

COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

December 06, 2017

DRAFT Facilitator's Summary

Facilitator: Emily Stranz; Notes: Charles Wiggins, 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.nwd-wc.usace.army.mil/tmt/agendas/2017/>

Dworshak Update

Steve Hall, Corps, reported on operations at Dworshak. The current elevation is 1,525 feet, with 3 kcfs inflow and 4.8 kcfs discharge. Dworshak is drafting from a high pool of about 1,526 feet, due to an inflow event that brought the pool to 1,526 feet. Inflows are expected to drop to 2 kcfs by December 16. The Corps plans to continue with the current operation until the pool reaches 1,520-21 feet, and then adjust discharge as necessary to achieve 1,520 feet elevation at the end of December.

Steve said this operation was prudent for now, based off of the unofficial water supply forecast which is 3.1 MAF (129% of normal). However, he noted that weather forecasts call for a dry December because of a major blocking ridge offshore. The Climate Prediction Center also shows a drier pattern until the end of the year, with wetter conditions afterwards.

Chum Operations

Paul Wagner, NOAA, reported on chum. There are spawning fish in the Ives/Pierce Island complex, following the usual timing pattern with a peak towards the end of November. There were 100 fish observed in the area on November 28. Bonneville has seen 21 chum pass so far this year. Tony Norris, BPA, noted that they were out surveying last week and saw both chum and stellar sea lions. Project tailwater elevation is at 12.1 feet, which is well below the top of the island (there was not water flowing into the pocket on top of the island). Paul noted that the region will continue to monitor the situation and Salmon Managers will prepare for a discussion on the switch from spawning to incubation operations for the December 20th TMT meeting.

Doug Baus, Corps, reported that the Northwest River Forecast Center's Water Precipitation Summary for the Columbia River mainstem above The Dalles is 107% of normal, and the Snake Clearwater Basin is at 112% of normal. However, the monthly results show that these averages are somewhat misleading, as October and November were quite wet, and December is much drier in both the Columbia River mainstem and Clearwater Basin. In regards to the climate forecasts, the 6-10, 8-14, and 30-day predictions all show the same trend of above average temperatures and below average precipitation.

Zero Nighttime Generation on the Lower Snake River Projects

Tony Norris, BPA, and Paul Wagner, NOAA, discussed the trigger for zero nighttime generation at the Lower Snake River projects. This year's triggers will be a three-day running average of fewer than 35 total steelhead and fewer than 10 wild steelhead. Current counts show 135 steelhead and 44 wild steelhead. If the triggers are realized between now and the next TMT meeting, Paul will email TMT members and will report back at the December 20 TMT meeting.

The TMT YER will take place on December 12 at the Columbia River Inter-Tribal Fish Commission. The next scheduled TMT meeting will be a face-to-face on Wednesday, December 20th.

**Columbia River Regional Forum
TECHNICAL MANAGEMENT TEAM OFFICIAL MINUTES**

December 6, 2017

Notes: Pat Vivian

1. Introduction

Representatives of Idaho, the Nez Perce and Umatilla tribes, Washington, NOAA, Oregon, BOR, BPA, the COE, BOR, USFWS, and others participated in today's TMT conference call chaired by Doug Baus, COE, and facilitated by Emily Stranz, DS Consulting.

2. Dworshak Operations Update

2a. Dworshak Dam Current Hourly Data. Dworshak is currently at elevation 1525 ft with inflows of 3 kcfs and discharges of 4.8 kcfs, Steve Hall, COE, reported. The reservoir is slowly drafting from a peak elevation of 1526 ft. Inflows are predicted to recede to about 2 kcfs by December 16.

Therefore, the COE plans to continue current discharges of 4.8 kcfs until the reservoir drafts to the 1520-1521 ft elevation range, then reduce discharges to attain 1520 ft elevation by end December, as TMT specified in SOR #2017-1 on November 22.

In response to a question from Russ Kiefer, Idaho, Hall said it's hard to tell whether the operation continues to be prudent because weather forecasts are uncertain. A very preliminary estimate puts the December water supply forecast at around 3.1 maf, which would be 129% of average. Under that scenario, the current operation would be prudent. However, a big change could be coming, with October and November being wetter than normal, to drier than normal conditions in December. The NOAA Climate Prediction Center website says the 1 month outlook is drier than normal, but the 3 month outlook is wetter than normal. So it could go either way.

Dworshak operations will continue as previously coordinated at TMT until there is a clear reason for change. TMT will revisit this topic at its next meeting on December 20.

2. Chum Operation

2a. Chum Salmon Spawning Ground Surveys. Wagner gave an update on chum surveying in the Ives Island area. There were 100 spawners on November 28 and none on December 1, which follows the typical pattern of peak spawning at this time of year. Recently BPA did a GPS survey of redds WDFW had marked and found that chum are currently active in the Ives and

Pierce Island area – and so, unfortunately, are Steller sea lions, Tony Norris said.

At last report, the BON tailwater elevation was in the 12.5 ft range. The next TMT meeting on December 20 will be an appropriate time to discuss transitioning from the chum spawning to incubation operation, which means setting a minimum tailwater elevation target below BON during all hours. Baus advised TMT to start thinking now about how to operate for chum incubation. Wagner advised the Action Agencies to be prepared for “Christmas chum” that have been seen spawning around Christmas time in previous years.

To date, the 12.5 ft tailwater elevation below Bonneville appears to be sufficient for chum spawning. Current project outflows are 118 kcfs.

2b. Bonneville Dam Adult Salmon Counts. The latest counts for various species are linked to today’s agenda.

2c. TMT Coordinated Chum Operation, November 1, 2017. This link on today’s agenda summarizes the chum operation to date as coordinated at TMT

2d. Bonneville Dam Current Hourly Data. Doug Baus reported. As measured on the Columbia River mainstem above The Dalles Dam, the 2018 water year (October 1, 2017 to date) observed precipitation is currently 107% of normal. Observed water year precipitation is 112% of normal on the Clearwater in the Snake River basin. However, a review of precipitation by month shows a wider range in variability in monthly precipitation. October observed precipitation in the Clearwater Basin was 123% of normal and November was 111% of normal, but December is currently 68% of normal and continued below average precipitation is in the forecast. Columbia River mainstem precipitation above TDA was 105% of normal in October and 113% of normal in November, but is currently 63% of normal in December and forecasted precipitation is below average.

2e. NWRFC Water Year Summary Tables. Water year seasonal precipitation is 90-120% of normal. December is trending below normal.

2f. NWRFC Climate Forecast. The 6-10 day, 8-14-day, and 30-day forecasts all show a likelihood of above-average temperatures and below-average precipitation.

These forecasts do not appear to put chum at risk over the next 10 days, Wagner noted. The next TMT meeting on December 20 will address the transition from chum spawning to maintaining a minimum tailwater elevation for chum incubation.

3. Zero Nighttime Generation on the Lower Snake River Projects

Every year at this time, NOAA establishes a trigger count for transitioning to zero nighttime generation on the lower Snake River. The trigger is based on the steelhead run this year, which is 69,000 steelhead combined and 11,741 wild steelhead to date. These counts set the trigger at fewer than 35 combined and 10 wild steelhead passing Lower Granite for three consecutive days, Wagner said.

Both criteria must be met, and the Action Agencies typically use the same three consecutive days as a basis for establishing that the steelhead run is indeed over. On December 3, 44 wild steelhead and 136 combined wild and hatchery steelhead passed Lower Granite, so it's not time yet to transition to zero nighttime generation.

It's possible the trigger will be met before TMT reconvenes on December 20. If that happens, NOAA will send out an email notifying TMT members, as in past years.

4. Next TMT Meeting

The next regular TMT meeting will be on December 20. The TMT year-end review for 2017 will take place at CRITFC's offices in Portland on December 12.

Name	Affiliation
Russ Kiefer	Idaho
Jay Hesse	Nez Perce
Tom Lorz	CRITFC/Umatilla
Charles Morrill	Washington
Trevor Conder	NOAA
Erick Van Dyke	Oregon
John Roache	BOR
Tony Norris	BPA
Paul Wagner	NOAA
Doug Baus	COE
Julie Ammann	COE
Lisa Wright	COE
Steve Hall	COE
Scott Richardson	Snohomish PUD
Peter Cooper	BOR
Chris Runyan	BOR
Michael Bryant	CBB
Dan Turner	CEO
Charles Wiggins	DSC
Dave Swank	USFWS