

COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

August 25, 2021

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. Suggested edits are welcome and can be sent to Colby at colby@dsconsult.co. 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/2021/>.

Review Meeting Summaries & Minutes

TMT Members approved the August 18 facilitator's summary.

Dworshak Dam Operations

Jon Roberts, Corps, reported on operations at Dworshak Dam. The project is currently discharging 7.7 kcfs and pool elevation is slightly above 1,541 feet; Jon anticipates being at 1,535 feet +/- 0.5 feet at the end of the month.

Looking at the Clearwater and Snake River regions, natural river conditions and ambient air temperatures in the 10-day weather forecast are cooler, with most flow coming out of Hells Canyon and Dworshak at this time of year. Saturday and Sunday will see some slight warming in the high 80s and low 90s, but nighttime air temperatures will remain cool in the high 50s. Further out in the forecast, nighttime temperatures will remain consistently cool, and day-time temperatures will be in the high 70s to low 80s. Ambient air temperatures will cool the river to slightly below average for this time of year, which will benefit the region.

Natural river flows from the Anatone and Clearwater are expected to drop down into the 70-degree F range. This will provide consistent cooler water, cooling the Lower Granite forebay and resulting in a tailrace temperature around 66 degrees F. Current water temperatures are cooler than average for this time of year; the Clearwater is below 67 degrees F and the Anatone mixed with Hells Canyon water is under 70 degrees F. This will help transition the lower Snake River forebays into cooler conditions. With forebay temperatures remaining cooler, the Lower Granite pool at 25-30 meters is 62-63 degrees F, and 70-72 degrees F at the top of the pool due to low ambient air temperatures.

In response to the cooler tailrace temperatures, Dworshak will start gradually stepping down discharges in small increments (300-700 cfs) slowly over several days. The project will make a reduction tonight, over the weekend, and towards the 1st of September. These releases will transition into the Dworshak Board's Operational Plan.

Doug Baus, Corps, thanked the Walla Walla District team and TMT members for the great coordination efforts over the past few months. Jay Hesse, Nez Perce, echoed these commendations, and added that although TMT-coordinated operational changes prevented running out of water, it came at a cost to fish.

Dworshak Board 2021 Operational Plan

Jay reported that the Dworshak Board met and finalized the 2021 Operational Plan for the Snake River Basin Adjudication (SRBA) release of 200 KAF of water (posted to the TMT website). The plan generally calls for a very gradual ramp down of Dworshak flows: from 7 kcfs on September 1, stepping down on a frequent basis in small intervals, to reach a base flow of 1.6 kcfs at the end of September. These criteria will help benefit conditions for fish that continue to migrate up through the mainstem. Doble testing is not scheduled to occur this year at Dworshak, allowing for the ability to use maximum flexibility across September for the gradual ramp down.

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 September 1, 2021 at 9:00 AM.

Columbia River Regional Forum
Technical Management Team
OFFICIAL MINUTES
Wednesday, August 25, 2021
Minutes: Melissa Haskin, BPA (contractor, FLUX Resources)

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

1. Review Meeting Summaries & Minutes

The facilitator's summary for the 8/18 TMT meeting was finalized with no additional edits.

2. Dworshak Dam Update – Jon Roberts, Corps NWW

This time of year, air temperatures can sit around 85°F-95°F, or higher if there is a heat wave. A few years ago, the region was hit with a heat wave the first week of September. However, this year, it looks like temperatures will remain moderate. The 10-day weather forecast calls for 80°F weather in the Clearwater and Snake River basins, with cool weather persisting Saturday and Sunday. The highs may be in the upper 80°F range. Some places in Southern ID may reach ~90°F, however nighttime temperatures will remain cool – likely around the lower 50°F range in the mountains and higher 50°F degree range elsewhere. Heading into September, natural river temperatures should remain cool as ambient air temperatures hover around 80°F.

Dworshak is discharging 7.7 kcfs and the forebay is slightly above 1,541 ft. The projected end of month elevation is on track for 1,535.3 to 1535.5 ft.

Cooler water is expected in the Lower Granite tailrace due to cooler water coming in from the upper portion of the Snake River as well as cooler water from Dworshak Dam. Some of those effects are already noticeable. The tailrace temperature has dropped below 66°F intermittently and for the most part has been hovering around 66°F. At the bottom of the forebay, temperatures are at ~62-63°F. At the top, they are closer to 70-72°F. This is a significant improvement from earlier in the year when temperatures hit 79°F at the top of the pool.

River temperatures in the Clearwater have dropped to below 67°F. At Anatone below Hell's Canyon, water temperatures remain under 70°F. This is typical of mid-September conditions, which tend to naturally cool the lower Snake River. At Little Goose, the forebay is near 65°F, which is about 2°F cooler than what is usually seen this time of year.

With this forecast and the expected cooler conditions across the system, the Corps plans to step down Dworshak discharge tonight and again this weekend and around the start date of the Dworshak Board's start date for the annual SRBA plan (the next agenda item). Each time, discharge will be reduced by 300-700 cfs and held for several days before dropping down.

Baus commented on the coordination that has occurred thus far this season, noting that the coordination this year has been unprecedented. The region worked together on 3 SORs and coordinated operations that led to today's conditions. Ending August with an end-of-month

elevation of 1,535 ft. at Dworshak Dam is a good place for the region to be in, he added. Jay Hesse, Nez Perce, also shared appreciation of the efforts made, especially the extra modeling and work completed by the Corps Walla Walla district. He added that the 1,535 ft. elevation came at the cost of fish mitigation conditions – there was a cost to the fish to get to this place, he noted.

3. Dworshak Board 2021 Operational Plan - Jay Hesse, Nez Perce Tribe

The Dworshak Board 2021 Operational Plan is attached to today’s agenda. As part of the Snake River Basin Adjudication, the Nez Perce Tribe secured 200,000 acre-feet (200 KAF) of Dworshak water for release to benefit fish, with the intention to provide a transition for Dworshak summer flow augmentation through September until the natural cooling that typically happens late September or early October. As part of the agreement, the release strategy of that water is determined by the Dworshak Board. Overall, the operational plan calls for a gradual ramp down of Dworshak flows. Starting September, the plan is to reduce discharge to approximately 7 kcfs, then gradually reducing discharges down to ~1.6 kcfs around September 30. Since Doble testing is not scheduled for Dworshak Dam this year, the Board will be able to use the maximum flexibility during ramp down. Charts illustrating the ramp down are available in Hesse’s presentation, available on the TMT website.

Today’s Attendees:

Agency	TMT Representative
Army Corps of Engineers	Doug Baus (chair), Lisa Wright
Bonneville Power Administration	Scott Bettin
Bureau of Reclamation	Joel Fenolio
NOAA Fisheries	Trevor Conder
US Fish & Wildlife Service	Dave Swank
Washington	Charles Morrill
Oregon	Absent
Idaho	Jonathan Ebel
Montana	Brian Marotz
Nez Perce Tribe	Jay Hesse
Umatilla Tribe	Tom Lorz
Colville Tribe	Absent
Warm Springs Tribe	Jen Graham
Kootenai Tribe	Absent
Spokane Tribe	Absent

Other Attendees (non-TMT members):

Corps – Jon Roberts, Alexis Mills, Chris Peery, Scott St. John
 DS Consulting – Emily Stranz (Facilitator), Colby Mills
 BPA – Melissa Haskin (Notetaker)
 Yakama Nation Fisheries – Tom Iverson
 EPA – Dave Gruen
 FPC – Erin Cooper
 Clearing Up – K.C. Mehaffey