

COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

October 19, 2022

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: <http://pweb.crohms.org/tmt/agendas/2022/>. 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 for the October 5 meeting.

Chum Operation – Doug Baus, Corps, reported on current conditions and coordination for the start of chum operations. Precipitation is on the way! The NWRFC forecasts for the next 10-days start dry on days 1 and 2, then on day 3 notable precipitation starts to pick up in the entire Columbia River Basin. Precipitation will continue throughout the remainder of the 10-day period. Forecasts show Bonneville with flows around 100 kfs by the end of the 10-day period. Doug noted that precipitation in the lower Columbia can often play a significant role in the chum operation. The 10-day QPF shows healthy volumes of precipitation throughout the entire basin, with an excess of 100%, and up to 125-150% of average precipitation, and values ranging from $\frac{3}{4}$ inch to 5 inches (up to 4 inches in the Cascades). While the 5-day QPF is lighter, it remains noteworthy. Climate forecasts for the 6-10-day and 8-14-day outlooks both show a probability of below average temperatures throughout the Columbia basin, and a probability of above average precipitation.

Tony Norris, BPA, reported the 10-day streamflow forecast for the Hood River shows a response to the incoming precipitation. He noted that this demonstrates a similar response should be seen in Hamilton Creek and Hamilton Springs. The forecasted 10 days of significant precipitation (especially on the west slope of the Cascades) typically produce good conditions for chum. Forecasted conditions within the immediate 14-day timeframe provide an opportunity for the chum operation to start as early as November 1, if TMT Members agree.

Kelsey Swieca, NOAA, reported 1 chum at Bonneville few weeks ago, although nothing in the past couple days and no chum yet in the below-Bonneville spawning surveys. Charles Morrill, WA, noted that the Ives area is not a good indicator of chum presence until the Bonneville tailwater is at 11.1-11.3 feet elevation. Typically, chum do not use the area at lower elevations. He noted that due to technical difficulties, an update on the Greys River is unavailable at this time. He will provide an update to the TMT when available.

Joel Fenolio, Reclamation, reported that the agency is fine to move ahead with the chum operation, despite few chum in the area currently. He noted that this year is a planned Grand Coulee drum gate maintenance year. Dave Swank, USFWS, added that releases seem to attract and stimulate chum spawning behavior, emphasizing it may not be appropriate to wait until there are large numbers present in Ives area before initiating operations.

Doug reviewed the proposed 2022/2023 TMT coordinated chum operation (as posted to the TMT website), and TMT Members provided feedback. Generally, fish managers were supportive of the proposed operation. Kirk Truscott, Confederated Tribes of the Colville Reservation, expressed caution around Grand Coulee Dam refill, noting that with current climate predictions he is comfortable, and

would like to continue to monitor conditions to avoid having to racket back flows out of Coulee to refill in April.

Based on positive TMT input, chum operations will begin on November 1 with the same operation as coordinated last year, operating Bonneville tailwater to the 11.3 ft (11.5 ft with buffer) tailwater minimum. Action Agencies will coordinate with the project and implement the operation. Coordination for the spawning phase will be from November through December, and will transition into the incubation phase from January through April 10, 2023 (or sooner, as coordinated by the TMT). TMT partners will continue to provide chum updates at TMT meetings throughout the operation.

Update on TDG – Dan Turner, Corps, provided an update on steelhead spill TDG. The Corps received clarification regarding Water Quality criteria from WA Ecology. On October 13 the Corps began implementing the 115% downstream forebay / 120% tailwater TDG criteria, and will continue to do so throughout the end of steelhead spill. Dan noted that only internal tracking has been updated, and the Corps' website should reflect the changes soon. Forebay gauges are not typically installed this time of year; TDG hasn't been above 115% in the tailwaters, so forebays are expected to be within criteria as well. In response to a query, Dan noted that the forebay gauges are expensive to operate, and so are not installed during periods when not needed.

Questions or Comments from Members of the Public – There were no questions or comments from members of the public.

The next scheduled TMT meeting is on November 2 at 9:00 AM.

**Columbia River Regional Forum
Technical Management Team
OFFICIAL MINUTES
Wednesday, October 19, 2022
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 Meeting Summaries & Minutes – 10/5

- Meeting Summaries and Minutes for the October 5 meeting were approved

Questions and Comments:

None

2. Chum Operation – Doug Baus, Corps; Joel Fenolio, BOR; Kelsey Swieca, NOAA Fisheries; Tony Norris, BPA

- a. Bonneville Dam – NW River Forecast Center (NWRFC) 10-day Inflow Forecast – *Doug Baus, Corps*
 - Next three days show a decrease in project inflows
 - Over 10 day
 - Inflows: 73 kcfs
 - End of 10-day: ~100 kcfs
- b. NWRFC 10-Day Weather Forecast – *Doug Baus, Corps*
 - Day 1 & 2 are forecasted as dry
 - Day 3 forecast precipitation picks up
 - Cascades: inch of precipitation forecasted
 - Precipitation plays a significant role in chum operation
 - Notable precipitation continues through the 10-day period
 - As it relates to the volume analysis as compared to average
 - 100 to 150% of average
 - In excess of 4 inches (3/4 in to 5 inches)
 - QPF 5-day analysis is lighter but still noteworthy

- c. NWRFC Climate Forecast – *Doug Baus, Corps*
 - Long-term temperatures show a probability of below average temperatures throughout the Columbia basin.
 - Precipitation shows a probability of above average.
 - The temperature and precipitation pattern persists in the 8-14 day outlook.
- d. Hood River – *Tony Norris, BPA*
 - 10-day streamflow forecast shows a good indication of response from the expected precipitation on the west slope of Cascades.
 - We can expect a similar response in Hamilton Creek and Hamilton Springs which have them flowing and ready for when chum arrive.
 - BPA believes that the chum operation can begin as early as November 1.
- e. Bonneville Dam Adult Salmon Counts – *Kelsey Swieca, NOAA Fisheries*
 - 1 chum was seen a few weeks ago
 - Not any in the past couple of days
- f. Chum Salmon Spawning Ground Surveys – *Kelsey Swieca, NOAA Fisheries*
 - No chum yet

Questions and Comments:

Charlie Morrill, Washington, also added that this is typical chum behavior and there will likely not be much of a presence until the November 1-3 timeframe. He is happy to hear the outlook and the amounts of expected precipitation.

- g. 2021/2022 TMT Coordinated Chum Operation
- h. Gray's river – *Charlie Morrill, WDFW*
 - Morrill explained that he had technical difficulties and has not been able to look at the data as of yet.
 - He will provide an email update when he has more information.
 - He suspects that there is no chum currently in Gray's river but with the upcoming precipitation it will encourage chum to come.

Questions and Comments:

Joel Fenolio, Reclamation, added that the perspective for BOR is the same as years past; they are okay with the operation beginning earlier than when the chum begin to show up because of the Grand Coulee drum gate maintenance scheduled for next year. Typical year they would prefer a pragmatic approach.

- i. BiOp

- According to the Biological Assessment and the BiOp, the Corps will coordinate the start of the chum operation beginning the first week of November, or when chum arrive.
- Action Agencies are comfortable with a tentative start date of November 1.
- The chum operation's steps 2-5 will be the same as the operation of last year as outflows increase.
- The Corps will start the operation at 0600 on November 1 and will operate the Bonneville tailwater in a range of 11.3-13.0 feet with the exceptions of necessary changes to manage higher outflow. Additional details associated with the steps taken to manage higher project outflows is posted to the agenda today.

Jonathan Ebel, FPAC Chair and IDFG, said that FPAC discussed the operation yesterday. He appreciates Corps detail of total volumes. Generally the fish managers are supportive of how the operation is right now.

Kirk Truscott, Colville, asked Fenolio what the date that the drum gate is scheduled for maintenance.

Fenolio responded that it is planned for the normal date of March 15.

Truscott asked if they plan to draft Grand Coulee to elevation at 1250 feet.

Fenolio responded that it is a maximum of 1255 feet with a five foot buffer.

Truscott believes that the forecast from a climate standpoint that there will not be an issue with elevations at Grand Coulee. He wants to make sure that with the drum gate maintenance that TMT operates collectively for drum gate, FRM, flows and power so that there is not a situation of decreasing flows to achieve refill in the last two weeks of April.

Dave Swank, USFWS, thinks that it is good there is rain. He takes exception of Fenolio's statement of waiting for release because chum show up after they note flow in the Ives area. He feels like if the flow is released the chum will come. There may not be a reason to wait, as a release will stimulate spawning.

Scott Bettin, BPA, said that it is the first week of November that the operation typically begins, that it is just fine-tuning. He believes the chum are around and they will start spawning quickly in November.

Fenolio said that he is not expecting large amounts of wait time but if there is drier trend for later in the year, they may look at day by day. He is not saying that there should not be an early release but that TMT might want to take a more pragmatic approach in drier years.

Swank agreed that TMT should always keep in mind Grand Coulee's water supply forecast but wants to add that chum's life cycle appears to cue into the release.

Morrill said that Truscott and he had talked previously and agreed refill is a key concern and priority. He hopes the water year continues to be strong throughout the season but if not he agrees that TMT will need to make adjustments as necessary.

Baus reminded the TMT the chum operation has two phases. Today we are coordinating the 1st phase which is the spawning phase that will occur November 1 through late December. The second phase will be the incubation operation that will start once the spawning phase ends and will end April 10 or sooner if coordinated with the TMT.

ACTION: Start Spawning Phase of the chum operation on November 1.

Stranz added that chum updates will continue on the Agenda.

3. Update on TDG – *Dan Turner, Corps-NWD*

- a. TDG Tracking Steelhead Spill
 - Received clarification on water quality from Washington Department of Ecology.
 - Implementing the 115% downstream forebays and 120% tailwater TDG criteria
 - Internal tracking has been updating correctly
 - There are not forebay gauges in operation at this time of year but there is a reasonable assumption that there is not an excess of TDG in the forebay as it is not exceeding 115% in the tailwater.
 - Began implementation on Friday October 13.
 - Continue to implement through steelhead spill.

Erick Van Dyke, OR, asked Turner whether it is a cost saving measure for removing gauges in the forebays.

Turner said that in years past, they have not had a forebay criteria outside of spring/summer spill and there was no need for the gauges. Gauges are expensive to operate and it is a cost saving to not have them in place during periods they do not need them.

4. Public Comments:

None

5. Set agenda for next meeting – **November 2, 2022**

- a. Chum Update
- b. Operation Review

Today's Attendees:

Agency	TMT Representative(s)
Army Corps of Engineers	Doug Baus (chair), Lisa Wright
Bonneville Power Administration	Tony Norris, Scott Bettin
Bureau of Reclamation	Joel Fenolio
NOAA Fisheries	Kelsey Swieca
US Fish & Wildlife Service	Dave Swank

Washington	Charles Morrill
Oregon	Erick Van Dyke
Idaho	Jonathan Ebel
Montana	Brian Marotz
Nez Perce Tribe	Jay Hesse
Umatilla Tribe/CRITFC	Tom Lorz
Colville Tribe	Kirk Truscott
Warm Springs Tribe	
Kootenai Tribe	
Spokane Tribe	

Other Attendees (non-TMT members):

Corps – Aaron Marshall, Alexis Mills, Elizabeth Holdren, Dan Turner, Ashlynn Tate, Scott St. John

DS Consulting – Emily Stranz (Facilitator), Colby Mills

BPA – Andrea Ausmus (note taker, Contractor with CorSource Technology Group)

Clearing Up – K.C. Mehaffey

Chelan PUD – Melissa Lesser, Jay Fintz

Energy Keepers – Eve James

Oregon DEQ – David Gruen, Marilyn Fonseca

Yakama Nations Fisheries – Tom Iverson

Puget Sound Energy – John Chandler