

COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

September 19, 2018

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.nwd-wc.usace.army.mil/tmt/agendas/2018/>

Review Meeting Minutes and Facilitator's Summary

Emily conducted a round of introductions for TMT members in the room and on the phone. The group approved the August 29 meeting minutes and summary.

**Kyle Dittmer was added to the participants list on the August 22 minutes*

Treaty Fishing - SOR 2018-C2

Kyle Dittmer, CRITFC, provided an update on Treaty fishing. CRITFC, on behalf of its represented tribes, has asked for an extension on the Treaty fishing. The actual start date will either be today, Wednesday the 19th, or Thursday the 20th. Fishing will continue through this Saturday the 22nd, and then finish for the season. He noted that diminishing fish run numbers have resulted in a shorter fishing season this fall. Kyle will let the Corps know of the start date as soon as possible. Doug Baus, Corps, confirmed that depending on the finalized start date, the Corps will make best efforts to implement the request as soon as reasonably possible.

Snake River Flow Augmentation

Joel Fenolio, BOR, presented on 2018 Upper Snake River flow augmentation. He summarized a total volume of 487 KAF flow augmentation between April 3 and August 31, which consisted of: 78 KAF from natural flows, 227 KAF from the Upper Snake above Milner between July 1-31, 120 KAF from the Payette system between June 15 – August 30, and 62 KAF from the Boise system between May 28 – June 22. A heavy rain event in June pushed out flow timing for the Upper Snake above Milner to July 1 – 31. Joel noted that the flow augmentation efforts aim to improve juvenile migration by pushing water through the system while juveniles are migrating.

2019 Draft Water Management Plan

Doug Baus, Corps, provided an update on the 2019 draft Water Management Plan, identified in the BiOp. The TMT members were encouraged to review Draft 1 when it becomes available on the website, on October 1. Doug noted that the TMT has until the end of October to submit comments on the first draft. Once all comments are submitted, a second draft will be posted in November. The two-draft process was implemented in past years in an effort to better coordinate legal and policy revisions, as well as TMT coordination before the final document is due on December 29.

There are elements in the current draft of the Water Management Plan that are reflective of older operative documents, specifically the current BiOps. Once the new BiOps are finalized they will be reflected in the plan, either before the end of this year or in the seasonal update next spring. The Corps views the Water Management Plan as a living document and prepares seasonal updates throughout the year, providing opportunities for comments and revisions. The group was encouraged to look at the updated Water Management Plan and provide comments, and review the seasonal update for 2018 once posted.

Operations Review

Reservoirs: Joel Fenolio, BOR, reported on Bureau of Reclamation projects:

- **Hungry Horse:** midnight elevation was 3, 551.5 feet, with forebay elevation on schedule to hit 10 feet from full at 3,550 feet by the end of September. He noted that operations are now at Columbia Falls minimums of 3,700 cfs and looking at an average of 2.7 kcfs outflow from Hungry Horse for October.

- **Grand Coulee:** midnight elevation was 1,281.3 feet, which is on track for reaching 1,283 feet by the end of September.

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

- **Libby:** midnight elevation was 2,442.3 feet, with average inflows of 4.7 kcfs, with outflows holding at the bull trout minimum of 6 kcfs;
- **Albeni Falls:** midnight elevation was 2,062.1 feet, with yesterday’s average inflows at 12.9 kcfs and outflows of 13.4 kcfs;
- **Dworshak:** midnight elevation was 1,521.9 feet, with yesterday’s average inflows at 0.8 kcfs and outflows of 4.6 kcfs;
- **Lower Granite:** yesterday’s average outflow was 22.4 kcfs;
- **McNary:** yesterday’s average outflow was 97.4 kcfs; and,
- **Bonneville:** yesterday’s average outflow was 90.7 kcfs.

Water Quality: Dan Turner, Corps, reported that forebay gauges are starting to be pulled for the season, and will be reinstalled next March for spill season. Generally, TDG is very low, near 100%, with the exception of Cascades Island gauge downstream of the Bonneville spillway that is seeing 110%. There is attraction flow spilled for BON spillway fish ladder entrances that is likely causing localized high TDGs.

Fish: Paul Wagner, NOAA, reported on fish. He provided the following adult passage data:

| Bonneville | of 10-year average | Ice Harbor | of 10-year average |
|--------------------------|--------------------|--------------------------|--------------------|
| Fall Chinook | 33% | Fall Chinook | 45% |
| Fall Chinook jacks | 33% | Fall Chinook jacks | 22% |
| Steelhead | 30% | Steelhead | 20% |
| Unclipped/wild steelhead | 30% | Unclipped/wild steelhead | 18% |
| Lamprey | 143% | | |

Russ Kiefer, ID, reported that sockeye are still coming in to the Salmon River Basin, but likely nearing the end of the run. The total trapped in the basin is 103, with 13 wild/natural. This is a lower return than recent years, in part due to the water chemistry issues at Springfield hatchery; the water chemistry issues have been addressed, so moving forward, return success will be more dependent on out-migration and ocean conditions. He noted that returns are not the lowest in the past 10 years, but 2018 is a lower year. Paul added that there was some confusion about why the sockeye weren’t converting from Ice Harbor to Lower Monumental. They determined there had been a misidentification of sockeye at Ice Harbor (counter was confusing “mini-jacks” for sockeye) and the numbers were adjusted lower accordingly.

Juvenile fall Chinook (subyearling) passage is nearing an end, at Lower Granite and Little Goose less than 100 are passing per day. The fish have stopped being transported at Little Goose Dam for the time being due to signs of disease and mortality.

Power System: Tony Norris, BPA, reported that operations are returning the Lower Snake projects to MOP after the release of the Dworshak augmentation volume. It is forecasted that the Dworshak elevation target (1,520 feet) will be reached on September 24 or 25, which is when all projects will then be returned to MOP range. However, Lower Granite will not be returned to MOP on the same schedule due adjustments for navigation safety.

Tony also reported on the impact of mild temperatures, low flows, low wind, and subsequent decrease in hydro-generation.

The next TMT meeting is a conference call on October 3, 2018, at 9:00am.

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

September 19, 2018

Minutes: Melissa Haskin, FLUX Resources

1. Introduction

Representatives of NOAA, Corps, MT, OR, ID, Nez Perce Tribe, BPA, Reclamation, USFWS, Colville Tribe, and others participated in today’s TMT meeting chaired by Doug Baus, Corps, and facilitated by Emily Stranz, DS Consulting. See the end of these minutes for a list of attendees.

2. Review of minutes

The 8/29 meeting summaries and minutes were approved with no additional changes. The 8/22 minutes will be revised to add Kyle Dittmer, CRITFC, to the attendee list.

3. Extension of Treaty Fishing, SOR 2018-C2

Kyle Dittmer, CRITFC, updated TMT members on SOR 2018-C2, which calls for operating the forebays at Bonneville, The Dalles, and John Day within a 1.5 ft operating range during the Treaty fishing period. Dittmer was not sure if the Tribes were requesting the extension to start today, Wednesday, September 19 or tomorrow, Thursday, September 20. The tribes will be fishing through Saturday, September 22. It will be a shorter season than normal.

Doug Baus, Corps, responded that the Corps will make best efforts to implement the SOR as requested when it’s received.

4. Upper Snake River Flow Augmentation Presentation

Joel Fenolio, Reclamation, presented on this season’s Upper Snake River Flow Augmentation. The flow augmentation volume for the Snake River in 2018 was 487 KAF. About 78 KAF were from natural flows and the Upper Snake above Milner contributed about 227 kaf, the Payette contributed 120 kaf, and the Boise contributed 62 kaf. “We tried to get the water out as early as possible after flood season,” he said. “That water would not have been in the system anyways. We’re supposed to get the water out between April 3 and August 31.”

The Upper Snake has 9 reservoirs and about 7 days of travel time, making it a complex system. This year was an unusual year in that in early June, Reclamation was operating to flood control. Then, in mid-June when the agency was transitioning away from flood control operations, a storm brought 4 inches of rain. This resulted in a delay of flow augmentation until July 1. This year, Reclamation released average flows of 3,500 cfs.

In the Boise system, water was released between May 28 and June 22. In the Payette, water was released from June 15 to Aug 30.

Dave Swank, USFWS, asked about the intent of flow augmentation from the Upper Snake. Fenolio responded that it's similar to the draft at Libby to push water through the system while the juveniles are out migrating.

5. 2019 Draft Water Management Plan

Doug Baus, Corps NWD, updated TMT on the 2019 Draft Water Management Plan. The first draft will be posted to the TMT website by October 1. Baus noted that the Corps will ask for comments and feedback by the end of October. The Corps will then post the second draft and call for any additional revisions with the intent that comments and revisions will be completed prior to the end of the year. This will help create a cushion for the Corps and TMT to complete all necessary revisions by the due date for the final draft, which is by the end of the year.

Some of the language in the current document regarding governing documents (BiOps, etc.) may contain outdated wording. "There are a lot of moving parts." Baus also reminded TMT that the Water Management Plan is a living document and that Seasonal Updates are posted 2-3 times per year. He also noted that the current Seasonal Update summarizing the 2018 water year will be posted shortly and that it is a good summary document for TMT members to review with all of the actions implemented as a result of TMT.

6. Operations Review

a. Reservoirs – Joel Fenolio, Reclamation, and Lisa Wright, Corps

Hungry Horse midnight elevation 3,051.5 ft, releasing 2.3 cfs.

Grand Coulee: midnight elevation 1,281.3 ft, slowly filling, targeting 1,283 ft at the end of month.

Libby: midnight elevation 2,442.3, inflows 4.7 kcfs, discharges 6.0 kcfs (bull trout minimum).

Albeni Falls: midnight elevation 2,062.1 ft, inflows 12.9 kcfs, outflows 13.4 kcfs.

Dworshak: midnight elevation 1,521.9 ft, inflows 0.8 kcfs, outflows 4.6 kcfs.

Lower Granite: outflows 22.4 kcfs.

McNary: outflows 97.4 kcfs.

Bonneville: outflows 90.7 kcfs.

b. Water Quality – Dan Turner, Corps

Spill season is over. Forebay gauges are starting to be pulled and will be reinstalled next March. This results in some missing data points in the online data. TDG is around 100% at most places, except Cascade Island, which is seeing exceedances of 110%. The attraction spill for the

fish ladders may be causing the high TDG. However, at Warrendale, TDG is fine. Turner said concern is low and that the gauge will be pulled soon.

Dave Swank, USFW, wondered why the forebay gauges were pulled this time of year. Turner responded that it is for financial purposes since the gauges require a lot of maintenance. They gauges must be regularly serviced when in place.

c. Fish – Paul Wagner, NOAA

Adults: Adult counts are down this year. The counts to date are:

Bonneville: fall Chinook 136,475, 33% of the 10-year average; jacks 19,305, 33% of the 10-year average; steelhead 85,799 (29,048 unclipped), 30% of the 10-year average; Lamprey 43,422, 143% of 10-year.

Ice Harbor: still early in the season for fall Chinook with a total of 12,074, 45% of 10-year average; jacks 1,892, or 22% of the 10-year average; steelhead 14,960, or 20% of the 10-year average (unclipped 3,748, which is 18% of the 10-year).

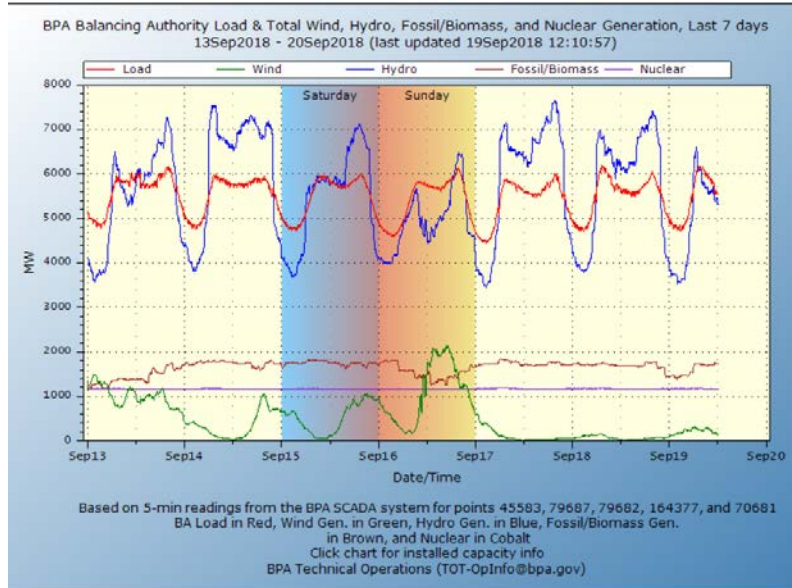
Russ Kiefer, ID, updated TMT on adult sockeye. So far there have been 103 trapped in the basin and 13 of those were natural. The season is nearing its end. Julie Ammann, Corps, asked how this year compares to the past. Kiefer said he could find out. He said the return has been lower than in recent years due to hatchery water chemistry issues, which should now be resolved. He said while it is a low return year, it is probably not the lowest in the last 10 years. Lisa Wright, Corps, asked how this year's conversion from Lower Granite to the trap compares to previous years. Kiefer responded the conversion rate is usually in the range of 40-70%. This year it's currently at the lower end of that range but there may still be fish migrating upstream so that number will hopefully increase.

Wagner also reported on adult Snake River sockeye conversion rates, which caused confusion earlier this year when counts at Ice Harbor were significantly higher than at Lower Monumental. It turns out that the reason was due to a miscounting issue at Ice Harbor. The counter was over-estimating the counts at Ice Harbor by classifying mini-jacks as sockeye. The actual count total for the year has been adjusted from 659 to closer to 370, which is more in line with upstream counts.

Juveniles: Fall Chinook juveniles have decreased to less than 100 per day at Lower Granite and Little Goose. In October, the numbers can pick up again substantially. Especially after a storm they can get the urge to move.

d. Power – Tony Norris, BPA

Temperatures are mild and streamflows are low so hydropower generation is down. The effects of the high pressure ridge can be seen in the resulting wind generation in the graph below. Typically, there is less wind when there is a high pressure ridge.



Norris also updated TMT on MOP operations, saying that BPA expects to return the Lower Snake pool to their MOP range coincident with Dworshak drafting to elevation 1,520 feet on about September 23. The only outlier is at Lower Granite where there are navigation constraints that raise the minimum pool elevation by 6 inches. Lower Granite will be very close to top of the MOP range.

5. Next TMT

The next TMT meeting is a conference call on October 3, 2018, at 9 a.m.

Today’s Attendees:

TMT Members:

| | |
|---------------------------------|--|
| Army Corps of Engineers | Doug Baus (Chair), Lisa Wright, Julie Ammann |
| Bonneville Power Administration | Tony Norris |
| Bureau of Reclamation | Joel Fenolio |
| NOAA Fisheries | Paul Wagner |
| US Fish & Wildlife Service | Dave Swank |
| Washington | N/A |
| Oregon | Erick Van Dyke |
| Idaho | Russ Kiefer |
| Montana | Jim Litchfield |
| Nez Perce Tribe | Jay Hesse |

| | |
|--------------------|-------------------|
| Umatilla Tribe | Tom Lorz (CRITFC) |
| Colville Tribe | Sheri Sears |
| Warm Springs Tribe | Jen Graham |
| Kootenai Tribe | N/A |
| Spokane Tribe | N/A |

Other Attendees (non-TMT members):

Corps – Alfredo Rodriguez, Amanda Morelos, Jon Roberts, Eric Hockersmith, Dan Turner, Aaron Marshall, Michelle Sanders

CRITFC – Kyle Dittmer

Clearing Up – K.C. Mehaffey

Public Power Council – Shane Scott

PGE – Ruth Burris

Public (no affiliation) – Charles Pace

DS Consulting – Emily Stranz (Facilitator), Colby Mills

FLUX Resources – Melissa Haskin (Notetaker)