

COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

June 27, 2018

DRAFT Facilitator's Summary

Facilitator: Emily Stranz; Notes: Charles Wiggins, 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/>

Treaty Fishing

Kyle Dittmer, CRITFC, brought TMT up to date on tribal fishing activities, as requested in SOR 2018 C-1, approved at TMT on June 13 and available on the TMT web site. Fishing in the Columbia River has been good. Sockeye counts are coming in higher than forecasted; however, Chinook counts are below forecasts. CRITFC conducted an aerial net survey on Tuesday, June 26, and there are 302 nets in the river – 139 on the Oregon side and 163 on the Washington side. Kyle noted that the tribes will likely request another week, July 2-6, which he will coordinate with the Corps and BPA. A SOR for fall season Treaty fishing will be submitted in August.

Libby Dam

Logan Osgood-Zimmerman, Corps, reviewed operations at Libby Dam. She noted that the sturgeon pulse ended yesterday, passing 1.2 maf, per the May final water supply forecast for April-August of 7.4 maf. The May water supply forecast set the bull trout minimum, at 9 kcfs through August, the bull trout minimum then drops to 6 kcfs in September, which the Corps will maintain to facilitate in-water work for the KTOI habitat restoration program (see SOR approved at TMT on May 9, 2018).

The BiOp end of September reservoir elevation is 2,449 feet; however, the Corps plans to target 2,449 feet by the end of August to ensure they can hold outflow at 6 kcfs all of September. Logan noted that the year is shaping up to look like last year, where there was a big water supply forecast that later dried up. There is some rain projected in the next week that may increase volume; however, generally flows are dropping. Flows will likely be between 9 and 11 kcfs until September. The project plans to hold 6 kcfs through September regardless of inflows, so may end up higher than 2,449 feet by the end of the month. The project is on target to meet its August and September goals. The elevation at Lake Kooncanusa is expected to remain between 2448 and 2451.5 feet in September.

Dworshak Dam Operations

Steve Hall, Corps, gave a brief update on operations at Dworshak Dam. Currently the reservoir is 0.1 feet from full, at 1,599.9 feet. They expect to fill today and then pass inflow. Current discharge is 4.1 kcfs, rising to 4.8 kcfs later in the day; inflows are at 6 kcfs. Water temperature in the Lower Granite tailrace is 64 degrees F. The model is tracking well with observed temperatures. Model runs are suggesting a rise to 65 degrees, then moderating due to cooler weather. Steve noted that at this point the forecast and model are not showing a need to increase Dworshak discharge to augment water temperature in the Lower Granite tailrace. Another model run is scheduled for the end of the week.

Spill of approximately 500 cfs may occur during the Unit 3 testing process that could be associated with the testing and/or managing the forebay elevation. An oil system leak and late delivery of a bearing part caused a three-day testing delay. This spilling is of concern to both downstream hatcheries, which are currently monitoring adult passage, and the Corps will try to minimize necessary spill. Testing will involve a speed no-load test; dewatering the unit for electrical testing; reassembly; a 72-hour high temperature run; and removal of the testing equipment before Unit 3 is returned to service, now projected to be July 8. Testing will continue on the weekend and on July 4.

- **ACTION: Steve will notify Doug Baus, Corps, when the Unit 3 testing begins, and Doug will transmit this information to TMT members.**

Adult PIT-Tag Monitoring Tools

Dave Swank, USFWS, reported on the adult PIT-tag monitoring tools developed this spill season by both DART and FPC. These tools were designed to monitor adult Chinook passage during spring spill operations through June 20. Dave thought both tools could be adapted to measure adult sockeye passage as well if data are available. FPAC will discuss this idea and report back to TMT.

Notification of Little Goose Line Outage 6/28

Lisa Wright, Corps, informed TMT of a line outage at Little Goose Dam tomorrow, June 28, from approximately 6:30AM to 4:30PM to inspect a failed breaker. Inflows during the outage are currently forecasted to be in the range of 51-54 kcfs. The operation has three phases:

- 1) Starting at 6:30AM, line switching will require all units out of service for about 20 minutes up to 1 hour. During this time, all outflow will be spilled up to 50 kcfs to avoid exceeding 120% TDG in the tailrace.
- 2) After line switching, all units except Unit 6 will be out of service for about 6-8 hours during inspection of the failed breaker. During this time, Unit 6 will be operated in the upper 1% range (approximately 18-19 kcfs) and the remainder of outflow will be spilled.
- 3) After the inspection, line switching will again require all units out of service for about 20 minutes up to 1 hour and all outflow will be spilled up to 50 kcfs (same as the first phase).

Depending on results of the inspection, parts will be ordered to repair the failed breaker and a second similar outage will be required to complete the repairs. The Corps will notify the region on any additional outages and timing.

The next TMT meeting will be a conference call on Wednesday, July 11, at 9:00AM.

Agenda topics:

- Dworshak Unit 3 update
- Dworshak temperature update
- Treaty fishing update
- Snake River sockeye passage update

Columbia River Regional Forum

TECHNICAL MANAGEMENT TEAM OFFICIAL MINUTES

June 27, 2018

Minutes: Melissa Haskin, FLUX Resources

Introduction

Representatives of BPA, USFWS, Corps, OR, WA, ID, MT, CRITFC-Umatilla, Nez Perce Tribe, and others participated in today's TMT meeting chaired by Doug Baus, Corps, and facilitated by Emily Stranz, DS Consulting.

1. Treaty Fishing - Kyle Dittmer, CRITFC

Kyle Dittmer, CRITFC, gave an update on Treaty Fishing. As a reminder, the Corps is currently implementing SOR 2018 C1 that is available on the TMT site. Dittmer reported that in the second week of treaty fishing, there are 139 nets on the Oregon side of the Columbia and 163 on the Washington side, for a total of 302. Chinook have come in lower than forecasted, whereas Sockeye have been observed at almost double the forecast.

CRITFC's member tribes will likely request to extend the season to include July 2-July 6, and should know for certain by this Thursday, June 28.

2. Libby Operations - Logan Osgood-Zimmerman, Corps

Logan Osgood-Zimmerman, Corps, presented on Libby Operations. As of yesterday, the Corps has completed the Sturgeon pulse operation that was requested in SOR FWS #1 and approved at TMT on May 9th. Originally, the Corps planned to hold 20 kcfs over 20 days to maximize the number of days above 30 kcfs at Bonners Ferry. The presentation from Kevin McDonnell, IDFG, at TMT on May 30th illustrated a need to keep Bonners Ferry above 30 kcfs as long as possible to support sturgeon spawning in the Kootenai River. As local flows dropped, the Corps increased outflows to 23 kcfs in order to hold to flow up at Bonners Ferry as long as possible. It looks as if approximately 9.5 kcfs will be the flat flow for the summer.

At the May 9 TMT meeting, the SOR from the Kootenai Tribe was approved. The SOR requested a Libby Dam outflow of 6 kcfs or less from September 2018 through November 2018 to support in-water work for the Kootenai River Habitat Restoration Program. To meet this request, the Corps will run a similar operation to last year and target elevation 2,449 ft by the end of August in order to hold Libby outflow at 6 kcfs in September, which is the minimum flow for bull trout. The Corps will meet this request even if inflows come up, which could mean that the end of September elevation may be slightly higher than 2,449 ft.

The expected peak elevation for Lake Koocanusa is between 2,449 ft and 2,451.5 ft, in early August, with expected elevations of 2,448 to 2,450 ft at the end of September.

3. Dworshak Dam Operations - Steve Hall, Corps

Dworshak is at 1,599.9 ft elevation – within 1/10 of a foot from full. The Corps will try to fill that last tenth of a foot by the end of today. Inflows are around 6 kcfs. Outflows are 4 kcfs and will go up to 4.8 kcfs once the reservoir is full. The Lower Granite tailwater is still cool at 64°F, and is expected to increase to 65°F then remain steady for a few days. There is nothing in the forecast to suggest a need to increase discharge at Dworshak to cool the Lower Granite Dam tailwater. The Corps is running models at least twice a week and will take actions as necessary if there is a need to start augmentation.

Jay Hesse, Nez Perce asked if the inflow would result in spill once the reservoir fills.

Steve Hall, Corps, reported that dam operators have been instructed to spill 500 cfs. This will be reduced as testing on Unit 3 starts later in the day and outflow is transitioned from spill to Unit 3. He said right now spill is minimal, but could increase if inflows come in higher than currently forecasted.

Testing of Unit 3 was originally scheduled to begin on Monday, June 25, but was delayed until today, June 27, due to some mechanical issues. This means the unit may be returned to service by July 8, 2018.

4. Adult PIT-Tag Monitoring Tools – Dave Swank, USFWS

Dave Swank, USFWS, reported on Adult PIT-Tag monitoring tools. He noted that the DART tool was designed to cover spring spill and does not include data for after June 20. He said it may be an agenda item for FPAC to discuss if they would like to request extending the tool for use in the summer.

The Fish Passage Center tool shows that counts at Little Goose and conversion rates in the lower Snake are back to where they are expected to be for this time of year, and that the level of concern associated with passage delay at Little Goose has diminished now that the project is spilling 30% for summer spill.

5. Notification of Little Goose Line Outage 6/28 - Lisa Wright, Corps NWD

Lisa Wright, Corps, notified TMT of a scheduled line outage at Little Goose tomorrow, Thursday, 6/28. She said this will result in an increase in spill above the summer FOP level of 30% for up to 10 hours (0630 to 1630). A document on the TMT site notes the schedule of operations. Inflows are currently forecasted to be around 51-54 kcfs during the outage. Starting at 6:30am, all units will be out of service during line switching for about 20 minutes up to 1 hour

and all outflow will be spilled up to 50 kcfs to not exceed 120% TDG in the tailrace. After line switching, all units except Unit 6 will be out of service for 6 to 8 hours to facilitate the inspection of a faulty breaker (XJ-7). During this time, Unit 6 will be operated at the upper end of 1% (18 to 19 kcfs) and all remaining outflow will be spilled. After the inspection, all units will be out of service again for line switching (20 minutes to 1 hour). Depending on findings of the inspection, parts will be procured to repair the breaker and a second similar outage will be required to complete the repairs. The Corps will notify TMT and/or FPOM as soon as that information is known.

6. Next TMT

The next TMT meeting is a conference call on July 11, 2018. During that meeting, there will be an update on Dworshak Unit 3, Lower Granite Dam tailwater temperatures, Treaty Fishing, and Snake River Sockeye passage. In the meantime, Steve Hall will provide an update on Unit 3 testing to Doug Baus as soon as it's available, who will then distribute to TMT.

Today's Attendees:

Name	Affiliation
Charles Morrill	WA
David Swank	USFWS
Doug Baus	Corps
Erick Van Dyke	OR
Eve James	BPA
Jay Hesse	Nez Perce
Jim Litchfield	MT
Kyle Dittmer	CRITFC
Leah Sullivan	BPA
Lisa Wright	Corps
Russ Kiefer	ID
Charles Pace	member of the public
Charles Wiggins	DS Consulting
Dave Benner	Fish Passage Center
Emily Stranz	DS Consulting
Kim Johnson	BPA
Laura Hamilton	Corps
Logan Osgood-Zimmerman	Corps
Melissa Haskin	Flux Resources
Mike O'Bryant	Columbia Basin Bulletin
Steve Burrell	Corps
Steve Hall	Corps