

COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

October 25, 2017

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/>

Meeting Minutes and Facilitator's Summary Notes

TMT minutes and notes for the September 20 and October 4th TMT meetings were approved with no additional changes.

Chum Operation

Paul Wagner, NMFS, reported that as of October 5th there had not been any chum observed by WDFW crews in the Pierce/Ives area. Similarly, no chum have passed Bonneville. Chum have been observed in Grey's River as recent as October 21st. He noted that in the past the chum have been delayed by low water flows, which may be the case this year, as stream flows are low; however, it is too early to tell if the fish will arrive at Ives later than normal. Paul explained that at this point FPAC would like to hold off on starting the chum operation, as it would mean having to draft Grand Coulee significantly. The Salmon Managers would like to check in on the operation at next week's TMT meeting and at this point expect to start the operation no later than November 7th, unless there is a significant shift in conditions.

Doug Baus, Corps, reported that Bonneville Dam outflows are relatively low for this time of year. Although early in the season, water supply forecasts for The Dalles April-August and Lower Granite April-July water supply forecasts are 104% and 111% respectively (as measured with the 5-day QPF). Climate forecasts call for near normal temperatures and below average precipitation in the next 6-10 days, and below average temperature and precipitation in the next 8-14 days.

Bonneville tailwater elevation is currently 9.8ft and the Tanner Creek gauge (which the Chum operation targets) is 9.7ft. Outflows are 95.1kcfs. It was noted that Hamilton Creek is flowing as of the rain last weekend.

The group reviewed the original 2016 Chum operation, which is provided on the TMT website. The operation changed throughout the season with in-season management. Doug noted that it is the Corps' understanding that they will start with the original operation, with a start date of no later than November 7, unless otherwise coordinated through TMT. TMT will discuss the Chum operation at their November 1st meeting.

Draft Water Management Plan

Doug Baus, Corps, explained the process for comments on the Draft Water Management Plan. There will be two drafts. The first one was released on October 1. This draft is available on the TMT web site. TMT members can comment on this draft until October 31. Comments should be

emailed to: John Roache, BOR, Tony Norris and Scott Bettin, BPA, and Doug Baus, Corps.

The action agencies will review the comments and release the second draft by November 14. TMT members can comment on the second draft until November 20. The document will be finalized by January 1, 2018.

Operations Review

Reservoirs: Lori Postlethwait, BOR, reported on Bureau of Reclamation projects:

- Hungry Horse midnight elevation was 3,542.8ft., current inflows are 1,800cfs and discharge is 2,000 cfs. The project is operating for minimum flows at Columbia Falls.
- Grand Coulee midnight elevation was 1,286.5 ft.

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

- Libby midnight elevation was 2,441.9 ft., current inflows are 4.2 kcfs, and discharge is 4.2 kcfs.
- Albeni Falls midnight elevation was 2,055 ft.; current inflows are 18.1 kcfs and outflows are 27.1 kcfs.
- Dworshak midnight elevation was 1,518.8 ft.; inflows are 2.4 kcfs and discharge is 1.8 kcfs.
- Lower Granite average daily outflows were 22.1 kcfs.
- McNary average daily outflows were 94 kcfs.
- Bonneville average daily outflows were 114.7 kcfs

Fish: Paul reported on fish. Adult fall Chinook and steelhead passage is winding down for the season. He noted that at Bonneville, fall Chinook passage is at 60% of the 10-year average, jacks are at 43%, steelhead are at 35%, and wild steelhead are at 30% of the 10-year average. For Lower Granite fall Chinook passage is at 73% of the 10-year average, jacks are at 35%, steelhead are at 45%, and wild steelhead are at 30% of the 10-year average.

In regard to juveniles, passage picked up at Little Goose from a low in the 50s to around 100-200 per day, with Bonneville at 100 or less. Paul mentioned that monitoring continues through the end of October.

Power System: Tony Norris, BPA, walked the group through the power generation graph, noting that there was period of significant wind generation. He noted that despite the forecast for strong east winds, these winds will likely not impact power generation, as the winds are very localized and won't likely reach the turbines in the eastern gorge.

The next TMT meeting is currently scheduled for November 1st at 9:00 AM.

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

October 25, 2017

Minutes: Pat Vivian

1. Introduction

Representatives of NOAA, BPA, the COE, USFWS, Idaho, Washington, Montana, BOR, CRITFC, Oregon, and others participated in today's TMT meeting chaired by Doug Baus, COE, and facilitated by Emily Stranz, DS Consulting.

2. Review Meeting Minutes – September 20 and October 4

The minutes and facilitator's summaries for both meetings were approved as final.

3. Chum Operation

Paul Wagner reported on conditions relative to the 2017-18 Bonneville operation for chum spawning, which is typically implemented around November 1.

3a. Chum Salmon Spawning Ground Surveys 2017-18. As of October 5, WDFW surveyors had observed no chum spawners in the Ives Island area, although chum were observed at Grays River on October 21. In the past, Wagner recalled, the November 1 start date for chum flows has been delayed based on scarce water resources, which may be the case this year. Streamflows are low, and to get chum moving now, it would be necessary to draft Grand Coulee aggressively by 2/3 ft per day or more.

Therefore, NOAA didn't support starting chum flows on November 1. Charles Morrill, Washington, concurred with this advice. Monitoring of spawning grounds will continue, and TMT will revisit the start of the chum operation at its next meeting on November 1.

3b. Bonneville Dam Adult Salmon Counts. As of early this morning, Morrill reported, the adult chum salmon count at BON was zero.

3c. NWRFC Water Supply Forecast. BON outflows are low at present, but the NWRFC water supply forecast for TDA is near normal, Baus reported.

The water supply forecast for The Dalles (April-August) is 91 maf, 104% of average, and for Lower Granite (April-July), 22 maf, 111% of average.

3d. NWRFC Climate Forecast. The 6-10 day forecast generally shows cooler temperatures in northeastern Washington, with near normal temperatures in Oregon. Precipitation over the next 6-10 days is forecasted to be below average.

The 8-14 day outlook is for temperatures to be below average or near normal in Washington, Oregon, and Idaho. Precipitation is forecasted to be below average throughout the Northwest.

3e. Bonneville Dam Current Hourly Data. There are two tailwater elevation gauges (“tailwater elevation” and “project tailwater elevation”) reported on the Bonneville Dam hourly data website. For our TMT coordinated chum operation we use the “project tailwater elevation” value that is measured at the Tanner Creek gauge (located about 1 mile downstream of the dam on the Oregon shore) when coordinating the chum operation. At 0800 hours today, the BON project tailwater elevation was 9.7 ft with 95.1 kcfs total outflow.

3f. Summary of 2016-17 Chum Operation. For those who want detailed information on last year’s chum operation, pages 45-52 of the Water Management Plan seasonal update are linked to today’s agenda.

TMT will coordinate the start date for the chum operation at its next meeting on November 1. Tony Norris, BPA, asked whether the start date for the chum operation could be narrowed down to November 7 for the sake of water management planning. Wagner said it should start no later than November 7 and possibly earlier, and Morrill agreed.

3g. 2017 Chum Operation. At this time the Action Agencies are planning on implementing the following operation based on the start of last year’s chum operation. If the TMT would like a different operation then we need to coordinate a different operation.

- Effective no later than November 7, at 0600 hours operate the Bonneville Dam tailwater in the following order of operating ranges as project outflow increases.
- During all hours, operate project outflow to provide a tailwater elevation in the range of 11.5 to 13.0 feet.
- Then, if necessary to increase project outflow the tailwater may be operated up to 16.5 feet during nighttime hours (1700-0600). Concentrate the highest elevations around 2400 hours.
- Then, if necessary to increase project outflow, the tailwater may be operated up to 18.5 feet during nighttime hours (1700-0600).

- Then, if increasing river flows precludes the ability to manage tailwater elevations, within the steps above, operate to provide a tailwater range of 13.0-16.5 feet during daytime hours (0600-1700) and up to the maximum within project 24-hour ramp rate limits during nighttime hours (1700-0600).

Tony Norris recalled that last year, the final step was exceeded by heavy inflows. Dave Swank, USFWS, recalled that the definition of nighttime hours had to be revised. At this time the plan will be to implement the chum operation above but the TMT will check in on the operation at the next TMT meeting on November 1 to see if any adjustments may be necessary.

4. Water Management Plan

The 2018 Water Management Plan is on track for finalization by January 1, 2018. The first draft is posted to the TMT website for review, along with comments received to date. Comments to the COE are due October 31. The next draft will be posted November 14 and finalized at the end of December.

5. Operations Review

5a. Reservoirs. Lori Postlethwait, BOR, and Lisa Wright, COE, reported. Hungry Horse is at 3542.8 ft elevation, releasing around 2,000 cfs to meet Columbia Falls minimum flow requirement of 3500 cfs. Inflows are currently around 1,800 cfs. Grand Coulee is at elevation 1286.5 ft.

Libby is at elevation 2441.9 ft, with inflows of 4.2 kcfs and discharges of 4.2 kcfs. Albeni Falls is at elevation 2055 ft with inflows of 18.1 kcfs and discharges of 27.1 kcfs. Dworshak is at elevation 1518.8 ft with inflows of 2.4 and discharges of 1.8 kcfs. Lower Granite inflows are 22.1 kcfs, McNary inflows are 94 kcfs, and Bonneville inflows are 114.7 kcfs.

5b. Fish. Paul Wagner reported.

Adults: The pace of migration is winding down. At Bonneville, total cumulative fall Chinook returns are 313,022, which is 60% of the 10 year average. Fall Chinook jack returns are 37,248, which is 43% of the 10 year average. Steelhead returns are 116,834, which is 35% of the 10 year average. Wild steelhead counts are 34,010, which is 30% of the 10 year average.

At Lower Granite total fall Chinook adult returns to date are 25,641, which is 73% of the 10 year average. Fall Chinook jack returns are 53,011 which 35% of the 10 year average. Steelhead counts are 69,320, which is 45%

of the 10 year average. Wild steelhead counts are 15,382, which is 33% of the 10 year average.

The total lamprey count at LGR to date is 346, more than have been seen in decades. The cumulative lamprey count this year at BON was phenomenal at 82,571 for day passage only.

Steelhead passage is late for both hatchery and wild stocks. Chinook are faring a bit better at 60% of the 10 year average – but even that return is considerably less than returns of previous years.

Juveniles: As passage season winds down, subyearling fall Chinook are the only species still passing Little Goose, up from 50 or so per day in September to a few hundred per day now. Monitoring of juvenile passage at Little Goose will stop at the end of October.

5c. Power System. There no news to report today. Tony Norris showed TMT a graph posted to BPA’s website that tracks its load balancing authority in real time.

6. Next TMT Meeting

TMT will meet next in a conference call November 1.

Name	Affiliation
Paul Wagner	NOAA
Scott Bettin	BPA
Tony Norris	BPA
Aaron Marshall	COE
Lisa Wright	COE
Michele Yuen	COE
Doug Baus	COE
Dave Swank	USFWS
Eric Chau	COE
Dan Turner	COE
Charles Wiggins	DSC

Phone:

Russ Kiefer	Idaho
Charles Morrill	Washington
Jay Hesse	Nez Perce
Jim Litchfield	Montana
Lori Postlethwait	BOR
Tom Lorz	CRITFC
Erick Van Dyke	Oregon
Megan Morris	DSC

Charles Pace
Michael Bryant
Laura Berg

CBB
Clearing Up