

COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

September 6, 2017

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/2017/>

Dworshak Operations: Steve Hall, Corps, summarized operations at Dworshak Dam. Pool elevation is currently at 1,532 feet, with 7 kcfs discharge, 4.6 kcfs through the powerhouse and 2.4 kcfs spill. TDG levels in the Dworshak tailrace are below 110%, and about 100% in the hatchery collection channel. Water temperatures at the Lower Granite tailrace averaged 67.3 degrees, though diurnal fluctuations caused brief periods above 68 degrees yesterday afternoon. This situation might reoccur and is common during hot weather. However, smoky conditions from Northwest forest fires continue to shield solar radiation and keep temperatures lower.

The Lewiston forecast is for smoky conditions for the next ten days, with temperatures in the mid-80s to 90 degrees. There is a chance of precipitation Friday and Saturday. The Corps developed a modelled scenario showing the impact of a 7 kcfs Dworshak outflow on water temperatures in the Lower Granite tailrace. According to the model, water temperatures would remain below 68 degrees, at about 67 degrees. Steve reported that the Dworshak Board agreed to hold discharge at 7 kcfs unless conditions change, at which point the Board will reconvene.

Lower Granite Dam Spill Operation: Doug Baus, Corps, informed TMT that the RSW at Lower Granite was closed September 1 and spill was routed to bays 6 and 8; spilling deeper, cooler water. Bays 6 and 8 were previously chosen by FPOM as an alternative pattern if there were construction concerns with spilling through the RSW.

Paul Wagner, NOAA, reported that FPAC expressed a desire to modify this operation. Because the RSW is not operating, it would be better for fish passage to move spill to bays 2 and 3, as it moves flow and thus passage closer to the powerhouse. The Corps shared that they can accommodate the shift in spill bays.

In response to a question from Erick van Dyke, Oregon, Ann Setter, Corps, reported that Unit 1 is currently scheduled to return to service October 13.

- **ACTION:** The Corps will redirect Lower Granite spill to bays 2 and 3 immediately, and will maintain spill through those bays until September 14. Beginning September 15, these bays will be closed and spill redirected through the RSW unless FPOM, which meets next on September 14, requests otherwise.

Eagle Creek Fire Update

Several TMT members commented on the Eagle Creek fire, which is affecting operations in the Columbia Gorge. Paul Wagner began by reporting that due to water quality concerns, the Bonneville Hatchery (ODFW) released 600,000 tule fall Chinook, comprised of fish that were originally scheduled for release in October 2017 and March 2018 fish. Erick van Dyke said at this point there was no need to release fish at the three other hatcheries in the area, and that the facilities were helping stage fire operations. Erick Hockersmith, Corps, explained that I-84 is closed, so

there has been a transport modification: Lower Monumental and Little Goose operations switched to secondary bypass and transportation went to standby. Trucks had already collected about 38 fish, mainly fall Chinook smolts at LoMo, as well as 48 fish from Little Goose. These fish were taken downstream of the dams and released at the nearest boat ramp. Tony Norris, BPA, reported that one transmission line has been taken out of service (Bonneville-Hood River 115 kV). Additionally, smoke automatically tripped a Nostrander IV line on Monday, however, has since been reenergized. BPA is coordinating with fire crews, and no customers have lost service because of these issues.

Reminder: TMT is now scheduled to meet every two weeks

The next regular TMT meeting will be a face-to-face meeting on September 20, at 9:00.

Columbia River Regional Forum
TECHNICAL MANAGEMENT TEAM MINUTES

September 6, 2017

Minutes: Pat Vivian

1. Introduction

Representatives of Washington, Umatilla and Nez Perce tribes, Oregon, BOR, Idaho, NOAA, BPA, the COE, USFWS, Yakama Tribe and others participated in today's TMT call chaired by Doug Baus, COE, and facilitated by Emily Stranz, DS Consulting.

2. Dworshak Operations Review

Steve Hall, COE, reported. Dworshak reservoir has drafted to 1532 ft elevation and is releasing 7 kcfs, 4.6 kcfs of that through the powerhouse and the other 2.4 kcfs as spill.

TDG in Dworshak Tailrace (DWQI). The maximum tailrace TDG reading is 109.2% saturation in the afternoon, with a low of 108.7% at night.

TDG in Dworshak Hatchery (DHCI). Total dissolved gas levels are down in the hatchery, with an average of 100% saturation since Dworshak releases were reduced to 7 kcfs.

Hourly Snake and Clearwater Temperatures. Lower Granite tailwater is currently 67.3 degrees F, with a reading of 68.5 yesterday afternoon due to a relatively large diurnal flux of 1.5-2.0 degrees F. Smoky air from forest fires is expected to reduce solar radiation and diurnal flux in the next week.

Temperature Model Results (Sept. 5). Temperatures are predicted to cool off, with the model indicating around 67 degrees F at Lower Granite tailwater. The current plan coordinated by the Dworshak Board is to hold 7 kcfs out of Dworshak unless there are problems, at which time the Dworshak board would meet again. For the time being, 7 kcfs discharges should suffice.

Weather Forecast for Lewiston, ID. The 10 day forecast is smoky and hazy, with a chance of precipitation September 7-8. Highs will be in the mid 80s to 90s, which could help keep temperatures below 68 degrees at Lower Granite tailwater.

3. Lower Granite Dam Spill Operation

3a. Lower Granite JBS Phase 1 Spill Operations Update. As coordinated last week at TMT, the COE closed the Lower Granite RSW on September 1 and rerouted spill through bays 6 and 8. A memo of coordination (MOC) was coordinated through FPOM for spill operations during construction of an upgraded juvenile bypass system and is linked to today's agenda with further details.

FPAC has discussed the current spill operation and wants to propose a change, Paul Wagner, NOAA, said. Spilling through bays 6 and 8 was coordinated through FPOM as an alternate spill pattern in case construction at the bypass outfall prevented the ability to spill through the RSW. However, since construction is not the issue at this time, there is no need to spill through the bays farthest from the outfall; therefore, FPAC recommended spilling through the bays closest to the RSW and powerhouse, bays 2 and 3, to provide optimum fish passage conditions.

Baus said the COE would implement the requested spill change and proposed that spill through bays 2 and 3 continue until September 14. FPOM is already scheduled to meet September 14 and could discuss next steps. The next day, September 15, the RSW will resume operation unless otherwise coordinated through FPOM.

Wagner pointed out that USFWS and Idaho were not represented on the recent FPAC call. Both Dave Swank, USFWS, and Russ Kiefer, Idaho, said today they would support moving spill closer to the powerhouse under current conditions.

Erick Van Dyke, Oregon, asked when unit 1 is scheduled to return to service. The current schedule is October 13, Ann Setter, COE, replied.

Given FPAC's recommendation, the COE will close bays 6 and 8 and shift spill to bays 2 and 3 from 6am to 6pm daily through September 14. On September 15, bays 2 and 3 will close and spill will be routed through the RSW unless FPOM coordinates a different course of action the previous day.

4. Eagle Creek Fire Update

With the I-84 interstate closed between Troutdale and Hood River due to the Eagle Creek fire, a total of 600,000 tule fall Chinook were prematurely released from a Bonneville hatchery because of water quality concerns, Wagner reported. Smoke and ash accumulating at the

hatchery meant the smolts stood a better chance in the Columbia River despite their youth.

Three hatchery facilities operated by the state of Oregon are being used as a staging ground for firefighting crews, Erick Van Dyke reported. No further smolt releases are planned. The fire is actively burning and at some point TMT might need to talk about its effects.

Tony Norris gave BPA's perspective on the fire. BPA has a robust system with multiple contingencies, so no customers have lost power. Only one transmission line, the Bonneville-Hood River 115 kV, was taken out of service. On September 4 the Naito-Ostrander 500 kV line was tripped offline by smoke. It was reenergized the next day.

4a. FPOM Memo on Modified Transport Operations. Road closures in the vicinity of the Eagle Creek fire, particularly I-84, mean that transport operations had to be modified to avoid the risk of stranding a truckload of fish, Eric Hockersmith, COE, reported. At Lower Monumental 38 fall Chinook, and at Little Goose 48 fall Chinook, were collected and released at a boat ramp immediately downstream of the dams.

5. Next TMT Meeting

TMT will meet next in person on September 20.

Name	Affiliation
Charles Morrill	Washington
Tom Lorz	CRITFC
Jay Hesse	Nez Perce
Erick Van Dyke	Oregon
Peter Cooper	BOR
Russ Kiefer	Idaho
Paul Wagner	NOAA
Tony Norris	BPA
Doug Baus	COE
Lisa Wright	COE
Scott Bettin	BPA
Julie Ammann	COE
Chris Perry	COE
Charles Wiggins	DSC
Dave Swank	USFWS
Steve Hall	COE
Tom Iverson	Yakama
Wayne Jousma	COE
Dan Turner	COE

Michael Bryant	CBB
Laura Berg	Clearing Up
Eric Hockersmith	COE
Ann Setter	COE