

**COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM**

June 14, 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/>*

**Little Goose Dam Update**

Doug Baus (Corps), Paul Wagner (NOAA), and Lisa Wright (Corps), reported on special spill operations for adult fish passage at Little Goose Dam. Lisa prepared a summary of the operations that have been coordinated through TMT since June 2nd; the summary is available on the TMT web site.

Pursuant to the consensus agreement at the June 7 meeting, 30% spill occurred each day between 4AM and Noon, spill then increased to pass inflow until 4PM, when spill increased again to return to MOP if possible by 4AM without exceeding 130% TDG in the tailrace. Flow was capped at 140 kcfs to keep TDG below 130% at the tailrace. It was clarified that the chart provided in the summary shows hourly minimum and maximum flows throughout the day, as well as the average 24 hour flow.

Paul reported that adult Chinook passage has improved since starting the 30% spill operation and counts at Little Goose continue in the 1,000 +/- range. The deficit between fish numbers between Little Goose and Lower Monumental has now been reduced to 3,400 (from ~9,000 when the operations were initiated). Paul shared that there was a consensus at FPAC to continue with this operation for an additional week, to June 21 with the intention of assisting passage. Paul noted that the inflow forecast for the week has been revised, and flows are expected to drop to the 30% FOP spill zone in the near future. Spill over the last 24 hours has been between 30-40%.

Doug affirmed that the Corps will extend the operation until June 21<sup>st</sup>. He noted there may be some screen cleaning outages at Little Goose next week and that inflows are starting to recede.

→ **ACTION:** The Corps will continue the current adult passage operation to maintain 30% spill from 4AM to 12PM. If inflows are high enough that holding 30% spill for that 8-hour period results in filling the Little Goose pool above MOP, the project will pass inflow from 12PM until 4PM, and increase spill evenly from 4PM until 4AM to return to MOP, if possible without exceeding 130% TDG. This operation will be implemented through 4AM on June 21<sup>st</sup>.

Anne Setter (Corps) reported on debris conditions. She noted that debris has been reduced from last week; however, there is still 1,000ft<sup>2</sup> by the powerhouse. Wind events have helped move debris and last week Lower Monumental conducted an emergency spill to pass debris. Ice Harbor Dam (IHR) debris is minimal and variable. Last week saw an emergency spill at IHR and there is still some debris by the fish pumps in the tailrace. Debris is cleared daily at the Washington-side fish ladder at McNary.

***The next TMT meeting will be a face-to-face meeting on June 21<sup>st</sup> at 9:00.***

**Columbia River Regional Forum**  
**TECHNICAL MANAGEMENT TEAM OFFICIAL MINUTES**

**June 14, 2017**  
 Minutes: Pat Vivian

**1. Introduction**

Representatives of BPA, Washington, CRITFC, Idaho, the Colville, Nez Perce and Warm Springs Tribes, Oregon, NOAA, BOR and others participated in today's TMT call. Doug Baus, COE, served as chair and Emily Plummer, DS Consulting, facilitated the meeting.

**2. Little Goose Dam Operations**

**2a. Summary of Operations for Adult Passage.** Lisa Wright, COE, presented the following summary of the special spill operation at Little Goose Dam to aid adult passage, which is posted to today's agenda. It reiterates the three phases of the operation as TMT coordinated it, making slight adjustments every few days.

1. Coordinated at TMT Fri, June 2.  
 Implemented Sat, June 3 – Mon, June 5 (3 days):

4 am – 10 am (6 hours):

- Spill maintained at 40% of total project outflow.
- Five available turbine units operated as constant as possible.

10 am – 4 pm (6 hours):

- Spill increased to pass inflow (inflow = outflow).

4 pm – 4 am (12 hours):

- Spill increased to draft back to MOP range 633-634 ft.

2. Coordinated at TMT Mon, June 5.  
 Implemented Tues, June 6 – Wed, June 7 (2 days):

**Red text indicates change from previous operation.**

4am – 10am (6 hours):

- Spill maintained at **30%** of total project outflow.
- Five available turbine units operated as constant as possible.

10am – 4pm (6 hours):

- Spill increased to pass inflow (inflow = outflow).

4pm – 4am (12 hours):

- Spill increased to draft back to MOP range 633-634 ft, **if possible. Spill will *not* exceed 140 kcfs as a hard constraint to avoid exceeding 130% TDG in the LGS tailrace.**

3. Coordinated at TMT Wed, June 7.  
Implemented Thurs, June 8 through Wed, June 14 (7 days):

4am – NOON (8 hours):

- Spill maintained at 30% of total project outflow.
- Five available turbine units operated as constant as possible.

NOON – 4pm (4 hours):

- Spill increased to pass inflow (inflow = outflow).

4pm – 4am (12 hours):

- Spill increased to draft back to MOP range 633-634 ft, if possible. Spill will **not** exceed 140 kcfs as a hard constraint to avoid exceeding 130% TDG in the LGS tailrace.

The summary includes a table showing daily spring Chinook adult and jack counts as well as the day's minimum, maximum, and 24-hr average total project outflow, spill, percent spill, percent TDG, forebay elevation, and unit outages for screen cleaning. The results cover June 3-14, the dates of the special operation.

At the request of Charles Morrill, Washington, the COE will update the chart to clarify that the data are hourly average minimum and maximum.

**2b. Adult Fish Counts.** The most recent spring Chinook adult counts at Little Goose have been in the range of 948-1,520 per day, Paul Wagner, NOAA, reported. The disparity between Lower Monumental and Little Goose is down to 3,400 fish, which indicates that fish are moving in response to improved passage conditions at Little Goose.

Yesterday FPAC reached consensus on a recommendation to continue the 30% spill operation for another week. The current forecast predicts inflows in the 130 kcfs range, which is equivalent to approximately 30% spill if this forecast materializes. Wagner asked whether any of the Salmon Managers present wanted to change their recommendation given the revised forecast; none did.

In light of FPAC's consensus recommendation, the Action Agencies will continue to operate the Little Goose pool above MOP if necessary to maintain 30% spill from 0400-noon each day for another week until TMT meets again on June 21. Baus gave a heads-up there could be more unit outages at Little Goose for screen cleaning next week.

Ann Setter, COE Walla Walla, reported on debris management at the lower Snake River projects. Little Goose benefited from wind over the weekend so the amount of debris is down to 1,000 square ft by the spillway, with very

little by the powerhouse. An emergency debris spill at Lower Monumental yesterday cleared the forebay of woody debris, with the caveat that wind could have blown some debris upstream, and more is coming from Little Goose. After an emergency debris spill last week, accumulation at Ice Harbor is minimal except in the vicinity of the fish pump in the tailrace. The only place McNary has accumulated debris is at the ladder exit, which project staff have been clearing daily.

#### **4. Next TMT Meeting**

TMT will meet next in person on June 21.

<b>Name</b>	<b>Affiliation</b>
Tony Norris	BPA
Charles Morrill	Washington
Sheri Sears	Colville Tribe
Tom Lorz	CRITFC
Russ Kiefer	Idaho
Jay Hesse	Nez Perce
Jen Graham	Warm Springs
Scott Bettin	BPA
Erick Van Dyke	Oregon
Lisa Wright	COE
Doug Baus	COE
Paul Wagner	NOAA
Julie Ammann	COE
Charles Wiggins	DSC
Ann Setter	COE
Michael Bryant	CBB
Margaret Filardo	FPC
Dan Turner	COE
Aaron Marshall	COE
Eric Chaff	COE
Mary Mellema	BOR