

COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

November 2, 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 will review the official minutes and facilitator's summary from October 19 at the next TMT meeting.

Chum Operation – Doug Baus, Corps, reported on the October 19 TMT coordinated chum operation which started on November 1 at 0600 hours. Currently, the operation is in step 2, which operates project outflow to provide a tailwater elevation in the range of 11.3-13.0 feet. The complete operational steps are the same as last year, and are posted to the TMT website.

On November 1, Bonneville Dam tailwater averaged of 11.4 feet, with average outflows of 127 kcfs. Today the project tailwater elevation ranged from 11.4 feet – 11.8 feet, with total outflow ranging from 122-133 kcfs. Doug reminded the TMT that there are 2 project tailwater elevation columns on the Corps website: the Tanner Creek gauge is used for the chum operation and is the far-right column.

The NWRFC inflow forecasts for the next 10-days starts with a low of 114 kcfs today, and a high of 134 kcfs on November 6. The 10-day forecast period shows a trend of cooling temperatures and precipitation. Kyle Dittmer, CRITFC noted that the significant precipitation starting on Friday is the first atmospheric river event (pineapple express) of the season. The NWRFC climate forecast for the 6–10-day outlook and the 8–14-day outlook are the same, with a probability of below average temperatures through the Columbia River basin, and a probability of above average precipitation.

Tony Norris, BPA noted the project has been hitting targets, and soon the response to precipitation should affect stream flows. Dave Swank, USFWS, noted that the Hamilton Creek gauge is not yet registering flows and Tony agreed to check on it while in the field later this week.

Kelsey Swieca, NOAA, reported a few chum per day have passed Bonneville over the past week, with 36 YTD. This is 3 times higher than last year and 233% of the 10-year average for the same date. No chum have been counted yet in the spawning surveys below-Bonneville. Charles Morrill, WA, anticipated that they will see chum this week as flows come up.

Operations Review – Reservoirs: Joel Fenolio, Reclamation, reported on Bureau of Reclamation projects:

- **Hungry Horse:** the project is drafting through the fall, and is currently experiencing drier stream flows. Midnight elevation was 3,543.2 feet and the project is operating to Columbia Falls minimums as there is still no word from USFS on the Kneif Creek culvert repair that requires a draft down to at least 3,520 feet.
- **Grand Coulee:** started operating to chum flows, midnight elevation was 1,286.8 feet with inflows in the 70,000 cfs range and releases between 101-102,000 cfs.

Lisa Wright, Corps, reported on Corps of Engineers projects:

- **Libby:** midnight elevation was 2,448 feet, with average inflows of 7.9 kcfs, and outflows of 7.7 kcfs;
- **Albeni Falls:** midnight elevation was 2,052.4 feet, with average inflows of 11.6 kcfs, and outflows of 23.1 kcfs;
- **Dworshak:** midnight elevation was 1,515.6 feet, with average inflows of 3 kcfs, and outflows of 1.7 kcfs;
- **Lower Granite:** average outflows of 15.7 kcfs;
- **McNary:** average outflows of 101.6 kcfs; and
- **Bonneville:** average outflows of 126.8 kcfs.

Water Quality: Dan Turner, Corps, reported that adult steelhead spill continues at the lower Snake River projects and McNary Dam. He noted some forced spill at Lower Monumental Dam this week due to a powerhouse outage, the forced spill has caused an increase of TDG to 123%.

Fish: Trevor Conder, NOAA, reported that sub-yearling fall Chinook are moving through Lower Granite and Little Goose in decent numbers, ranging from 100-700 per day. Some of these appear to be moving through Bonneville, although in lower numbers (100s).

Adult fall Chinook are moving through the system in double digits. Decent numbers of coho are moving through Bonneville, although it is late in the season. Steelhead are in the double digits. Trevor noted that McNary saw a large coho count on October 26/27, which appears to have been from a hold up below The Dalles Dam. An environmental factor likely triggered the 9,000 coho passing through The Dalles on October 23. This pulse of coho has been moving through a new project every couple of days, with Lower Granite peaking on October 31 with 1,336. Lower Granite is seeing steelhead pass at 500-1,000/day (abnormally high for this time) which is above the 10-year average. Trevor thought this was due to flows and temperatures shifting everything later this year.

For totals: spring / summer Chinook are trending up and are greater than last year and the 10-year average. Fall Chinook are similar to last year; low in the Columbia (indicative Hanford reach) and Snake, although higher than the 10-year average. Coho are lower than last year and greater than the 10-year average. Sockeye are 2-5 times higher than last year and the 10-year average, with over 2,000 passing in the Snake and over 700 making it to Redfish Lake. Steelhead seem to be the lagging species, with greater passage than last year although low relative to the 10-year average.

The NOAA Science Center finished their preliminary survival memo, and Trevor will report on it at the next TMT meeting. He confirmed these are preliminary numbers, and that a final memo, usually provided later in the December/January period, will include the not yet available PIT-tag information and avian detections.

Power System: Tony noted that temperatures are cooling off, coinciding with more energy use. There is more water in the mainstem Columbia with the chum operation.

Kyle Dittmer, CRITFC, reported that the fall season treaty fishery operation turned out well, with 100% compliance for the 1.5-foot range, and 94-95% for the 1-foot band. No incidents or accidents were reported during the season, and Kyle expressed gratitude for the efforts from BPA and Corps staff.

Questions and Comments from Non-TMT Members: There were no questions or comments from members of the public.

**The next scheduled TMT meeting is on November 16 at 9:00 AM.
A DS Consulting Process Meeting for TMT Members will follow the business meeting.**

**Columbia River Regional Forum
Technical Management Team
OFFICIAL MINUTES
Wednesday, November 2, 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 – 10/19

- Charles Morrill, WA, needed more time to look at the minutes.
- Check for approval at the next TMT meeting in two weeks.

Questions and Comments:

None

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

a. October 19, 2022 – TMT Coordinated Chum Operation

- Coordinated the start date
 - Effective on November 1, 2022 at 0600 hours
- Remaining steps 2-5 to manage increasing project outflows.
 - Currently at Step 2 – During all hours project outflow is operated to provide a tailwater elevation in the range of 11.3 – 13.0 feet.

b. Bonneville Dam – Inflow Forecast – Doug Baus, Corps

- Tuesday November 1, 2022

Reminder: Project Tailwater located at Tanner Creek (reported in the far right column of the hourly report website) is the column used for chum operations.

 - Hour ending 1 tailwater elevation: 9.9 feet.
 - As morning progressed, the tailwater elevation ramped up to begin the operation by 0600.
 - Average tailwater elevation: 11.4 feet
 - Average project outflows: 127 kcfs
- Wednesday November 2
 - Tailwater low: 11.4 feet (hour ending 7)

- Tailwater high: 11.7 feet (hour ending 1)
- Total Outflows: 122 – 133 kcfs
- RFC Inflow Forecast (Ten-Day)
 - Tailwater low: 114 kcfs (November 2)
 - Tailwater high: 134 kcfs (November 6)
- c. NWRFC 10-Day Weather Forecast – *Doug Baus, Corps*
 - Noteworthy events: Cooling temperatures in conjunction with precipitation
 - Days 1 and 2: Forecasted snow levels dropping.
 - Day 3: Significant precipitation in Cascades and west of Cascades – in excess of 2 inches. Snow levels expected to rise.
 - Day 4 and beyond: Forecasted snow levels are continuing to remain low.

Kyle Dittmer said the event coming in Friday is an atmospheric river event, pineapple express, and is the first of the season. We need the moisture but it will be messy on Friday.

- d. NWRFC Climate Forecast – *Doug Baus, Corps*
 - Probability of below average temperatures.
 - Probability of above average precipitation.

Dave Swank, US Fish and Wildlife, asked why the Hamilton Creek gauge is registering as dry if it is functioning properly.

Norris will let him know as he is heading out there tomorrow. He has a hard time believing the Halloween rains were not enough to allow it to flow. He said that the gauge might not be registering because there is not enough water. He is going out to the site tomorrow (11/3) to see what is happening.

- e. Bonneville Dam Adult Salmon Counts – *Kelsey Swieca, NOAA Fisheries*
 - A few chum per day at Bonneville
 - YTD total: 36
 - Three times higher than last year
 - 233% of ten-year average
- f. Chum Salmon Spawning Ground Surveys – *Kelsey Swieca, NOAA Fisheries*
 - No chum seen yet

Morrill expects they will see chum at the survey being done this week. He would be surprised if no chum are found at the survey with the flows coming up and passage over Bonneville.

3. Operations Review

a. Reservoirs

Reclamation – Joel Fenolio

- Hungry Horse Dam
 - Drafting through the fall. Seeing drier stream flows at the moment.
 - Midnight elevation of 3543.2 feet.
 - Operating at Columbia Falls minimums.
 - In a holding pattern until word from Forest Service about the Knieff Creek culvert repair.
- Grand Coulee Dam
 - Operating to chum below Bonneville
 - Midnight elevation of 1286.8 feet.
 - Inflows: 70 kcfs
 - Outflows: 102 kcfs

Corps – Lisa Wright

- Libby Dam
 - Midnight elevation of 2448 feet.
 - Inflows: 7.9 kcfs.
 - Outflows: 7.7 kcfs.
- Albeni Falls
 - Midnight elevation: 2052.4 feet.
 - Inflows: 11.6 kcfs.
 - Outflows: 23.1 kcfs.
- Dworshak Dam

- Midnight elevation: 1515.6 feet.
 - Inflows: 3 kcfs.
 - Outflows: 1.7 kcfs.
 - Lower Granite average outflows: 15.7 kcfs
 - McNary average outflows: 101.6 kcfs
 - Bonneville average outflows: 126.8 kcfs
- b. Water Quality – Dan Turner, Corps
- Adult steelhead spill continues at Lower Snake projects and McNary
 - Forced spill this week at Lower Monumental due to a powerhouse outage caused an increase in TDG (up to 123%)
- c. Fish – Trevor Condor, NOAA Fisheries
- Juveniles
 - No yearlings
 - Subyearlings are decent through Lower Granite and Little Goose – ranging from 100 – 700/day
 - Some subyearlings appear to be moving through Bonneville – lower numbers ranging around 50 – 260/day
 - Some juvenile Fall Chinook in the system
 - Adults
 - Bonneville
 - Fall Chinook
 - Still moving through system
 - Numbers in double digits
 - Coho
 - Still moving through late in the season
 - Steelhead
 - Numbers in double digits
 - McNary
 - Coho
 - Large Coho count on October 26 and October 27

- The fish appear to have been holding up at The Dalles.
- October 23: 9000 count day at The Dalles
- Pulse of Coho moving through project every few days
- Lower Granite
 - Coho
 - Pulse just now hitting
 - October 31 – 1336 Coho moving through system
 - Steelhead
 - 500-1000/day
 - Abnormally high
 - Above ten-year average
 - Probably from late nature of the year – everything has been shifted later than normal.
- General Updates and Totals
 - Spring/Summer Chinook
 - In many cases 2x greater than last year
 - Greater than ten-year average
 - Fall Chinook
 - Similar to last year
 - Low in Columbia, indicating the Hanford Reach
 - High in Snake for ten-year average
 - Coho
 - Little lower than last year
 - Greater than ten-year average
 - Sockeye
 - 2-5x last year
 - 2-5x ten-year average
 - 2000 passing the Snake River
 - Over 700 sockeye made it to Red Fish Lake
 - Steelhead

- Greater than last year
- Lower than 10 year
- Species lagging more than others – hope for rebound in the next few years.
- Survival Memo
 - Science Center has completed preliminary survival memo
 - Update at next TMT
 - Survivals are in general average

Tom Lorz, Umatilla Tribe/CRITFC, asked when the additional PIT-tag information would be added to the memo. The PIT-tag information from bird colonies just became available.

Condor responded that the Science Center generally provides a final memo in the December/January period. They plan to add in the avian detections on east Sand Island to determine their detection efficiencies and determine precision. The Science Center typically says that the numbers may not change much but this year they said it could change substantially. Condor wants to consider the memo preliminary for those estimates that go down to Bonneville.

Lorz appreciates this because in looking at the PIT numbers there were twice that in the avian colonies to the PIT trawls.

Jonathan Ebel, ID, asked if the Science Center has produced the final report for last year.

Condor will check and send it on.

d. Power Report – Tony Norris, *BPA*

- Temps are cooling and people are using more energy
- Chum operations mean more water in mainstem Columbia

4. Fall Season Treaty Fisheries Operation Update – Kyle Dittmer, CRITFC

- Compliance range of 1.5-foot range: 100%
- Compliance range of 1-foot band: 94-95%
- Appreciation to Corps, BPA and RCC staff
- No accidents/deaths on river

5. Public Comments:

None

6. Set agenda for next meeting - November 16, 2022

- a. Update on Chum
- b. Update on NOAA Survival Memo
- c. Share photos from chum spawning field trip

Today's Attendees:

Agency	TMT Representative(s)
Army Corps of Engineers	Doug Baus (chair), Lisa Wright, Julie Ammann
Bonneville Power Administration	Tony Norris, Scott Bettin
Bureau of Reclamation	Joel Fenolio
NOAA Fisheries	Trevor Condor, 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	
Warm Springs Tribe	
Kootenai Tribe	
Spokane Tribe	

Other Attendees (non-TMT members):

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

BPA – Ben Haussmann

CRITFC – Kyle Dittmer

DS Consulting – Emily Stranz (Facilitator), Colby Mills

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

Columbia Basin Bulletin – Mike O'Bryant

Chelan PUD – Jay Fintz

Clearing Up – K.C. Mehaffey

Oregon DEQ – Marilyn Fonseca