

COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

July 15, 2020

DRAFT Facilitator’s Summary

Facilitator: Emily Stranz; Notes: Colby Mills

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/2020/>.

Review Meeting Minutes

TMT Members approved the official meeting minutes and facilitator’s summaries for the July 1 and July 8 meetings.

Juvenile Transportation

Dave Swank, USFWS, presented SOR 2020-4 (posted on the TMT website) which would change the juvenile transportation resumption date in the Snake River. The request is to resume transport, using trucks, at Lower Granite and Little Goose dams on August 1 (from August 15), and not resume transportation at Lower Monumental. Jay Hesse, Nez Perce, clarified that the SOR is specific to transport only and does not impact summer spill operations, which are still scheduled to change on August 15. Because this is a change to the Spill Agreement, if there is an objection and request to elevate from any of the Spill Agreement signatories, the SOR would have further discussion at the Spill Operations Work Group.

SOR signatories included: NOAA, USFWS, ID, WA, Nez Perce Tribe, Yakama Nation, Colville Tribes, and CRITFC. The remaining TMT members were polled on the SOR:

MT	No objection	OR	Objects, does not elevate
BPA	No objection	Spokane	Absent
BOR	Supports	Warm Springs	Absent
USACE	Supports		

Doug Baus, Corps, confirmed that the SOR will be implemented as written. The transport program is scheduled to resume at Lower Granite and Little Goose Dams, with collection starting at 0700 hours on August 1. Truck transport will occur every other day, starting in the morning on August 3, and will continue based on collection numbers.

BPA and BOR requested a copy of Oregon’s emailed SOR polling response.

→ **ACTION:** Doug will provide OR’s SOR response to BOR and BPA.

Dworshak Operations

Jon Roberts, Corps, reported on operations at Dworshak Dam. The project is currently at full powerhouse, discharging between 9.4-9.6 kcfs. Elevation is 5-feet down from full, at 1,595.19 feet, and the project continues to draft about 1-foot per day.

TDG is staying within a 2% range every day, and levels in the river remain under 100%; TDG levels at the hatchery have been under 100% for the last week.

The Snake River at Anatone is 66.85 degrees F. Temperatures have slowly climbed over the past 10 days and have remained steady over the last 2 days. Temperatures at Orofino have reflected the same pattern. The Lower Granite tailwater is currently between 65.5-66 degrees F. Temperatures in the Anatone and

Clearwater are forecasted to increase based on the NWRFC 10-day weather forecast. Highs remain in the 90s throughout the basin, with lows in the 50s and 60s in the next few days. The later part of the 10-day period is expected to be 90-degree F in the basin, and the project will watch closely to see if the heat wave intensifies by the end of the 10-day period. Nighttime temperatures are not cooling as much, so the Anatone and Clearwater natural river flows are expected to heat above 68 degrees F.

Proposed operations are to continue the powerhouse at maximum capacity of 9.5 kcfs; some heating in the Lower Granite pool is expected, and the tailwater will increase closer to 67 degrees F. If the heat wave intensifies, the project will move additional water above full powerhouse via spill, while not exceeding the 110% gas cap, to provide enough cool water to keep the Lower Granite tailwater below 68 degrees F. Adjustments will be made as necessary over the weekend.

Operations Review

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

- **Libby:** midnight elevation was 2,449.1 feet, with average inflows and outflows of 20.0 kcfs;
- **Albeni Falls:** midnight elevation was 2,062.2 feet, with average inflows of 29.3 kcfs, and outflows of 29.8 kcfs;
- **Dworshak:** midnight elevation was 1,595.4 feet, with average inflows of 2.3 kcfs, and outflows of 9.5 kcfs;
- **Lower Granite:** average outflows of 45.4 kcfs;
- **McNary:** average outflows of 247.6 kcfs; and
- **Bonneville:** average outflows of 236.1 kcfs.

Aaron Marshall, Corps, reported on forebay operations in the lower Snake River. Lower Granite transitioned to a 2-foot raised MOP operating range, for elevation between 735-736.5 feet on July 14. He clarified that this falls under the variable MOP operation when flows drop below 50 kcfs. Little Goose and Lower Monumental dams transitioned yesterday to a 1-foot raised MOP operating range, for elevations of 634-635.5 feet, and 538-539.5 feet, respectively. These adjustments are needed to maintain minimum depth for transportation and navigation safety at the upstream tailwaters. Ice Harbor remains in the normal MOP range, with elevation between 437-438.5 feet.

Treaty fishing in the lower Columbia River resumes this week, Monday through Thursday, at Bonneville, The Dalles, and John Day pools. Aaron asked CRITFC if they had any updates for further operations requests; they will let the Corps know by the end of today.

It was noted that the SOR distribution list needs to be updated. While the AAs are updating, FPC will utilize the existing list posted on the website for distribution of SORs.

- **ACTION:** Action Agencies will review the SOR distribution list posted on the TMT website, update if necessary, and submit the list back to FPC for future SORs.

In response to a question, Aaron clarified that spikes in the NWRFC Lower Granite inflow forecast reflect hydro-power operations out of the Hells Canyon complex. The Corps tries to simulate what the daily load shaping will look like, to anticipate potential variation of inflow (the current forecast displayed is typical during hot weather).

Eric Rothwell, BOR, reported on Bureau of Reclamation projects:

- **Hungry Horse:** midnight elevation of 3,558.35 feet, with outflows of 3 kcfs, and inflows of 4 kcfs.
- **Grand Coulee:** midnight elevation of 1,289.5 feet. Both projects will be targeting their end of summer flow augmentation elevations.

Water Quality: Dan Turner, Corps, reported that Chief Joseph was the only project above the gas cap of 110%, due to flows from Canada, as there is no spill at Grand Coulee or Chief Joseph. The McNary tailwater is right around the gas cap of 120%, and the Corps will continue to closely monitor. The project is currently in its 57% summer spill operation.

Fish: Claire McGrath, NOAA, reported low to moderate passage numbers for sub-yearling Chinook.

At Bonneville, adult summer Chinook YTD passage is 76,724, or 90% of the 10-year average; Jack YTD passage is 9,889, or 62% of the 10-year average; sockeye passage is decreasing with YTD passage of 330,367, or 110% of the 10-year average. Total steelhead YTD at Bonneville is 15,152, or 46% of the 10-year average; wild steelhead YTD is 8,447, or 55% of the 10-year average; shad are decreasing in the system with YTD at 6.2 mil, or 200% of the 10-year average.

At Lower Granite, summer Chinook are decreasing, with YTD passage at 5,450, or 43% of the 10-year average; jacks YTD is 1,600, or 38% of the 10-year average; sockeye YTD is 160, or 30% of the 10-year average; and total steelhead YTD is 2,559, or 29% of the 10-year average.

At Priest Rapids, sockeye YTD passage is 194,751, or 79% of the 10-year average; summer Chinook YTD is 45,782, or 108% of the 10-year average; total steelhead YTD is 310, or 39% of the 10-year average. The project continues to see a few days lag in reporting numbers and count from earlier in the year have been fixed.

Dave noted that lamprey counts are well below the 10-year average, and it should be a low year for returns. Many fish however, are using the Bonneville Lamprey Passage Systems (LPSs) that are not reflected in the counts. Chris Peery, USACE, shared that the Fish Passage Center has added day and night lamprey counts to their website. Additionally, Chris noted that based off a handful of PIT-tagged sockeye, there is no observed conversion issue between projects for Snake River sockeye.

Power System: Tony Norris, BPA, reported incoming warmer weather, and that wind has dropped off with high pressure system.

Questions and comments from members of the public: there were no questions or comments from members of the public.

The next scheduled TMT meeting is a conference call on July 22nd 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 DRAFT OFFICIAL MINUTES

Wednesday, July 15, 2020

Minutes: Melissa Haskin, BPA (contractor, FLUX Resources)

Today's TMT meeting was chaired by Doug Baus, Corps, and facilitated by Emily Stranz, DS Consulting, and was conducted via conference call and webinar. See the end of these minutes for a list of attendees.

1. Review of Meeting Minutes

The summaries and official meeting minutes for the July 1 and July 8 TMT meetings were approved with no additional edits.

2. Juvenile Transportation - David Swank, USFWS; Jay Hesse, Nez Perce; and Doug Baus, Corps

Dave Swank, USFWS, presented SOR 2020-4 - Juvenile Transportation Date Change, available on the TMT website. This SOR seeks to adjust juvenile transportation operations noted in the 2019 - 2021 Spill Operations Agreement and in the 2020 Fish Operation Plan. The SOR requests that juvenile transportation, using trucks, at Lower Granite and Little Goose dams resume on August 1, 2020 (start collections at 0700 August 1) instead of August 15. It also requests the suspension of summer transportation at Lower Monumental Dam in 2020. Signatories of the SOR include NOAA Fisheries, USFWS, ID, WA, Nez Perce Tribe, Yakama Nation, Colville Tribes, and the Columbia River Inter-Tribal Fish Commission. TMT members and Action Agencies not listed as signatories were polled. The poll results were as follows:

- MT – No objection
- OR – Object without elevation. OR was not present at the meeting and submitted their polling response via email to Baus and Stranz.
- BPA – No objection
- Corps – Support
- Reclamation – Support

Based on the polling responses, the Corps will implement the SOR. Collection will begin on August 1 at 0700 at Lower Granite and Little Goose dams and truck transportation will take place every other day based on collection numbers. At the earliest, the first truck departure from Lower Granite and Little Goose will be on August 3.

3. Dworshak Operations - Jon Roberts, Corps NWW

The Dworshak reservoir is 5 feet below full at 1,595.19 ft and drafting around 1 foot per day. The project is operating at full powerhouse, discharging 9.4 to 9.6 kcfs. TDG has been under 100% and fluctuating within a 2% range over the past week.

Water temperature in the Snake River at Anatone has increased the past few days and is currently 66.85°F. The tailwater at Lower Granite has been 66–66.5°F.

The 10-day weather forecast shows a heat wave with air temperatures in the high 90s throughout much of the basin into early next week with lows in the 50s and 60s. This will likely result in higher river temperatures.

Roberts shared the operational scenario based on the latest model results that shows the Corps' plan to keep discharge at 9 kcfs will result in the Lower Granite tailwater temperature climbing to 67-67.5°F, but staying below 68°F. If the heat wave intensifies at the end of the 10-day forecast, the Corps will move additional water via spill up to but not to exceed the 110% gas cap to provide cool water to allow Lower Granite to remain close to 68°F.

4. Operations Review

4a. Reservoirs – Eric Rothwell, Reclamation; Lisa Wright, Corps

Hungry Horse –Midnight elevation 3,558.35 ft. Inflows are ~ 4 kcfs.

Grand Coulee – Midnight elevation 1,289.5.

Libby Dam – Midnight elevation 2,449.1 ft., yesterday's average inflows and outflows 20 kcfs.

Albeni Falls – Midnight elevation 2,062.2 ft., inflows 29.3 kcfs and outflows 29.8 kcfs.

Dworshak Dam – Midnight elevation 1,595.4 ft., inflows 2.3 kcfs and outflows 9.5 kcfs.

Lower Granite – Yesterday's average outflows were 45.4 kcfs.

McNary Dam – Yesterday's average outflows were 247.6 kcfs.

Bonneville Dam – Yesterday's average outflows were 236.1 kcfs.

MOP Updates: Aaron Marshall, Corps, reported that the Lower Granite Minimum Operating Pool (MOP) range was raised by 2 feet to 735.0–736.5 feet on July 14 for navigation safety, per the variable MOP operation in the 2020 Fish Operations Plan.

Also on July 14, the Corps raised the MOP range at Lower Monumental and Little Goose by 1 ft, to 538.0–539.5 feet and 634.0–635.5 feet, respectively, for the purpose of navigation safety. Both projects will remain in the 1-foot raised MOP range for navigation safety until further notice.

Treaty fishing is scheduled for Monday through Thursday (7/13–7/16) in the Bonneville, The Dalles, and John Day pools. Tom Lorz, Umatilla Tribe/CRITFC, said he will have more information later today and will forward information on treaty fishing as he gets it.

4b. Water Quality – Dan Turner, Corps

Chief Joseph has been above the 110% gas cap. The Corps is monitoring the situation. The McNary tailrace has been right below the 120% gas cap with the summer spill operation of 57%.

4c. Fish – Claire McGrath, NOAA

Juveniles: Subyearling Chinook are moving downstream in low to moderate numbers.

Adults: McGrath reported the current counts as reported on the FPC website, which are more up-to-date than what is reported in her summary table. At Bonneville, summer Chinook YTD are 76,724, which is 170% of last year and 90% of the 10-year average. Jacks have been 62% of the 10-year average. Steelhead are at ~15,000 YTD, which is 126% of last year, but only 46% of the 10-year average. Wild steelhead are at 8,447 for the year, which is 120% of last year and 55% of the 10-year average. Sockeye are decreasing, and showing at 2,000 to 8,000 per day and ~330,000 YTD. Sockeye are at 110% of the 10-year average. Shad are at 6.2 million YTD, which is 200% of the 10-year average. Lamprey are still passing in steady numbers.

At Lower Granite, summer Chinook are decreasing and passing at 60-168 per day over last week. They are at 5,450 total for the year thus far, which is 169% of last year and 43% of the 10-year average. Jacks are at about 1,600 YTD, which is 38% of the 10-year average but 88% of last year. Sockeye are passing at 8-15 per day with about 160 YTD, which is more than last year but only 30% of the 10-year average. Steelhead are at 2,559 YTD, which is 83% of last year and 29% of the 10-year average.

At Priest Rapids, sockeye are passing at 16,000-19,000 per day and are at 194,000 YTD, which is more than last year at this time and 79% of the 10-year average. Summer Chinook are steady, passing the project at 1,500 to 2,500 per day, 152% of last year's number and 108% of the 10-year average. Steelhead are at 310 YTD, which is 114% of last year and 39% of the 10-year average. There has been a few days lag in reporting.

As reported at previous TMT meetings, lamprey are low this year. Many fish are using the Bonneville Lamprey Passage Systems (LPSs) and thus not reflected in counts. Chris Peery, Corps NWW, reported that there is now a link on the FPC website to check both nighttime and daytime lamprey counts.

There have been 5 PIT-tagged Snake River sockeye detected at McNary and all 5 have made it to the Snake River. Travel times are about 1-2 days and 2 fish have reached Lower Granite.

4d. Power –Tony Norris, BPA

Wind has dropped off due to a high-pressure system and warmer weather will hit the region in the next few days.

5. Next TMT and Other

The next TMT meeting is call on July 22 at 9 a.m. There was an issue distributing the SOR to TMT members. FPC asked the Corps to distribute the list, as they do not have an updated distribution list. As a matter of process, the Corps does not distribute SORs on the behalf of requesters. The Corps requested that FPC use the default list posted on the website. The Corps will work with FPC to update their list.

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	Eric Rothwell

Agency	TMT Representative
NOAA Fisheries	Claire McGrath
US Fish & Wildlife Service	Dave Swank
Washington	Charles Morrill
Oregon	Absent
Idaho	Jonathan Ebel
Montana	Jim Litchfield
Nez Perce Tribe	Jay Hesse
Umatilla Tribe/CRITFC	Tom Lorz
Colville Tribe	Sheri Sears
Warm Springs Tribe	Absent
Kootenai Tribe	Absent
Spokane Tribe	Absent

Other Attendees (non-TMT members):

Corps – Dan Turner, Jon Roberts, Eric Hockersmith, Chris Peery, Alfredo Rodriguez, Aaron Marshall, Alexis Mills

DS Consulting – Emily Stranz (Facilitator), Colby Mills

BPA – Melissa Haskin (CONTR, FLUX Resources, Notetaker)

Columbia Basin Bulletin – Mike O’Bryant

Clearing Up – K.C. Mehaffey

Snohomish PUD – Mike Shapley

Chelan PUD – Jay Fintz

Snohomish PUD – Brian Zigler