnight elevation was 3,547.7 feet (12.3 feet from full) and the project will continue filling (7 feet since last week). Due to the decrease in WSF, outflows will reduce to 800 cfs today (750 cfs minimum) with a projected fill in late June, passing about 3 kcfs after that. HGH will then operate to meet Columbia Falls minimum flows, with an end of September draft target for flow augmentation at 3,548.3 feet (11.7-foot draft).
- **Grand Coulee (GCL):** inflows yesterday were 140.1 kcfs, with outflows of 125 kcfs. Midnight elevation was 1,276.8 feet (13.2 feet from full). Refill will continue through June to keep flows at McNary (MCN) beneficial for anadromous fish. The target elevation heading into the July 4 holiday weekend is 1,285 feet, with a target maximum refill of 1,289.5 feet. The reduced remaining refill accounts for the Lake Roosevelt incremental storage release program.

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

- **Libby (LIB):** current elevation is 2,435.9 feet, with inflows of 30 kcfs, and outflows of 20 kcfs for the recently coordinated sturgeon pulse (through about June 16). Flows are starting to recede throughout the basin after the recent peak from snow melt. The end of September target elevation was confirmed at 2,446.73 feet, other questions regarding LIB operations were referred to the Seattle District website and project ESP traces: https://www.nwd-wc.usace.army.mil/nws/hh/www/pend_esp.html.

- **Albeni Falls (ALF):** current elevation is 2,060.4 feet, with inflows of 39 kcfs, and outflows of 34.5 kcfs. The project plans to refill later this month; more info is available the Seattle District website about spillway gate restrictions.
- **Dworshak (DWR):** current elevation is 1,596 feet, with average inflows of 9.5 kcfs, and outflows of 1.7 kcfs that are anticipated to increase this weekend as the project operates to its flood control refill curve.
- **Lower Granite (LWG):** is operating within the minimum operating pool (MOP), between 733-734.5 feet. All projects on Snake are in a MOP range, except LMN has a raised MOP.
- **MCN:** current elevation is 337.9 feet, with average inflows of 226 kcfs, and receding outflows today below yesterday's average 228 kcfs.
- **Bonneville (BON):** current elevation is 74.1 feet, with outflows of 223.6 kcfs and decreasing.

Water Quality – Dan Turner, Corps, reported that TDG levels are at or below the Water Quality Standard (WQS) of 125% in the lower river tailraces; at this time there are no TDG concerns.

Fish – Emi Melton, NOAA, reported that yearling Chinook passage is winding down. At LWG, the index ranged from 1,000-138, and at BON the 2-week period started at 17,000 and ended at about 1,500. Sub-yearling Chinook passage has been increasing, with a peak index at LWG of 30,000-40,000 smolts in the last 2 weeks; outmigration at MCN has picked up ranging from 3,000-17,000. Steelhead passage is slowing, with daily indices around 100 or less at BON. Snake River sockeye outmigration is slowing through LWG; passage at MCN and BON is also slowing with some upper Columbia sockeye still detected.

For adults, the Chinook run at BON has shifted from spring to summer (Chinook at other projects are still noted as 'spring' Chinook). Daily counts include 1,000/day at BON, 700-1,500/day at MCN, and 700-2,300 at LWG. Spring Chinook YTD at BON is about 114% of the 10-year average, 110% at IHR. Steelhead counts are mostly lower in the lower river projects, with BON at 53% YTD, but 127% at IHR. Sockeye returns are starting at BON and increasing at MCN, and a good number of shad are also being detected in the lower projects, with a few detected at IHR.

Charles Morrill, WA, reported that from April 3-May 29 at LWG, spill was 82.6%, consistent with the past couple years and from a fish perspective, indicates a high spill rate. Water temperatures are increasing at all projects, notably at LWG the average temperature was about 58.6 degrees F, the fourth highest recorded temperature there since 1992. He emphasized the concern regarding warmer water temperatures and the effect on fish passage and survival.

Power System – Tony reported that preparations for hot weather are underway. Last week, LIB had a powerhouse trip which reduced discharge for about 18 minutes before it was resolved.

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 June 11, 2025, at 9:00 AM.

**Columbia River Regional Forum
Technical Management Team
OFFICIAL MINUTES
Wednesday, June 4, 2025**

Minutes: Andrea Ausmus, BPA (contractor, CorSource Technology Group)

Today's TMT meeting was held via Microsoft Teams and conference call, 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

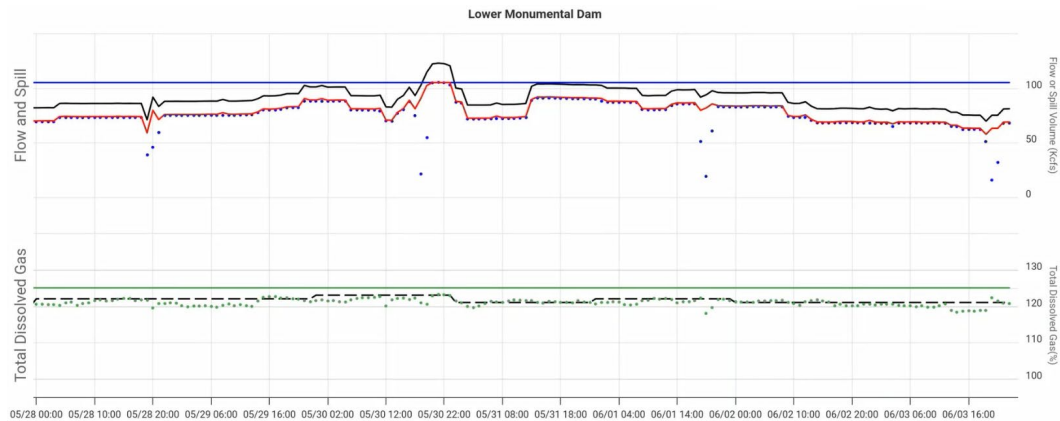
a. May 28 Summary

- Approved.
- May 28 Minutes are still pending and will be reviewed at the next TMT.

2. LMN Operations for Transport Update – Erick Van Dyke, OR/FPAC Chair

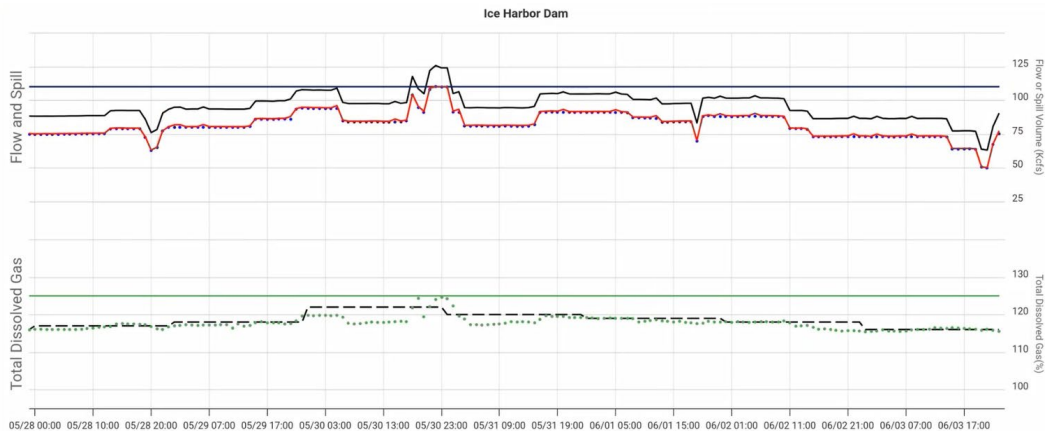
a. FPC Spill to FOP Graphs

- Lower Monumental (LMN)



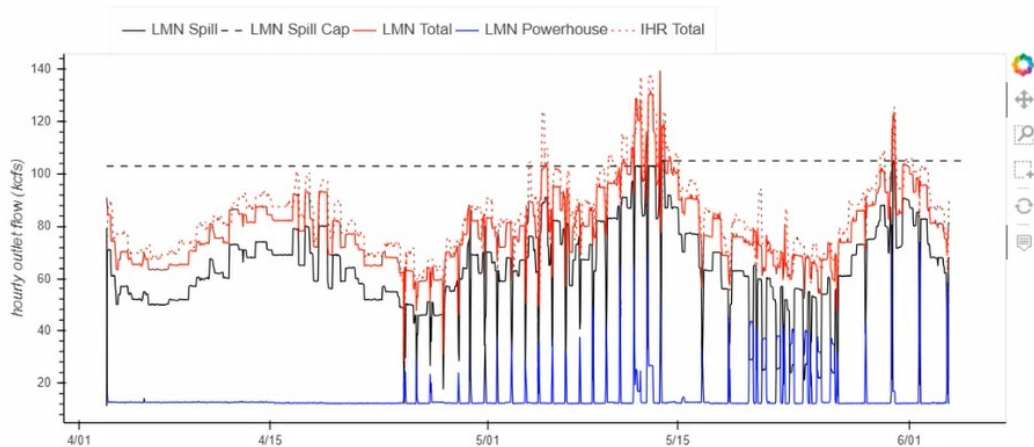
- The operations at LMN to allow for the barge to cross the tailwater to load fish continues.
- Blue dots show when the spill is below what is expected, in this case to allow the fish barge to move across the tailrace.

- Ice Harbor (IHR)



- The blue dots do not change, signifying reduction of spill.
- The pattern of within day flow fluctuations are occurring below LMN.

b. LMN, IHR Flow & Elevation Timeseries



- The reductions that have been occurring dropping to zero.
- The Fish Managers will be looking closer to the 5-minute data at the end of the season.

3. **Flow Augmentation** – *Erick Van Dyke, OR/FPAC Chair, and Tony Norris, BPA*

- FPAC does not have any changes to their flow augmentation recommendation and as it is still being managed as was recommended.
- Continuing to release at the maximum May/June rate and will move the remainder of the volume July 6 – 12 to complete the full release of the 1 maf.

4. **Operations Review**

a. Reservoirs

Reclamation – Chris Runyan

- Hungry Horse Dam

- Last Week's Conditions:
 - Above average temperatures over the weekend.
 - Mid-80s at the dam.
 - Very little precipitation last week.
 - Some of the higher elevations received ~0.5 inch.
- Current Conditions:
 - Cooled to more average temperatures.
 - Highest SNOTEL are reporting near average snowpack.
 - The higher elevation sites on the eastside as well as all of the lower elevation sites have melted out.
- Future Conditions:
 - Dry 10-day with another warmup at the end of this weekend.
- Working on June Final Forecast today, but they are seeing a fairly large drop in the forecast since the May forecast, specifically since mid-May things have started drying up.
- Inflows (6/3): 8.8 kcfs
- Outflows: 1.5 kcfs
- Midnight elevation: 3547.7 feet
 - From Full: 12.3 feet
 - Filled: 7 feet last week.
- Current Operation:
 - Due to the decrease in the Water Supply Forecast, outflows from HGH will be reduced to 800 cfs today.
 - 750 cfs is the actual minimum but they will take it to 800 cfs to start with.
- Current Projections:
 - Filling reservoir in Late June with this current outflow and then needing to pass inflow at around 3 kcfs after that.
- Future Operations:
 - After this HGH will be operated to meet Columbia Falls minimum flows.
- End of September Draft Target: 3548.3 feet
 - 11.7-foot draft.
- Grand Coulee Dam
 - Inflows (6/3): 140.1 kcfs
 - Outflows: 125 kcfs
 - Midnight elevation: 1276.8 feet

- From Full: 13.2 feet
- Filled: 3.6 feet last week.
- Current Operation:
 - Continue to refill during the month of June with close consideration of keeping flows at McNary beneficial for anadromous fish.
- Future Operations:
 - Going into July 4 weekend, the reservoir is targeting to be in the 1285-foot range per normal operations.
 - After the July 4 weekend, GCL will be targeting a maximum refill of 1289.5 feet.
 - Forgoing the last half foot is to account for the Lake Roosevelt incremental storage release program for normal operations.

Corps – Leah Hamilton, Corps

- Across the whole basin we see that we have reached our peak, and flows are starting to recede.
- Libby Dam (Lake Koocanusa)
 - Elevation: 2435.9 feet
 - Inflows: 30 kcfs
 - Outflows: 20 kcfs
 - Operations:
 - Sturgeon pulse as was coordinated.
 - Releases of 20 kcfs will go through June 16.

Brain Marotz, MT, asked what is being looked at for maximum refill this year. He asked what projected maximum elevation is.

Hamilton said that she was not sure off the top of her head. It would be a better question for Seattle District – Leon Basdekas. She said to send one of them an email and she would ask Basdekas what they are estimating, and they can get back to Marotz on that.

Marotz said that she had said that the sturgeon pulse was looking to stay at 20 kcfs through June 16.

Hamilton said that she was not 100% sure about that date, there are still some conversations about the actual date. She said that it will be in the mid-June range.

Marotz asked about the projection for the End of September target at Libby.

Hamilton said that she was not sure but she would confirm that with Seattle District. She said that the June Water Supply Forecast for Libby will be posted today or tomorrow and it might have this information on it.

Norris said that it was already announced at a recent TMT meeting because it is based on the May Final Water Supply Forecast.

Baus said at RCC they have the value listed as 2446.73 for the end of September for Libby Dam.

Hamilton shared via chat:

| *Brian Marotz - Montana (Unverified) and others who are interested, Seattle district ESPs for libby operations are here: https://www.nwd-wc.usace.army.mil/nws/hh/www/pend_esp.html*

- Albeni Falls (Lake Pend Oreille)
 - Elevation: 2060.4 feet
 - Inflows: 34.5 kcfs
 - Outflows: 39 kcfs
 - Operations: Plan on refilling later in June. More information is available on the Seattle District [website](#) about the specific operations and gate restrictions.
- Dworshak Dam
 - Elevation: 1596 feet
 - Inflows: 9.5 kcfs
 - Outflows: 1.7 kcfs
 - Operations: Nearing the top of the pool so will keep outflows at 1.7 kcfs until the weekend when they will begin to adjust flows to manage the last foot of refill.
- Lower Granite Dam
 - Elevation: 733.8 feet
 - Operating within MOP of 733 – 724.5 feet
- Lower Snake River Projects
 - All Projects are operating within the MOP range.
 - Lower Monumental has a raised MOP
- McNary Dam
 - Inflows: 226 kcfs
 - Elevation: 337.9 feet
- Bonneville Dam
 - Inflows: 228 kcfs
- b. Water Quality – *Dan Turner, Corps*
 - TDG
 - At or below the Water Quality Standard of 125% TDG in the Lower River.
 - No TDG concerns at this point.

c. Fish

Salmon – Kelsey Swieca, NOAA

- Juveniles
 - Yearling Chinook
 - Passage is generally winding down.
 - Smolt Passage Index (two-week period)
 - Lower Granite: ranging from 1000 – 138
 - Bonneville: ranging 17000 - 1500
 - Subyearling Chinook
 - Passage picking up.
 - Smolt Passage Index (two-week average)
 - Lower Granite: 20 – 30k
 - McNary (outmigration): 3 – 17k
 - Steelhead
 - Passage is slowing down
 - Smolt Passage Index (two-week average)
 - Bonneville: 100
 - Sockeye
 - Snake River Sockeye pass through Lower Granite quickly so outmigration there is slowing down. Passage at McNary and Bonneville is also slowing down but we are still seeing a little more passage there – likely from the Upper Columbia Sockeye.
- Adult Salmon Counts
 - Adult run at Bonneville has shifted from Spring run to Summer run. It remains Spring run at all the other dams at this point.
 - Spring Chinook
 - Passage Index per day
 - Bonneville: 1k
 - McNary: 700 – 1500
 - Lower Granite: 700 – 2300
 - Ten-year YTD Average:
 - Bonneville: 114%
 - Ice Harbor: 110%
 - Summer Chinook
 - Still early
 - Ten-year YTD Average:

- Bonneville: 84%
- Steelhead
 - Counts are still low in the Lower River
 - Ten-year YTD Average:
 - Bonneville: 53%
 - Ice Harbor: 127%
- Sockeye
 - Returns are starting to show up at Bonneville and up to McNary. Still early in its run.
- Shad
 - A good number are showing up in the Projects with a few detected up to Ice Harbor.

Charles Morrill, WA, said that Melton did a great job with the update.

Washington Update, Morrill, WA

- Spill is important at the projects and for the Spring Passage season, April 3 through May 29.
 - Spill at Lower Granite (LGR): 82.6%
 - Consistent with past years
 - Seeing warmer temperatures at all of the Projects
 - LGR average water temp was 58.6° F and was the fourth highest water temperature seen at LGR since 1992.
 - Temperatures are a little bit of a concern as we pay attention to water temperatures both at LGR and at other Projects.
- d. Power System – *Tony Norris, BPA*
 - Preparing for hot weather.
 - Last week there was a powerhouse trip at LIB that reduced discharge for about 18 minutes and then was brought right back up. These are instantaneous systems that are designed to protect the transmission system.

5. Other

Van Dyke asked Turner to share the draft of the Spill Priority List with FPAC so they can look at the list prior to the meeting.

Turner said that he would get that posted later this week, before Monday.

Stranz asked if the Treaty Fishing would be put on the agenda for next week.

Lorz said that he guessed it was a little early but he would check with the TAC folk.

6. Set agenda for next meeting – June 11, 2025

Meeting Location: Microsoft Teams

- a. Spill Priority List Coordination
- b. Treaty Flow Augmentation
- c. LMN Operations for Transportation
- d. Operations Review
- e. Treaty Fishing (tentative)

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, Tom Iverson |
| Bureau of Reclamation | Chris Runyan, Eric Rothwell |
| Army Corps of Engineers | Doug Baus (Chair), Lisa Wright |
| 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 | Tom McDonald |
| Bonneville Power Administration | Tony Norris, Ben Hausmann |

Other Attendees (non-TMT members):

COE – Dan Turner, Alexis Mills, Leah Hamilton, Chris Peery, Tiffany Stoeckig-Dixon, Tom Conning, Catherine Dudgeon, Patricia Madson, Eric Chow, Jessika Solleder

BOR – John Powell

BPA – Tammy Mackey

NMFS – Emi Melton

Washington Ecology – Thomas Starkey

Oregon DEQ – David Gruen

DS Consulting – Emily Stranz (Facilitator), Colby Mills

CorSource – Andrea Ausmus (BPA note taker, Contractor, *recording only*)

Snohomish PUD – Mike Shapley, Ryan Ziegler

Douglas Co. PUD – Andrew Gingerich

EKI – Eve James

TMT – June 4, 2025

AVA – Patrick Maher, Mike Dillon,

PGE – Phil DeVol

FPC – Noah Campbell, Erin Cooper

Energy EPS – Joshua Rassmussen

Chelan PUD – Lance Beyer, Jay Fintz, Carl Bertilson

NPCC – Kate Self

Clearing Up – K.C. Mehaffey

Unaffiliated – Kenneth Curtis, Travis Togo, Shea Frantz, Miguel Verduzco, Mike Buchko, Melissa Schlichting