

COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

November 6, 2019

DRAFT Facilitator's Summary

Facilitator: Emily Stranz; Notes: 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. These notes are not intended to be the "record" of the meeting, only a reminder for TMT members. Official minutes can be found on the TMT website: <http://www.nwdwc.usace.army.mil/tmt/agendas/2019/>.

Chum Operations

Doug Baus, Corps, began by reminding the group that the summary of the 2019 chum operation, coordinated at the October 30th TMT meeting is posted on the TMT website.

Bonneville Dam project tailwater elevation at 0100 hours was 11.3 feet. Yesterday, the tailwater ranged from a minimum of 11.3 to a maximum of 11.8 feet, averaging at 11.5 feet, with an average total outflow of 132 kcfs. Doug noted that when the chum operation started on November 6 at 0600 hours, Bonneville tailwater elevation was 11.4 feet, which was within the coordinated range of 11.3 – 13 feet. Scott Bettin, BPA, suggested that in future years TMT coordinate a 6-hour window for the operation start time, to allow for water travel time. Inflow forecasts at Bonneville Dam reflect more of the same patterns of low to no precipitation in the Lower Columbia River Basin.

The NWRFC 5 and 10 day forecasted precipitation summary shows the continued pattern of 25% or less and 25-50% of forecasted precipitation throughout the Columbia Basin observed since the October 23 TMT meeting. Today's precipitation summary with 10-days QPF forecasts 25% or less than average precipitation throughout the Columbia Basin with the exception of some localized above average forecasted precipitation in Northwestern Montana. The 5-day outlook shows predominantly 25%-50% of average forecasted precipitation throughout the Columbia Basin. The 8-10 day, as well as the 14-day, outlooks show above average temperatures and below average precipitation. The 30-day outlook shows predominantly above average temperatures with an equal chance of above or below average precipitation.

John Roche, BOR, reported that Grand Coulee Dam is drafting at 0.5-feet per day for chum operations. Currently project forebay elevation is at 1,284.6 feet. In response to the precipitation and inflow forecasts, the project anticipates a significant draft to protect the minimum elevation of 11.3 feet for chum. It is anticipated that maintaining the current operation through end of month will result in a project elevation of 1,271 feet by the end of November. John suggested that the TMT check-in on potential impacts on drafting below 1,275 feet and probability of meeting the April 10 elevation target next spring. Tony Norris, BPA, noted that high-pressure systems and east winds will also have an impact on Grand Coulee.

Charles Morrill, WA, reported that decisions are best made on a week-by-week basis, as only roughly 3-5 chum have been counted in the Ives Island area and survey results from this week have not been posted yet. He noted that Washington would prefer to maintain the minimum of

11.3 feet and remain as close as possible to that moving forward. Counts in the Ives area as of last Friday were no chum, 758 Chinook, and 45 Coho.

After deliberating, Salmon Managers decided to schedule a FPAC call to continue the conversation and to review additional survey results for a more accurate chum count.

- **ACTION:** FPAC will check-in on Thursday, November 7 at 4:00 PM to review additional survey results for chum counts, and determine whether they recommend a change in current operations.
- **ACTION:** A TMT call will be scheduled for Friday, November 8 at 9:00 AM to discuss FPAC results. Doug will notify the TMT if this meeting is cancelled. Until then, the operation will continue as coordinated at TMT on October 30.

The next scheduled TMT meeting is a conference call on November 8, 2019, at 9:00 AM.

This summary is respectfully submitted by the DS Consulting Facilitation Team. Suggested edits are welcome and can be sent to Colby at colby@dsconsult.co.

Columbia River Regional Forum
Technical Management Team OFFICIAL MINUTES
Wednesday, November 6, 2019
Minutes: Melissa Haskin, FLUX Resources

Today's TMT meeting was chaired by Doug Baus, Corps, and facilitated by Emily Stranz, DS Consulting. See the end of these minutes for a list of today's attendees. Copies of documents discussed and meeting minutes are available on the TMT website.

1. Chum Operation - Doug Baus, Corps NWD; Claire McGrath, NOAA Fisheries; Tony Norris, BPA

Doug Baus, Corps, reported on the chum operation that was coordinated last week at the October 30th TMT meeting and began on Monday, November 4, at 6:00am. A summary of the operation is posted to the agenda.

Baus reminded TMT that the tailwater elevation used for the chum operation is reported in the hourly data as "Project Tailwater Elevation" in the column on the right. There are two tailwater elevations reported for different locations and the chum operation manages to the Tanner Creek gauge data in that column. Tony Norris, BPA, explained that the Tanner Creek tailwater gauge is used for the chum operation because it is downstream of the last sheet pile of the navigation lock on the Oregon shore and is more representative of water surface elevation produced by the total discharge and is closest to Ives Island. The survey crew regularly confirms the accuracy of the gauge with their surveying equipment.

Baus reported on the hourly data at Bonneville Dam. As of 0100 this morning, the project tailwater elevation was 11.3 feet, which is the bottom of the range, and it has been above that since. Yesterday, the project tailwater elevation ranged from 11.3-11.8 feet and averaged 11.5 feet. Total outflow yesterday was 132 kcfs. On the first day of the operation, November 4, the hourly data show the operation beginning at 0600 with a tailwater elevation of 11.4 feet.

Scott Bettin, BPA, pointed out that the chum operation started at Grand Coulee the day before in order to make it to Bonneville Dam by 6am on Monday. He noted that it can be hard to hit an exact start time when releasing water from 350 miles upstream and proposed having a start time range in the future, preferably a 6-hour window. The timing is complicated by non-Federal projects that can store the water and by redd surveys at Vernita Bar that restrict flow.

Charles Morrill, WA, said that there a number of steps that can be taken to improve the start of the operation and make it easier for everyone involved. This should be a part of future discussions.

Baus reported that the RFC inflow forecast for Bonneville Dam is ~119-128 kcfs over the next 10 days. With no precipitation in the forecast, all of the water for the operation will be coming out of Grand Coulee so inflows will be fairly stable.

The 5- and 10-day precipitation forecasts are 25% of normal for the entire Columbia Basin, with the exception of northwestern Montana which is expected to receive some localized precipitation.

Norris added that typically, by this time of year, the Willamette is flowing well due to fall rain. However, it is tracking way below average.

The NWRFC 6-10 and 8-14 day climate forecasts show temperatures above average and precipitation below average – not very supportive of the chum operation. The 30-day forecast calls for an equal chance of normal, below normal or above normal precipitation with above average temperatures.

Due to the well below average precipitation conditions throughout the region, water for the chum tailwater will be coming out of Grand Coulee at about 0.5 foot draft per day.

John Roache, Reclamation, reported that the Grand Coulee forebay is currently at 1284.6 feet. With the low precipitation and inflow forecasts, they are looking at a significant draft in order to support the chum minimum tailwater elevation of 11.3 feet. The end of November elevation is on track to hit ~1,271 feet. Going below 1,275 feet will require a check in with the region because there could be potential impacts all the way into spring. The last time Grand Coulee was below 1,275 ft. at the end of November was 1988.

Norris added that if east winds develop near Bonneville Dam, it will increase the amount of water needed to maintain the minimum tailwater elevation.

Julie Ammann, Corps, asked TMT representatives if there should be a discussion about off-ramp options or if members would prefer to wait and hope conditions improve. Considering the likelihood of going below 1,275 feet at Grand Coulee and the impacts of that, when do salmon managers want to make a decision?

Morrill said that it will likely be a week-by-week discussion. They are a listed species so the intent is to provide spawning opportunities. He recognizes the risk to refill but is hopeful that the forecast will turn around. He said it would be WA's preference to stay at 11.3 ft. He is waiting on the report from yesterday's survey but it sounds like they only counted a few chum in the area. The survey last Friday, before the operation began, counted about 100 Chinook redds and 758 live Chinook in the Ives area, along with 40 Coho.

Claire McGrath, NOAA, said that her agency would be willing to have the hard conversation around lowering the tailwater now, especially because of the lack of precipitation in the forecast and the fact that not many chum are being observed right now. She said she did not have the full understanding from Reclamation about how unusual it would be to have this low of an elevation at the end of November. At FPAC yesterday, the takeaway was that this is exactly the reason not to have a prescribed start date for chum. With so many things in motion at once, a prescribed start date does not make sense. She said she will take this discussion back to FPAC.

Sheri Sears, Colville Tribe, was in favor of considering conservation of water for spring flows since the weather forecast throughout the month is dry.

TMT members discussed whether an elevation below 11.3 feet would make sense. Morrill asked how low of a tailwater should they be considering? Dave Swank, USFWS, proposed an FPAC caucus to discuss the issues and concerns. Tom Lorz, Umatilla, proposed waiting for the

information from the survey tomorrow (Thursday), then have an FPAC call to come up with a recommendation.

Norris added that at 10.5 feet, areas that Chinook target for spawning would be dewatered. So any redds that are currently there would be at risk.

Swank said there were fish spawning in the channel before the operation. Those would be ok at a lower elevation but an elevation of 10.5 ft. would dewater any areas of newer Chinook redds. He does not have a good sense of what elevation would protect those redds or how many are there.

Morrill replied that anything below 11.3 ft. would impact chum and Chinook. He asked BPA and the Corps what elevation they would be comfortable providing as an interim measure, given the outlook for precipitation and flows.

Norris said that aren't good correlations between refill in April and elevations in November and December. He said that he would expect some precipitation at some point in November or December. The question is when it will come. If the agencies were to pull back for a week and wait for chum to arrive, 10-15 kcfs could be saved per day, from a water management perspective. However, that would put redds that are already in the area at risk of being dewatered, he said. Chum have never delayed their arrival past mid-November so they should be in the area by mid- next week.

Morrill said that WA would stay firm in its decision to stay at 11.3 feet for the time being.

Baus noted that the forecasts were clear about the lack of precipitation when the decision was made to start this operation. He said that thinking long and hard about pushing out the start date could have helped this situation be avoided.

Norris noted that even if a decision came Friday, it would take a few days for the operation to be implemented and by that time chum would likely be in the area so it would not make sense to stop the operation following a Friday decision and then start it again next week.

An FPAC call was scheduled for Thursday at 4 p.m. followed by a TMT call on Friday at 9 a.m, if necessary. *[NOTE: after the FPAC call on Thursday, the salmon managers recommended maintaining the 11.3-ft minimum tailwater (no changes), so the Friday TMT call was cancelled.]*

2. Next TMT

The next meeting is face-to-face on November 20, 2019.

Today's Attendees:

Agency	TMT Representative
Army Corps of Engineers	Doug Baus (Chair), Lisa Wright, Julie Ammann
Bonneville Power Administration	Tony Norris, Scott Bettin
Bureau of Reclamation	John Roache
NOAA Fisheries	Claire McGrath
US Fish & Wildlife Service	Dave Swank
Washington	Charles Morrill

Agency	TMT Representative
Oregon	N/A
Idaho	N/A
Montana	N/A
Nez Perce Tribe	N/A
Umatilla Tribe/CRITFC	Tom Lorz
Colville Tribe	Sheri Sears
Warm Springs Tribe	Jen Graham
Kootenai Tribe	N/A
Spokane Tribe	N/A

Other Attendees (non-TMT members):

Army Corps of Engineers – Jon Roberts, Steve Hall, Alexis Mills, Dan Turner, Aaron Marshall
DS Consulting – Emily Stranz (Facilitator), Colby Mills
FLUX Resources – Melissa Haskin (Note taker)
Columbia Basin Bulletin – Mike O’Bryant
Clearing Up – K.C. Mehaffey
Northwest Power and Conservation Council – Leslie Bach