

COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

August 15, 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://pweb.crohms.org/tmt/agendas/2018/>

Review Meeting Minutes and Facilitator's Summary

After several small changes, which will be incorporated, TMT approved minutes and summaries for its July 18, July 20, July 25, July 27, August 1, and August 8 meetings.

Dworshak Dam Operations

Steve Hall updated TMT on operations at Dworshak Dam. Currently the project is operating at 1,550 feet elevation, with 1 kcfs inflow and 10 kcfs outflow. TDG levels have been between 101-102% at the project tailrace, and under 98 % at the hatchery. Water temperatures in the Lower Granite tailrace were in the range of 68 degrees F. Discharge from Hells Canyon has recently decreased and is forecasted to reduce again this weekend. The ten-day weather forecast for Lewiston is for temperatures in the low to mid 90's; night time temperatures are getting down to 60 degrees F.

To reach the required 1,535-foot elevation by the end of August, average project outflows would need to be approximately 7.5 kcfs. The Corps plans to reduce outflow to 7.5 kcfs beginning at midnight tonight (12/16). It is expected that there will likely be water temperature exceedances at the Lower Granite tailrace by August 20, with temperatures above 68 degrees; however, the Corps is trying to carefully balance managing water temperatures at Lower Granite and the remaining Dworshak augmentation flow.

Jay Hesse, Nez Perce, noted that the Lower Granite adult trap stops collecting if water temperatures at the trap rise above 70 degrees. At this point, water temperatures are suitable for trap operations to continue; however, if the trap is closed, there may be interest in using some of the September Dworshak Board augmentation water to ensure that the hatchery can continue fall Chinook broodstock collection at the Lower Granite trap.

→ **ACTION: The Corps will decrease discharge at Dworshak to 7.5kcfs at 0000 hours on Thursday, August 16th.**

Ice Harbor Dam Operations

Aaron Marshall, Corps, provided information about operations at Ice Harbor Dam. On Friday, August 10th, the Corps increased the Ice Harbor pool operating range to MOP+0.5 to maintain navigation safety and access at the entrance to the Lower Monumental navigation lock (see the 2018 Summer Fish Operations Plan on page FOP-10 in section 4.6 Navigation Safety). This morning, the minimum operating pool range at Lower Monumental forebay was also increased to MOP+0.5 to maintain navigation safety. The Corps noted that they will continue to make incremental changes to MOP as necessary, however, being as the Snake River is currently

around 25-30 kcfs, they do not expect it to drop much lower and thus will likely not need to continue adjusting the reservoir elevations.

In other Ice Harbor news, Tony Norris, BPA, reported that although loads were quite high in the Tri-Cities last week, BPA was able to manage and did not need to increase generation at Ice Harbor Dam.

Spill Priority List

Dan Turner, Corps, shared the winter spill priority list, which will be implemented starting September 1. This defines spill priority order for lack of load spill. The list also reflects gas cap spill up to the state TDG standards. Input on the spill priority list can be provided to the Corps anytime throughout the season.

Operations Review

Reservoirs: Lisa Wright, Corps, reported on Corps projects:

- Libby -- elevation 2,446.6 ft., with 6.1 kcfs inflow and 9 kcfs outflow;
- Albeni Falls – elevation 2,062.3 ft., with 10.8 kcfs inflow and 10.3 kcfs outflow;
- Dworshak -- elevation 1,551.2 ft., with 0.9 kcfs inflow and 10.1 kcfs outflow;
- Lower Granite – average outflow was 30.9 kcfs;
- McNary – average outflow was 156.7 kcfs; and,
- Bonneville – average outflow was 138.6 kcfs

Peter Cooper, BOR, reported on Bureau of Reclamation projects:

- Hungry Horse – elevation 3,556.41 ft., with 900cfs inflow and 2.7 kcfs outflow (dropping to 2.5 kcfs tonight.), targeting 3,550 ft end of September;
- Grand Coulee – elevation 1,282.3 ft., targeting 1,279.6 ft end of August.

Fish: Paul Wagner, NOAA, reported on fish. He reviewed adult passage:

Bonneville	% of 10-year average	Lower Granite	% of 10-year average
fall Chinook	36	summer Chinook	42
fall Chinook jacks	32	summer Chinook jacks	12
steelhead	30	steelhead	40
unclipped steelhead	26	unclipped steelhead	33
sockeye	60	sockeye	25
lamprey	160		

Russ Kiefer, ID, reported that as of 8/13, 41 sockeye have been trapped in the Sawtooth Valley, 9 of which were wild/natural. Additionally, it was noted that some of the steelhead counted passing Lower Granite were actually overwintering steelhead from return year 2017; thus the large differential in the counts at Lower Granite and Little Goose.

Subyearling passage is nearing the end of the season, with fewer than 1,000/day passing Lower Granite, and hundreds/day at Little Goose and Lower Monumental. Bonneville, McNary and John Day are all on reduced sampling operations because of warm water temperatures.

Water Quality: Dan Turner, Corps, reported the Corps is continuing to implement summer spill operations and that all projects are operating below TDG caps. There will be Doble testing at the

Snake River projects soon, which is expected to increase spill. (*Note: for more information on Doble testing, see the 2018 Fish Passage Plan, Appendix A.*)

Power Supply: Tony Norris, BPA, reported that the BPA balancing authority lost 1,300 megawatts of wind energy and thus the amount of reserves that BPA needs to hold in order to balance those plants.

The next scheduled TMT meeting is a conference call on August 22, 2018, 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
August 15, 2018

Minutes: Melissa Haskin, FLUX Resources

1. Introduction

Representatives of NOAA, Corps, ID, OR, WA, MT, Nez Perce Tribe, Colville Tribe, Umatilla Tribe, BPA, USFWS, Reclamation, and others participated in today’s TMT meeting chaired by Doug Baus, Corps, and facilitated by Emily Stranz, DS Consulting. (See the last page for the list of attendees.)

2. Review Meeting Minutes – 7/18, 7/20, 7/25, 7/27, 8/1, and 8/8

TMT members reviewed and approved the meeting summaries and minutes for 7/18, 7/20, 7/25, 7/27, 8/1, and 8/8 following the edits identified below (**edits in bold**):

- 7/18 Official Minutes – Fish Update, first paragraph: “Adults: Sockeye at Bonneville are close to 190,000, which is about 60% **for season of the 10-year average**”.
- 7/20 Official Minutes – Adult Sockeye Passage, paragraph 5: “There’s little **PIT-tag** data to work with.”
- 8/1 Facilitator Summary –
 - Dworshak Dam Operations, last paragraph: “Tony Norris, BPA, reported that the cause of the recent outages at Dworshak has been identified as an incorrectly **calibrated-connected** sensor on a transformer.”
 - Little Goose Dam Operations, last paragraph: “Dave Swank, USFWS, offered a perspective that water temperatures in the fish ladders could be causing passage issues for **naturally produced** Snake River sockeye.”
 - Fish Update, last paragraph: “Due to water temperatures above 70 degrees F, **Lower Granite, Little Goose, Lower Monumental**, McNary, John Day, and Bonneville have all switched to reduced sampling protocol.
- 8/1 Official Minutes – Adult Sockeye Passage, second paragraph: “He is looking at temperature differentials in the fishways **and in the exit pools** at Lower Monumental and Little Goose as a more likely culprit that blocked fish passage.”
- 8/8 Official Minutes – Ice Harbor Generation, last sentence of first paragraph: “Umatilla, USFWS, and WA agreed that they were not happy about the potential cut in spill but understood that responding to any required increase in generation would be of shorter duration **that would any other operation than going above MOP.**”

3. Dworshak Dam Operations – Steve Hall, Corps

Steve Hall, Corps NWW, reported on operations at Dworshak Dam in Idaho. The forebay is currently sitting at 1,550.7 ft elevation, with outflows of 10 kcfs and inflows of 1 kcfs. TDG in the tailrace is 101-102% and below 100% at the downstream hatchery – around 98%. Yesterday, temperatures were in the high 67°F range in the Lower Granite tailrace, right now they are in the low 67°F range. Expect a rise in temperatures this afternoon, but overall things are not too terribly warm. There is a good layer of cool water still persisting.

Idaho Power backed off considerably last weekend and is running more of a “normal” operation. They are expected to back off again this weekend. Brownlee is at 2,056 ft elevation.

This week’s weather is forecast to be hot but not too bad in Lewiston, ID, with a weekend storm rolling in. Temperatures should drop fairly quickly through the weekend. The weather forecast says low 90s during the days and 60s overnight.

The most recent models show that the flat discharge to hit 1,535 ft by the end of August is 7.5 kcfs. There is still some uncertainty of what will happen next week following the storm. The drop to 7.5 kcfs puts the temperature at Lower Granite tailrace exceeding 68°F around August 20-21. The Corps may be able to increase Dworshak outflows a little on August 19 to stave off the rise in temperatures. Hall said the proposed course of action would be to drop flows to 7.5 kcfs at midnight tonight and carry that through the weekend with a possible change early next week.

Salmon managers commented, “It is what it is,” and “We just have to hope the rain will cool it off.”

Jay Hesse, Nez Perce, mentioned issues with trapping at Lower Granite. If water temperature at the trap exceeds 70°F, the tribe has to stop collecting fish for broodstock. He said at this point he thinks it will be fine but if the risk increases, he will be willing to have a conversation about tapping into the Dworshak 200 kaf reserve meant for September.

4. Ice Harbor – Aaron Marshall, Corps

Aaron Marshall, Corps, reported on operations at Ice Harbor. On Friday, August 10, the Corps increased the Ice Harbor forebay operating range to MOP+0.5 (437.5 to 438.5 ft) for navigation safety. Project data showed that the forebay this morning was at 438.29 ft and at Lower Monumental, the tailrace was 437.58 ft.

Additionally, the Corps made a similar adjustment at Lower Monumental this morning – increasing the forebay operating range to MOP+0.5 (537.5 to 538.5 ft). Currently the forebay is at 537 and will be raised to the MOP+0.5 range.

Lower Granite: outflows 30.9 kcfs.

McNary: outflows 156.7 kcfs.

Bonneville: outflows 138.6 kcfs.

b. Water Quality – Dan Turner, Corps

The Corps is spilling in accordance with the Summer FOP. TDG is under the gas cap. Doble testing is occurring on the Snake River so there will be increased spill. *[Note: for more information on Doble testing, see the 2018 Fish Passage Plan, Appendix A].*

c. Fish – Paul Wagner, NOAA

Adults

Bonneville: Chinook are now being counted as fall Chinook. Fall Chinook adults 3,664, 36% of the 10-year average; fall Chinook jacks 591, 32% of the 10-year average; steelhead 50,067 (21,000 unclipped), 30% of the 10-year average; sockeye 193,763, 60% of the 10-year average; Lamprey 40,130, 160% of 10-year. Last year was good up and down Pacific Coast for lamprey. It was a banner year. This year is good but not as strong as last year. Salmon managers are not sure why.

Lower Granite: no fall Chinook yet; summer Chinook adults 7,241, 42% of 10-year average; summer Chinook jacks 816, or 12% of the 10-year average; steelhead 6,040, or 40% of the 10-year average (unclipped 2,080, which is 33% of the 10-year); sockeye are almost done with 271, only 25% of the 10-year average.

Russ Kiefer, ID, noted that sockeye are appearing at the Redfish Lake trap. As of the August 13, the total trapped sockeye count was 41. None were wild/natural. Overall, conditions look good and fish look good, reported Kiefer.

Kiefer also noted that the Lower Granite adult steelhead counts include some overwintering fish from the 2017 adult return year.

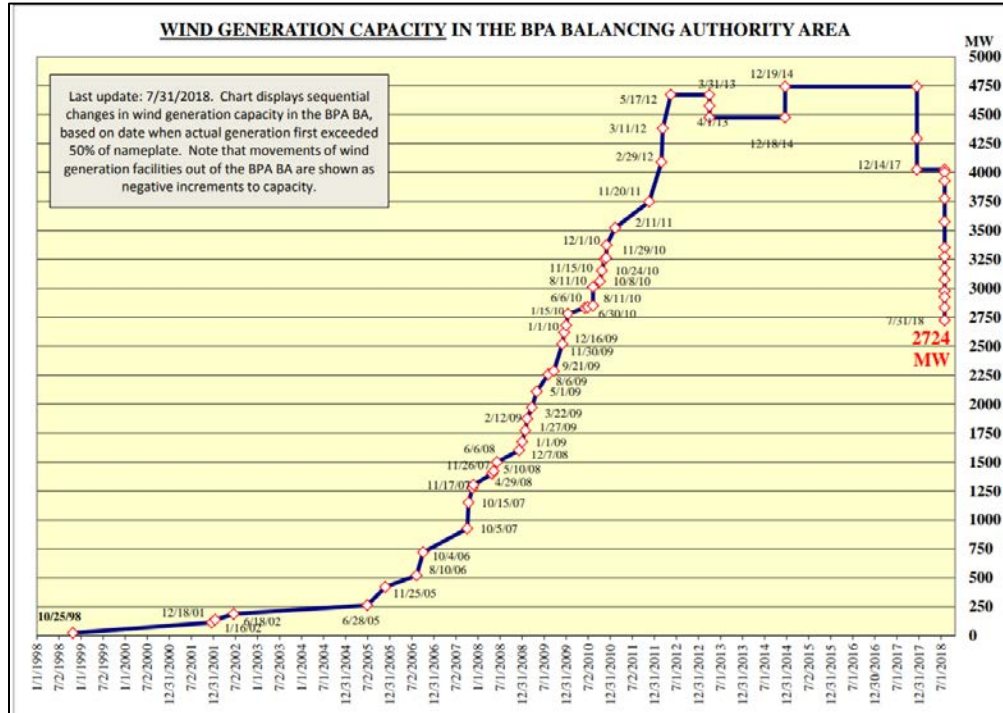
Charles Morrill, WA, noted that at yesterday's Compact Meeting, warm river temperatures at Bonneville were discussed (currently around 73°F, which is higher than the 10-year average). Also, TMT should expect an SOR from CRITFC on August 27, 2018.

Juveniles

Subyearling Chinook are nearing the end of their run. Counts at Lower Granite have been less than 1,000 per day for last 10 days and are also decreasing at Little Goose, Lower Monumental, John Day and McNary. All of the Columbia River projects are on reduced sampling because of increased water temperatures. The numbers should be "taken with a grain of salt" because of this.

d. Power – Tony Norris, BPA

As noted in the reports on BPA’s website, wind generation capacity in BPA’s Balancing Authority Area has dropped from 4,750 megawatts to 2,724 megawatts. This is the result of wind generators finding another Balancing Authority to balance their generation. This incrementally reduces the amount of reserves necessary for BPA to hold on their system.



8. Next TMT. The next TMT meeting is a conference call on August 22, 2018, at 9 a.m.

Today’s Attendees:

TMT Members:

Corps	Doug Baus (Chair), Julie Ammann, Lisa Wright
BPA	Tony Norris, Scott Bettin
Reclamation	Peter Cooper
NOAA Fisheries	Paul Wagner
US Fish & Wildlife	Dave Swank
Washington	Charles Morrill
Oregon	Erick Van Dyke
Idaho	Russ Kiefer
Montana	Jim Litchfield, Brian Marotz
Nez Perce Tribe	Jay Hesse
Umatilla Tribe	Tom Lorz
Colville Tribe	Sheri Sears
Warm Springs Tribe	N/A
Kootenai Tribe	N/A
Spokane Tribe	N/A

Other Attendees:

Corps – Dan Turner, Aaron Marshall, Steve Hall, Alfredo Rodriguez, John Heitstuman, Jonathan Roberts, Amanda Morelos, Ann Setter, Laura Hamilton, Steve Burrell, Michelle Yuen, Natalie Richards

Columbia Basin Bulletin – Mike O’Bryant

DS Consulting – Emily Stranz (Facilitator), Charles Wiggins, Colby Mills

FLUX Resources – Melissa Haskin (Notetaker)