

COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

January 8, 2025

DRAFT 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://pweb.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 December 18, pending a final review by Charles Morrill, WA.

Official Water Supply Forecasts – Chris Runyan, Reclamation, reported the official January water supply forecast for Hungry Horse Dam (HGH). He noted that NRCS' snowpack summary in the south fork of the Flathead Basin is 125% of average, although there is varied distribution across the basin; 75% in the east and 100% in the southern end. Water YTD precipitation in the basin has been around average, at 103%; inflow YTD at 62%.

January through July was 2,050 kaf, or 92% of average; April through August was 1,908 kaf, or 93% of average; May through July was 1,557 kaf, or 94% of average; May through September was 1,675 kaf, or 94% of average. Chris reminded the group that the April through August volume sets the minimum flows at Columbia Falls, which has been increased to 3,500 cfs; 900 cfs directly below the dam. Final minimums for the year will be set in March. The forecasted end of April forebay elevation is around 3,525 feet.

Doug Baus, Corps, reported the January water supply forecasts for Corps of Engineers projects:

- **The Dalles (TDA):** NWRFC April to August volume forecast is 79 maf, or 89% of average.
- **Lower Granite (LWG):** NWRFC April to July volume forecast is 18 maf, or 90% of average.
- **Libby (LIB):** Corps runoff forecast April to August is 5,871 kaf, or 97% of average.
- **Dworshak (DWR):** NWRFC April to July volume forecast is 2,154 kaf, or 87% of average.

Chum Operation – Doug Baus, Corps, provided an overview of the current conditions and forecasts for chum. The incubation phase (coordinated by TMT on December 18) began on December 19 and will continue until the transition to spring spill at Bonneville Dam (BON) on April 10, unless otherwise coordinated by TMT. Further details can be found posted on the TMT website.

The BON tailwater elevation on January 8 at 0700 hours was 15.1 feet (above the minimum of 11.3 feet). The RFC inflow forecast over the next 10-days shows a high of 164 kcfs on January 9 and a low of 131 kcfs on January 12. Tony Norris, BPA, reported no indication of any issues in maintaining chum through emergence. Chris noted that storage at Grand Coulee Dam (GCL) is at 113% of average for this time of year.

Kelsey Swieca, NOAA, added that the chum operation transitioned into the incubation phase on December 19 after WDFW notified NOAA that field crews had determined spawning was complete in the Ives/Pierce Complex. Since then, no chum have been observed at BON or the Ives/Pierce Complex. Finally, Charles reported that 24 surveys were conducted between December 17 and January 4; from WA's perspective, the transition timing was appropriate, and the operation did not have an impact on the few chum left. He will provide escapement estimates likely sometime in June.

Operations Review – Reservoirs: Chris reported on Reclamation projects:

- **HGH:** the project received between 1-2 inches of precipitation in the last week and may get another inch over the next 10-days, although forecasts look dry. The 3-day average inflow was 0.59 kfs, inflows for the last week were 73% of average. Yesterday's outflows were 2.7 kcfs and midnight elevation was 3,523.98 feet (just over 36 feet from full). The project continues to draft, about 1.3 feet since last week, and storage is about 99% of average for this time of year. HGH continues to meet the minimum flows at Columbia Falls, 3.54 kcfs yesterday. Chris noted again that the minimum flow requirements have been revised to 3.5 at Columbia Falls and 0.9 below the dam, HGH will continue to meet these requirements over the next couple months unless there is a need to draft for FRM.
- **GCL:** inflows yesterday were 85.2 kcfs, and 83% of average last week. Outflows were 73.9 kcfs with a midnight elevation of 1,286.4 feet (3.6 feet from full). The project has refilled 0.6 feet since last week and storage is 113% of average for this time of year. GCL will conserve storage while meeting chum incubation requirements.

Alexis Mills, Corps, reported on Corps of Engineers projects:

- **LIB:** midnight elevation was 2,413.8 feet, with inflows of 1.2 kcfs (last week closer to 3 kcfs) and minimum outflows of 4 kcfs. The end of January FRM draft requirement of 2,411.5 feet.
- **Albeni Falls (ALF):** midnight elevation was 2,052.8 feet, with inflows of 18 kcfs and outflows of 8 kcfs. Flexible winter power operations are ongoing, and the reservoir is filling.
- **DWR:** midnight elevation was 1,522.6 feet, with inflows of 4 kcfs and outflows of 1.8 of kcfs. The project is expected to remain on minimums through January.
- **LWG:** midnight elevation was 736.9 feet, with inflows of 36 kcfs, and outflows of 36 kcfs; generally passing inflow.
- **McNary (MCN):** midnight elevation was 338.7 feet, with inflows of 134 kcfs and outflows of 130 kcfs.
- **BON:** midnight elevation was 74 feet, with inflows yesterday of 163 kcfs and current outflows of 154 kcfs; the tailwater has been averaging about 15 feet for the past few days.

Water Quality: Dan Turner, Corps, reported that TDG values are all very low and below criteria; there is no spill on the system. He noted that Oregon DEQ modified their WQS for TDG. This process happens about every 5 years to allow for planned spring and summer spill, the Corps will work with ODEQ heading into March.

Fish: Kelsey reported on adult counts for BON: 60 steelhead have passed since start of year. In response to her query on monitoring counts at Ice Harbor Dam (IHR), Chris Peery, Corps, clarified that the posted years are off, and video counts at IHR will occur March 1-31, with normal visual counts through the season; video counts at IHR will occur next winter November 2025 through February 2026.

Dave Swank, USFWS, had nothing to report on lamprey. Charles provided a link to NRCS' [Snow Water Equivalents](#) in the meeting chat.

Power System: Tony reported reasonable mild temperatures and a reasonable amount of water in the river.

Questions or Comments from Non-TMT Members – Erin Cooper, FPC, requested information on the Corps' Portland District ladder dewatering schedule; Doug will connect her offline to the new Chief of Fisheries for Portland District, Nick Bertrand.

**The next scheduled TMT meeting is on January 22, 2025, at 9:00 AM.
A DS Consulting Process Meeting will follow the TMT Business Meeting.**

**Columbia River Regional Forum
Technical Management Team
DRAFT OFFICIAL MINUTES
Wednesday, January 8, 2024**

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

Today's TMT meeting was held via conference call and webinar, 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. December 18 Summary and Minutes

- Charles Morrill said that he had looked at the notes but would need to go back and look at them to double check. He said that he would be able to do so ASAP after the meeting.
- Approved after Morrill's response.

2. Official Water Supply Forecast – Chris Runyan, BOR, and Doug Baus, Corps NWD

Reclamation

- Hungry Horse – January Final Forecast
 - Initial Notes:
 - Snowpack in the S. Fork of the Flathead basin today is reading >125% of median.
 - This is good to see but when looking at the S. Fork summary from NRFS it only uses two snow tails near the dam. Not the greatest thing to only look at.
 - On the Southern side of the basin there is average snow, 100% of median.
 - The Eastern side is below average, 75% of median.
 - Precipitation: 103% of median
 - HGH Inflow WYTD: 62% of average
 - January – July
 - 2050 kaf
 - 92% of average
 - Apr – Aug
 - 1908 kaf
 - 93% of average

- Set minimum flows for Columbia Falls.
- May – July
 - 1557 kaf
 - 94% of average
- May – September
 - 1675 kaf
 - 94% of average
- Minimum Flows Downstream of Hungry Horse
 - Columbia Falls
 - 3500 cfs
 - Bumped ~100 cfs from last month.
 - Below HGH
 - 900 cfs
 - Previously 710 cfs
 - Minimum flows will be updated in February, and then again in March the final will set the minimum flows for the rest of the year.
- Forecasted End of April Forebay
 - Elevation: 3520.5 ft

Corps

- The Dalles
 - April to August
 - 79 maf
 - 89% of average
- Lower Granite
 - April to July
 - 18 maf
 - 90% of average
- Libby
 - January Runoff Forecast
 - 5871 kaf
 - 87% average
- Dworshak
 - April to July
 - 2154 kaf

- 87% of average

3. Chum Operations - Tony Norris, BPA; Chris Runyan, BOR; Kelsey Swieca, NOAA; Charles Morrill, WA; Doug Baus, Corps-NWD

- TMT Coordinated Chum Incubation at the December 18 meeting
 - Incubation Start Date: December 19 @ 1:00 pm
 - Incubation End Date: April 9 @ midnight
 - Spring Spill @ BON: April 10
- a. Bonneville Dam (BON) – Hourly Data – *Baus*
- Tailwater Elevation (Hour 7): 15.1 feet
 - Above the minimum tailwater elevation of 11.3 feet.
- b. NWRFC – BON Inflow Forecast - *Baus*
- BON Inflow Forecasted:
 - High: 164 kcfs (January 9)
 - Low: 131 kcfs (January 12)
- c. BPA Update – *Norris*
- Not seeing any indication of any issues to maintain Chum through emergence.
- d. Reclamation Update – *Runyan*
- Runyan noted that this year is going well.
 - GCL Storage Level: >113% of average for this time of year.
- e. NOAA Chum Update – *Swieca*
- When we transitioned to the incubation phase, it occurred on December 19, after WDFW notified NOAA that their field crews determined that the spawning was complete in the Ives-Pierce Complex.
 - Since then, no Chum have been observed at BON or the Ives/Pierce Complex.
- f. TSW Internal Database - *Morrill*
- WDFW had 24 surveys conducted at the Ives/Piece Island Complex between December 17 – January 4.
 - Showed that the ending dates were prudent.
 - Hamilton and Hamilton Creek WDFW did see two live Chum on the December 30 Survey.

- All else is a zero.
- Morrill said that he thought that the timing was appropriate for the transition.
 - In his, and Ricky's, opinion the operation did not have any impact on the two Chum hanging on.
 - Morrill appreciated the operation and thanked TMT for the coordination and input provided. He said that we are done with the 2024 Chum return.
 - Morrill said that when he has the escapement estimates, he will provide those. They will probably not be available until June, when the escapement estimates are finalized.

g. TMT Coordinated Chum Operation – *December 18, 2024*

1. EFFECTIVE, DECEMBER (INSERT DATE HERE), 2024, AT 0001 HOURS, UNTIL FURTHER NOTICE, THE BONNEVILLE DAM MINIMUM TAILWATER ELEVATION IS 11.3 FEET DURING ALL HOURS.

4. Operations Review

a. Reservoirs

Reclamation – Chris Runyan

- Hungry Horse Dam
 - Conditions: Last week HGH received ~1 – 2” of precipitation.
 - Future Conditions: 10-Day shows dry conditions, but HGH may receive another inch or so.
 - Inflows (3-day average): 0.59 kcfs
 - Inflows Percent of Average (week): 73% of average
 - Outflows (January 7): 2.7 kcfs
 - Midnight elevation: 3523.98 feet
 - Feet from Full: ~36 feet
 - Drafted: 1.3 feet since last week.
 - Storage: 99% of average for this time of year
 - Operations: Continues to meet the minimum flows at Columbia Falls. Projections show to continue to meet the minimum flows over the next couple of months, outside of needing to draft for FRM (unlikely).
 - Columbia Falls (1/7): 3.54 kcfs
 - Minimum (Revised): 3.5 kcfs
 - Below the Dam (Revised): 0.9 kcfs
- Grand Coulee Dam
 - Inflows (1/7): 85.2 kcfs

- Percent of Normal: 83% of average
- Outflows: 73.9 kcfs
- Midnight elevation: 1286.4 feet
 - Feet from Full: 3.6 feet
 - Refilled: 0.6 feet since last week.
- Lake Roosevelt Storage: 113% of Average
- Operations: Continue to conserve water but also meet Chum incubation levels below BON.

Corps – Alexis Mills, Corps

- Libby Dam (Lake Koocanusa)
 - Midnight Elevation: 2413.8 feet
 - Inflows (1/7): 1.2 kcfs
 - Avg. Inflows (week): ~3 kcfs
 - Minimum Outflows: 4 kcfs
 - WSF
 - End of January FRM Draft Req: 2411.5 feet
- Albeni Falls (Lake Pend Oreille)
 - Midnight Elevation: 2052.8 feet
 - Inflows: 18 kcfs
 - Outflows: 8 kcfs
 - Operations: Flexible Winter Power Operations are ongoing, and the Reservoir is currently filling.
- Dworshak Dam
 - Midnight Elevation: 1522.6 feet
 - Inflows: 4 kcfs
 - Outflows: 1.8 kcfs
 - Operations: Project will likely remain at minimums for the remainder of January.
- Lower Granite Dam
 - Midnight Elevation: 736.9 feet
 - Inflows: 36 kcfs
 - Outflows: 36 kcfs
 - Operations: Generally passing inflow.
- McNary Dam
 - Midnight Elevation: 338.7 feet
 - Inflows: 134 kcfs

- Outflows: 130 kcfs
- Bonneville Dam
 - Midnight Forebay Elevation: 74 feet
 - Inflows: ~163 kcfs
 - Outflows: ~154 kcfs
 - Avg. Tailwater Elevation: ~15 feet
- b. Water Quality – *Dan Turner, Corps*
 - TDG
 - TDGs are all very low and well below any State criteria.
 - No spill on the system right now.
 - Oregon DEQ
 - Oregon DEQ modified the Water Quality Standard for Total Dissolved Gas, as expected and hoped for.
 - It is basically a continuation from years past, Oregon DEQ needs to go through a process every 5 years to modify the standard to allow for the planned Spring and Summer spill.
 - Not much different but there are some subtle differences for the Corps and Oregon DEQ to work through to make sure they are on the same page as we move into March and then Spring and Summer spill.
- c. Fish

Salmon – Kelsey Swieca, NOAA

- Adult Salmon Counts
 - Only have adult counts for Bonneville right now.
 - Bonneville (Lower Columbia):
 - Steelhead Total (2025):
 - Count: 60 Steelhead

Swieca asked because Chris Peery, Corps, was on the phone, in the hopes that he might provide insight. The calendar on the FPC fish monitoring site seemed to insinuate that we should be receiving IHR video monitoring counts as of January 1. She wanted to check if that was correct or not. She said that she does not seem to see that in the Fish Passage Plan there is a matching schedule.

Peery said that there is a little mistake there, they are getting the years off a little. They will do video counts starting in March at IHR, March 1 – March 31 and then they will do the normal, live counts through the year. Then they will have video counts again through the winter, November 2025 through February 2026.

Lamprey – Dave Swank, USFWS

- Nothing to report

SWE Link Information – Morrill

- Morrill shared that he had posted the link to the Snow Water Equivalents for the PNW, He said that when TMT talks about listening to what was provided to TMT by Runyan and others it is a wide variation. He said that he thought he would share because the West-side looks pretty wet but the farther East you go the dryer it appears. He said that for those of us that live on the West side and have seen nothing but rain, those on the East side have not necessarily.

| *Charles Morrill*

| *09:25*

| *Snow Water Equivalents ... link to:*

| *Charles Morrill*

| *09:25*

| [https://nwcc-](https://nwcc-apps.sc.egov.usda.gov/imap/#version=169&elements=&networks=!&states=!&counties=!&hucs=&minElevation=&maxElevation=&elementSelectType=any&activeOnly=true&activeForecastPointsOnly=true&hucLabels=false&hucIdLabels=false&hucParameterLabels=true&stationLabels=&overlays=&hucOverlays=&basinOpacity=75&basinNoDataOpacity=25&basemapOpacity=100&maskOpacity=0&mode=data&openSections=dataElement,parameter,date,basin,options,elements,location,networks&controlsOpen=true&popup=&popupMulti=&popupBasin=&base=esriNgwm&displayType=station&basinType=6&dataElement=WTEQ&depth=-8¶meter=PCTMED&frequency=DAILY&duration=1&customDuration=&dayPart=E&monthPart=E&forecastPubDay=1&forecastExceedance=50&useMixedPast=true&seqColor=1&divColor=7&scaleType=D&scaleMin=&scaleMax=&referencePeriodType=POR&referenceBegin=1991&referenceEnd=2020&minimumYears=20&hucAssociations=true&relativeDate=-1&lat=42.300&lon=-114.300&zoom=4.5)

[apps.sc.egov.usda.gov/imap/#version=169&elements=&networks=!&states=!&counties=!&hucs=&minElevation=&maxElevation=&elementSelectType=any&activeOnly=true&activeForecastPointsOnly=true&hucLabels=false&hucIdLabels=false&hucParameterLabels=true&stationLabels=&overlays=&hucOverlays=&basinOpacity=75&basinNoDataOpacity=25&basemapOpacity=100&maskOpacity=0&mode=data&openSections=dataElement,parameter,date,basin,options,elements,location,networks&controlsOpen=true&popup=&popupMulti=&popupBasin=&base=esriNgwm&displayType=station&basinType=6&dataElement=WTEQ&depth=-8¶meter=PCTMED&frequency=DAILY&duration=1&customDuration=&dayPart=E&monthPart=E&forecastPubDay=1&forecastExceedance=50&useMixedPast=true&seqColor=1&divColor=7&scaleType=D&scaleMin=&scaleMax=&referencePeriodType=POR&referenceBegin=1991&referenceEnd=2020&minimumYears=20&hucAssociations=true&relativeDate=-1&lat=42.300&lon=-114.300&zoom=4.5](https://nwcc-apps.sc.egov.usda.gov/imap/#version=169&elements=&networks=!&states=!&counties=!&hucs=&minElevation=&maxElevation=&elementSelectType=any&activeOnly=true&activeForecastPointsOnly=true&hucLabels=false&hucIdLabels=false&hucParameterLabels=true&stationLabels=&overlays=&hucOverlays=&basinOpacity=75&basinNoDataOpacity=25&basemapOpacity=100&maskOpacity=0&mode=data&openSections=dataElement,parameter,date,basin,options,elements,location,networks&controlsOpen=true&popup=&popupMulti=&popupBasin=&base=esriNgwm&displayType=station&basinType=6&dataElement=WTEQ&depth=-8¶meter=PCTMED&frequency=DAILY&duration=1&customDuration=&dayPart=E&monthPart=E&forecastPubDay=1&forecastExceedance=50&useMixedPast=true&seqColor=1&divColor=7&scaleType=D&scaleMin=&scaleMax=&referencePeriodType=POR&referenceBegin=1991&referenceEnd=2020&minimumYears=20&hucAssociations=true&relativeDate=-1&lat=42.300&lon=-114.300&zoom=4.5)

d. Power System – *Tony Norris, BPA*

- Reasonable temperatures lately with a reasonable amount of water in the river.

5. Questions from the Public

| *Erin Cooper 09:07*

| *Not a TMT agenda item, but if anyone can let me know when we can expect a Portland Idistrict ladder dewatering schedule, I'd appreciate it. ecooper@fpc.org*

Baus said that he does not track Portland District dewatering schedules. He said that he thought that the Corps' Chief of Fisheries of Portland District, Nick Bertrand, may be able to answer this request.

Lisa Wright, Corps, also noted that the ladder dewatering schedule is in the FPP. The Portland District Projects are December 1 and the specific date that they are actually dewatered, within the first few days of that, are typically sent out in the weekly reports, so that information should be out there.

Cooper asked if the weekly reports are available online.

Wright said they are posted on the FPOM website.

Cooper said if they are sent out and FPC does not receive them then they still do not know. She said that the problem is that because they host the adult count information online, they have people calling them and asking when the fish ladders are operating, which is not something that they can answer. She said that it is easy for Walla Walla because they post the dewatering schedule, it is updated every year on the FPOM website, but they do not get something like that from Portland.

Stranz asked if Baus was able to get Cooper Nick's contact information.

Baus said that he could do that.

6. Set agenda for next meeting – January 22, 2024

- a. Norris' presentation on Redd Elevations
- b. Official Water Supply Forecasts
- c. Chum Incubation Operations

Today's Attendees:

Agency	TMT Representative(s)
NOAA Fisheries	Kelsey Swieca (NMFS)
Oregon	Erick Van Dyke
Washington	Charles Morrill
Kootenai Tribe	
Confederated Tribes of Colville Reservation	Dennis Moore
Umatilla Tribe (CRITFC)	Tom Lorz, Pete McHugh
Yakama Nation	Keely Murdoch
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, Ben Hausmann

Other Attendees (non-TMT members):

COE – Dan Turner, Alexis Mills, Chris Peery, Elizabeth Holdren, Tiffany Stoeckig-Dixon, Jessika Solleder

Washington Ecology – Thomas Starkey

DS Consulting – Emily Stranz (Facilitator), Colby Mills

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

Clearing Up – K.C. Mehaffey

Columbia Basin Bulletin – Mike O'Bryant

EKI – Eve James

NPPC – Kate Self

Chelan PUD – Lance Beyer

Avista Utilities – Mike Dillon