

COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

August 19, 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 and Summaries

TMT Members approved official minutes and facilitator’s summaries for the July 29 and August 7 meetings. Official minutes and facilitator’s summary from the August 12 meeting will be reviewed at next meeting.

Treaty Fishing

Kyle Dittmer, CRITFC, presented SOR 2020-C2 (posted on the TMT website) for the fall 2020 treaty fishing season. The request from CRITFC is to operate Bonneville, The Dalles and John Day pools within a 1.5-foot band from August 24 at 0600 hours to August 27 at 1800 hours, and from August 31 at 0600 hours to September 3 at 1800 hours. Current forecasts suggest a run size of 196,000 adult fall Chinook, 95,000 steelhead, and 43,000 coho, which are all below the 10-year average. Kyle noted that CRITFC is sponsoring net flights each week, with a new more efficient camera, and survey data will be shared with the Corps within 1-4 days.

TMT Members were polled on the SOR:

NOAA	Support	USFWS	Support
OR	Support	ID	Support
WA	Support	MT	No objection
Kootenai	Absent	Spokane	No objection
Colville	Support	Nez Perce	Support
Umatilla	Support	Warm Springs	Absent
BOR	No objection	BPA	Support
Corps	Support		

The Corps will implement the SOR as requested, and it was noted that John Day Dam will operate at a 1.5-foot range as a soft constraint and a 2-foot range as a hard constraint.

Kyle noted that the fall is typically the longest fishing season, although Covid-19 precautions make fishing more difficult and the commercial demand for fish is weak at the moment. There is uncertainty on the length of fishery beyond what has currently been requested.

Dworshak Dam Operations

Jon Roberts, Corps, reported on operations at Dworshak Dam. The project is currently at full powerhouse, discharging between 10-10.1 kcfs. Current elevation is 1,553.81 feet, and the project will continue to draft about 1 foot per day.

TDG levels in the tailrace remain consistent between 99-101%, and Jon noted that slight increases throughout the day are a result from rising air temperatures.

The Lower Granite tailwater at 0700 hours was 65.62 degrees F, with a 12-hour average of 66 degrees F. There has been a substantial rise in water temperatures in the region because of weather over 100 degrees F

for the last several days. Water temperatures in the Lower Granite forebay are expected to rise slightly; the tailwater is 66 degrees F and is expected to climb to 67 degrees F based on the incoming warmer water.

The project is focusing on the thermocline in the forebay to not exceed 69 degrees F at the fish trap, which intakes water from the pool between 15-20-meters deep. Currently the fish trap is 65.65 degrees F and is expected to climb into the 67-68-degree F range. The Corps is keeping an eye on the impacts of these raising temperatures.

Ambient air temperatures are forecasted to be 100 degrees F in Lewiston today, with temperatures in the high 90s and 100s throughout the region. Nighttime temperatures are expected to be in the 60s and 70s. The 10-day forecast shows temperatures cooling slightly on Thursday and Friday, with nighttime temperatures back down to the 50s and 60s, continuing into Saturday. Temperatures will warm again on Sunday and Monday, although the heat will not return to 100-degree F weather. Jon reminded the TMT that it takes 3.5 days for outgoing water from Dworshak to impact the Lower Granite tailwater.

Dworshak operators are planning a flow reduction at midnight tonight down to 9,000 cfs. There is potential for another reduction of 500 cfs (down to 8,500 cfs) on August 24, which will depend on conditions. Kyle noted that historically by the middle of August, the worst heat waves have passed.

Port of Clarkston SOR for Lower Granite Pool

Aaron Marshall, Corps, presented the revised SOR from the port of Clarkston (posted on the TMT website) which requests to raise the Lower Granite pool above MOP to between 736.5 and 738 feet as soon as possible and hold until midnight on August 31 before resuming normal operations.

Wanda Keefer, Port of Clarkston, emphasized the need for more water so grain from the Port can be moved down river as grain storage from bountiful harvests is quickly backing up. The water depth at the Port has dropped 6 inches since the issue was identified on August 11.

TMT members asked clarifying questions to address biological concerns. David Doeringsfeld, Port of Lewiston, noted that with the continued drop in water depth comes significant risks and hazards to workers as the barges are filled and moved. If the 3,500 farmers from OR, ID, WA and MT cannot get grain out of the Port they will push to competitors.

Jon presented updated modeling to provide information on the potential temperature effects and determine the impact of using Dworshak water to compensate filling the Lower Granite pool. Dworshak will need to make up about 30% of the incoming flow throughout to compensate the warmer water being stored from the Snake River and keep the adult fish trap within temperature criteria for operation. An additional 1,000 cfs will be needed per day for every 6 inches the pool is raised. Dworshak release of 10 kcfs would need to extend longer than currently planned in order to maintain temperatures.

TMT Members were polled on the revised SOR:

NOAA	Objection w/o elevation	USFWS	Objection w/o elevation
OR	Objection w/ elevation	ID	Objection w/ elevation
WA	Objection w/o elevation	MT	Abstain
Kootenai	Absent	Spokane	Objection w/o elevation
Colville	Objection w/o elevation	Nez Perce	Objection w/ elevation
Umatilla	Objection w/ elevation	Warm Springs	Absent
BOR	Abstain	BPA	No objection
Corps	No objection		

For clarity and transparency, some TMT Members provided rationale for their polling responses:

- **NOAA:** NOAA reiterated their comments from last week regarding concerns about water temperature and safe and effective passage for adult fish. Their concerns were reinforced with the temperature modelling presented.
- **OR:** OR did not feel that the request was a balanced operation.
- **USFWS:** USFWS had similar concerns as when discussed last week, noting discrepancy in opinions on whether the federal navigation channel requirements are being met. Additionally, using additional water from Dworshak to mitigate temperatures was a major concern.
- **ID:** ID echoed USFWS’s concerns around using additional water from Dworshak. In general, ID supports efforts by the Port of Clarkston to dredge the berth and find a long-term solution for this issue.
- **Nez Perce:** Nez Perce’s concerns remain based on adverse impacts from rising water temperatures and management relative to adult trap operations.
- WA, Colville, Umatilla, BOR, Corps, MT, Spokane, and BPA did not have additional comments.

The Corps stated that without regional support, they would not be able to implement the SOR as requested at this time.

Operations Review

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

- **Grand Coulee:** the project started drafting to 1,279.5 feet last week, and midnight elevation was 1,287.6 feet. Inflows have been averaging at 115 kcfs, with releases of 130 kcfs over the last couple days. The project is aiming to get down to 1,279.5 feet by the end of the month.
- **Hungry Horse:** the project is releasing about 2.4 kcfs, with a midnight elevation of 3,555.3 feet. It plans to hold 2.4 kcfs out through end of the month, then adjust to get to 10 feet from full by the end of September.

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

- **Libby:** midnight elevation was 2,541.0 feet; with average inflows of 7.0 kcfs and outflows of 9.0 kcfs;
- **Albeni Falls:** midnight elevation was 2,062.3 feet, with average inflows of 13.7 kcfs and outflows of 15.1 kcfs;
- **Dworshak:** midnight elevation 1,554.2 feet, with average inflows of 1.2 kcfs and outflows of 10.1 kcfs;
- **Lower Granite:** average outflows of 28.2 kcfs;
- **McNary:** average outflows of 161.9 kcfs; and
- **Bonneville:** average outflows of 160.3 kcfs.

Water Quality: Dan Turner, Corps, reported that TDG levels in the system are looking good, and are lower due to the switch to late summer spill operations on August 15. He noted that the Warrendale gage (downstream of Bonneville Dam) had a ruptured membrane and was taken out of service for repair.

Fish: Claire McGrath, NOAA, reported low numbers of sub-yearlings, and that sampling frequency is limited at some projects due to high temperatures. A summary of juvenile passage index is posted on the TMT website.

For adults, fall Chinook counts have increased over the last week. At Bonneville, fall Chinook YTD passage is 17,002, or 108% of the 10-year average. Fall jack Chinook YTD passage is 2,507, or 47% of the 10-year average; coho YTD is 550, or 109% of the 10-year average; sockeye YTD is 342,000, or 110% of the 10-

year average; total steelhead YTD is 61,000, or 23% of the 10-year average, wild steelhead YTD is 49% of the 10-year average. There are low counts for shad and lamprey.

Yesterday was the first day for fall Chinook counts. At Lower Granite, total Chinook YTD passage is 30,177, or 41% of the 10-year average; sockeye are decreasing at YTD is 605 or 64% of the 10-year average; and total steelhead YTD is 5,000, or 37% of the 10-year average. The project is not yet seeing coho. Shad YTD passage is 9,000, or 40% of the 10-year average.

Dave Swank, USFWS, noted that lamprey passage is nearing the end for the season and has been a below average year. He reminded the TMT that the numbers posted are only daytime window counts, and the total passage should be around 3 times that total when including night window counts and LPS.

Power System: Tony Norris, BPA, reported an end in heat wave temperatures, noting that California and other NW utilities have had to declare power system emergencies with rolling blackouts to manage the system in CA. Cooler weather is expected ahead. Tony noted that maintaining human health and safety is a significant part of power system responsibility, and BPA has sent notices to western utilities in the west to take similar steps.

Questions or 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 August 26 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, August 19, 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 July 29 and August 7 Facilitator’s summaries and official TMT meeting minutes were approved with no additional edits.

2. Treaty Fishing

Kyle Dittmer, CRITFC, reported on System Operational Request (SOR) 2020 C-2 for operation of the lower Columbia pools during the fall 2020 Treaty fishery for an initial 2-week season: Monday, August 24, 2020, 6 am, through Thursday, August 27, 2020, 6 pm and Monday, August 31, 2020, 6 am, through Thursday, September 3, 2020, at 6 pm.

The SOR requests that the Corps and BPA operate Bonneville, The Dalles, and John Day pools within a 1.5-ft band during the treaty fishing period defined above. The latest TAC forecast of adult run size at Bonneville Dam for fall Chinook is 196,000 (below the 10-year average and below last year’s estimated run), 95,000 steelhead (below the 10-year average as well as last year’s pre-season estimate) and 43,000 coho (below the 10-year average and less than a quarter of last year’s number).

Tribal commercial fish sales will likely be lower than normal since the commercial demand for fish has declined due to COVID-19 and its impacts on the restaurant industry. Coronavirus has also made fishing logistics difficult, thus Dittmer said it is hard to tell how long the season this year will be.

As in the past, CRITFC will sponsor net flights each week to count nets. The data may take up to four days to come in.

Emily Stranz, DS Consulting, polled TMT members on the SOR. The polling results are as follows:

Agency	Vote
Army Corps of Engineers	Support
Bonneville Power Administration	Support
Bureau of Reclamation	No objection
NOAA Fisheries	Support
US Fish & Wildlife Service	Support
Washington	Support
Oregon	Support
Idaho	Support

Agency	Vote
Montana	No objection
Nez Perce Tribe	Support
Umatilla Tribe/CRITFC	Support
Colville Tribe	Support
Warm Springs Tribe	Absent
Kootenai Tribe	Absent
Spokane Tribe	No objection

Based on the regional support documented in the poll above, the Corps will implement the SOR as requested. Aaron Marshall, Corps, clarified that, as with this year’s previous treaty fishing SOR, John Day will operate in a 1.5-ft range as a soft constraint with a hard constraint of 2 ft. This allows real-time operations to utilize the full 1.5 ft range.

3. Dworshak Operations - Jon Roberts, Corps

Jon Roberts, Corps, reported on operations at Dworshak Dam. At midnight, the reservoir was sitting at 1,553.81 ft. and drafting over a foot per day. It is operating at full powerhouse ~ 10 kcfs to 10.1 kcfs. TDG has been between 99% and 101%. In the hatchery, TDG is below 99%.

The tailwater at 0700 hours was 65.62°F and the 12-hour average is currently 66°F. Water temperatures rose because of 100+°F air temperatures in the region. The pool temperature will likely climb above 67°F due to more warm weather in the region.

Today, temperatures at Lewiston are over 100°F. The 10-day weather forecast shows slightly cooler weather Saturday, however night time weather will be warm, with lows only dropping to 60-70°F. Temperatures will rise again starting Sunday. This heat wave, however, should not exceed 100°F.

Roberts reminded TMT that any water sent from Dworshak Dam takes about 3.5 days right now to reach Lower Granite. Tonight at midnight, flows will be reduced to 9 kcfs and on August 24, they may be dropped an additional 500 cfs, depending on conditions and the forecast, said Roberts.

4. Port of Clarkston SOR for Lower Granite Pool - Aaron Marshall, Corps NWD, and Wanda Keefer, Port of Clarkston

Much of today’s discussion centered around a revised SOR submitted by Wanda Keefer, Port Manager for the Port of Clarkston, which is located on the Snake River near the Idaho/Washington border. This SOR is a revised version of the SOR submitted at last week’s TMT that was not supported by salmon managers. Without regional support, the Corps did not implement that SOR. Now that the heat wave has passed, the Port is requesting a revised operation to raise the Lower Granite pool above Minimum Operating Pool (MOP) to between 736.5 and 738.0 feet as soon as possible and continuing through midnight August 31. The SOR is available in full on the TMT website.

Aaron Marshall, Corps, reported that the pool is currently operating in a 2-foot raised MOP of 735.0 - 736.5 feet per the Fish Operations Plan (FOP).

As mentioned at the last meeting, the reason for the SOR is to raise the elevation at the port to allow for loading of grain barges, specifically wheat. The port is hopeful the SOR could be implemented starting today, August 19. They first noticed the problem last week, on August 11, when the pool as measured at the Lewiston gauge was 736.26 feet, said Keefer. Since then, the pool has receded further and is now 6 inches lower, she said. She mentioned the port would be fine with a top elevation of 737.5 feet, however the request includes more because of the 1.5-ft minimum operating band BPA needs, she said.

TMT members had several questions for Keefer and Scott Zuger, manager of the Lewis-Clark Terminal, including:

- **How much faster will grain ship if the SOR is passed (Tom Lorz, Umatilla/CRITFC)?** Zuger said it is hard to estimate how much time is lost when a barge gets stuck or a tug has an operational issue.
- **Since the barges are only partially loading in Lewiston, Julie Ammann, Corps, asked if that means the grain has to be sent on more barges or if it adds to the time.** Zuger replied both.
- **If the SOR were to be passed, how many barges would be expected between now and September 30 (Jay Hesse, Nez Perce)? Likewise, how many would pass if the SOR was not approved?** Zuger replied 0-2 under current conditions and that it would be hard to guess with the SOR but there are 6 scheduled this week and 9 next week. He added that if the grain cannot be shipped it has to be stacked in bins since it cannot be shipped via rail or truck. Right now, the bins are 92-93% full, he estimated, adding that there are 2 more weeks or harvest.
- **Amman clarified that what Hesse and others were likely wondering is if there would be an increase in the grain shipped if the SOR is approved.** Zuger replied that they would risk losing 6-7 barges if the request is not approved. Clarkston would close and the farmers would use competitors. Currently 3,500 farmers use Clarkston-Lewiston and a single barge carries about 120,000 bushels, which is about the same as 120 semi-truck loads.
- **David Doeringsfeld, general manager for the Port of Lewiston, asked about safety issues in the Clarkston port.** Zuger replied that additional barges mean additional man-hours and thus more risk.

Following the general questions, Jon Roberts, Corps NWW, shared models of how implementing the SOR could potentially affect Dworshak Dam operations to maintain temperature objectives at Lower Granite. He shared four models comparing MOP+2 (current conditions), MOP +2.5, MOP +3, and MOP + 4. The comparison is available on the TMT website. He found that for every 0.5-ft increase above the current MOP range, Dworshak would need to increase outflow by 1,000 cfs to make up for warmer water out of the Snake River.

He shared a chart that compared how long Dworshak water would be available for temperature augmentation under the different pool operations. At the highest level, water would last until September 5, whereas at the current level, it should last until September 11.

Kyle Dittmer, CRITFC, added that as we move into September, nights get longer and cooler, which can be a help. However, the models already take this into account.

Based on what Roberts showed, the TMT asked Keefer if an extra 0.5 ft would be helpful. She said that would be 6 inches lower than when the problem was identified and thus it likely would not be helpful.

Dave Swank, USFWS, asked why 6 inches would not help. Zuger shared that when a barge comes in empty, it takes 2.5 feet of draft.

Amman asked about the differential between Lower Granite and Lewiston gauges. Marshall said it is 3/10 of a foot.

Since the forebay does fluctuate throughout the day within the 1.5-ft operating range, and Keefer was using only the midnight readings, the Corps wondered if it would be possible for the port to monitor the gauge reading and react accordingly. She responded that it takes about 7-8 hours to load a barge so that would not be particularly helpful, especially since schedules for tugs and barges are coordinated 4-5 days out.

Jonathan Ebel, ID, asked for confirmation that these issues are outside of the federal navigation channel and that the responsibility for dredging the berth falls with the Port. Keefer responded that there is not 14-ft depth everywhere they need it. Amman confirmed that as far as she knows the Corps is providing the minimum depth in the federal navigation channel.

Emily Stranz, DS Consulting, polled TMT members on the SOR. The results were as follows:

Agency	Vote
Army Corps of Engineers	No objection
Bonneville Power Administration	No objection
Bureau of Reclamation	Abstain
NOAA Fisheries	Object without elevation
US Fish & Wildlife Service	Object without elevation
Washington	Object without elevation
Oregon	Object and elevate
Idaho	Object and elevate
Montana	Abstain
Nez Perce Tribe	Object and elevate
Umatilla Tribe/CRITFC	Object and elevate
Colville Tribe	Object without elevation
Warm Springs Tribe	Absent
Kootenai Tribe	Absent
Spokane Tribe	Object without elevation

The following comments were added to the record:

NOAA: Claire McGrath has concerns for temperature impacts and the ability to maintain Lower Granite trap operations and safe and effective passage for adults. She said her concerns were reinforced by Roberts’ modeling work this week.

OR: Erick Van Dyke, OR, commented that this SOR is still not balanced.

USFWS: Dave Swank, USFWS, shared similar concerns to last week, though he found it frustrating that there were differing opinions on if the federal navigation channel was

having issues. He thinks that maintaining the Lower Granite adult trap is a major concern for his agency.

ID: Jonathan Ebel, ID, shared that his position is against using Dworshak Dam cooling water to assist with depth concerns at the Clarkston grain terminal. He noted support for dredging either by the Port or the Corps as a longer-term solution.

Nez Perce: Jay Hesse, Nez Perce, shared his objection based on concerns for fish impacts, as well as Lower Granite trap operations and water temperature.

Corps: Considering the lack of regional support, the Corps will not implement the SOR.

5. Operations Review

5a. Reservoirs – Chris Runyan, Reclamation; Lisa Wright, Corps

Hungry Horse – Midnight elevation 3,555.3 feet. Outflows are at 2.4 kcfs and will be held at 2.4 kcfs through the end of August, then adjusted for the 10-ft end of September draft.

Grand Coulee – Midnight elevation 1,287.6 feet. Inflows are 115 kcfs and outflows are 130 kcfs. Drafting started last week for the end of August target (1,279.5 ft.).

Libby Dam – Midnight elevation 2,541 ft., yesterday's average inflows were 7 kcfs and outflows were 9 kcfs.

Albeni Falls – Midnight elevation 2,062.3 feet, inflows 13.7 kcfs and outflows 15.1 kcfs.

Dworshak Dam – Midnight elevation 1,554.2 ft., yesterday's average inflows 1.2 kcfs and outflows were 10.1 kcfs (full powerhouse).

Lower Granite – Yesterday's average outflows were 28.2 kcfs.

McNary Dam – Yesterday's average outflows were 161.9 kcfs.

Bonneville Dam – Yesterday's average outflows were 160.3 kcfs.

5b. Water Quality – Dan Turner, Corps

TDG is down and the Corps is meeting water quality state standards. The Warrendale gauge downstream of Bonneville Dam suffered a ruptured membrane and is currently out.

5c. Fish – Claire McGrath, NOAA

McGrath reported on fish. At Bonneville, adult Chinook counts shifted to fall Chinook on August 1. Fall Chinook are at 200-6,000 per day and 17,002 YTD (above last year and 108% of the 10-year average). Jack fall Chinook are at 2,507 YTD (47% of the 10-year average). Coho have started to pass the project and are at 550 thus far, which is above last year and 109% of the 10-year average. Sockeye are coming in at low numbers since passage is at the tail end. YTD for sockeye is ~342,000 (this is way above last year and 110% of the 10-year average). Steelhead are at 61,000 for the year (126% of last year and 23% of the 10-year average). Wild steelhead are at 49% of the 10-year average.

At Lower Granite, counts shifted to fall Chinook on August 17. Yesterday was the first day fall Chinook were counted. The YTD is 30,177 (127% last year). Coho have not reached the project.

Sockeye numbers are decreasing. The YTD number is 6,005, which is way above last year and 64% of the 10-year average. Shad are at 9,000 YTD (40% of 10-year average).

For juveniles, the only thing passing is low numbers of subyearling Chinook.

Lamprey are at the tail end of their season. Swank reminded TMT members that the run will be below average but the current reported numbers are just daytime window counts. Once nighttime and LPS passage are taken into account, the posted number will likely triple.

5d. Power – Scott Bettin, BPA

The region is cooling off after a period of high temperatures that caused California and parts of the Northwest to have power emergencies, including rolling blackouts in some areas of California. When other balancing authorities request emergency power from BPA, they must follow similar fish protection measures as BPA does.

6. Next TMT and Other

The next TMT meeting is call on August 26 at 9 a.m.

Today’s Attendees:

Agency	TMT Representative
Army Corps of Engineers	Doug Baus, Lisa Wright, Julie Ammann
Bonneville Power Administration	Tony Norris, Scott Bettin
Bureau of Reclamation	Joel Fenolio
NOAA Fisheries	Claire McGrath
US Fish & Wildlife Service	Dave Swank
Washington	Charles Morrill
Oregon	Erick Van Dyke
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	Brent Nichols

Other Attendees (non-TMT members):

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

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

Clearing Up – K.C. Mehaffey

Columbia Basin Bulletin – Mike O’Bryant

CRITFC – Kyle Dittmer

DS Consulting – Emily Stranz (Facilitator), Colby Mills

Lewis-Clark Terminal – Scott Zuger

TMT – August 19, 2020

Port of Lewiston – David Doeringsfeld

Portland General Electric – Ruth Burris

Snohomish PUD – Brian Zigler

Port of Clarkston – Wanda Keefer

Yakama Nation Fisheries – Tom Iverson