

# COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

April 13, 2016

## Facilitator's Summary

Facilitator: Emily Plummer; Notes: Tory Hines 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.*

### **Update Water Supply Forecast**

Doug Baus, COE-NWD, provided an update on the official April water supply forecast that is posted on the TMT website. Mary Mellema, BOR, noted that the forecast volumes for the final April forecast for Hungry Horse Dam inflow:

- April-July: 1,719.8 kaf (92%)
- January- July: 2,000.0 kaf (95%)
- April-August: 1,781.3 kaf (92%)
- May-September: 1,557.3 kaf (92%)

Mary also noted that the minimum flows downstream of Hungry Horse have not changed and are:

- Columbia Falls: 3,500 cfs
- Hungry Horse: 900 cfs

Doug noted the final April forecast volumes for the USACE projects:

- The Dalles April-August: 87 maf (99%)
- Lower Granite April-July: 19 maf (95%)
- Libby April-August: 6,681 kaf (114%)
- Dworshak April - July: 2,308 kaf (95%)
- Grand Coulee April-August: 57 maf (100%)
- Albeni Falls April-August: 11 maf (92%)

Doug noted that the current conditions relevant to the final April forecast are as follows:

- The Dalles April-August: 89 maf (101%)
- Lower Granite April-July: 20 maf (100%)

Paul Wagner, NOAA, noted that the minimum flows are Hungry Horse haven't changed, but clarified that the outflows will. Mary noted that they will continue to track outflows and minimum flows will be adjusted accordingly. Mary also noted that Grand Coulee forebay elevation is currently around 1,252ft and the end of April flood control elevation will be 1243.8 ft. Steve Hall, USACE Walla Walla, noted that the April 15<sup>th</sup> pool elevation at Dworshak is 1,563.7ft, resulting in a shift of 294kaf to Grand Coulee. The April 30<sup>th</sup> target elevation is 1,543.5ft and by the end of April volume will be shifted out of Dworshak. Steve noted that they are not expecting to draft down to 1,543ft at Dworshak, as they are likely to intercept the flood control refill curve towards the end of April.

Paul noted that NWRFC 10 day forecasts often are not met with projects running below forecasted flows.. He asked if this was because of a lack of forecasted precipitation in the basin or declining snowpack. Steve stated that 2015 experienced very early runoffs and this year will likely not be as early as last year. It is noteworthy that every year is different; currently, they are anticipating that runoff will be a few weeks earlier than expected, however, a lot of snow remains in the basin. While lower elevation snow has melted off, snow remains at elevations above 4,500ft. Presently, the water supply forecast has not changed since the beginning of April and runoff volumes look normal for this time of year. The reservoir pool is expected to remain at current levels until the end of April. By May inflows will pass through and releases will be tapered off in order to follow the refill curve. Charles Morrill, WA, thanked Steve for providing the update.

### **Dworshak Dam Spill Test**

Doug reported back to TMT on recommendations provided during a meeting with the Dworshak Hatchery on April 8<sup>th</sup>. It was suggested that the spill test operations are moved from early May to April 28<sup>th</sup> and 29<sup>th</sup>; the Corps agreed to the recommendation and will implement the Dworshak Dam spill test in accordance with the revised dates (specified below). Doug noted that the Corps is in the process of coordinating with the Nez Perce Water Quality and the State of Idaho DEQ and that if additional changes are made to the operation, the Corps will circle back to TMT to report the changes. Additionally, he added that the spill test is subject to change based on real time conditions, and coordination with the Nez Perce and State of Idaho. Erick Van Dyke, OR, asked if the Corps would follow up with TMT once the status of the waivers is determined. Doug noted that the Corps would provide an update either through TMT or FPOM.

- **ACTION:** The Corps will update TMT members with feedback received from the Nez Perce Tribe and ID DEQ. Additionally, the Corps will update TMT members as to which forum will provide the data from the spill test, either FPOM or TMT.
- **ACTION:** Pending coordination with Nez Perce and ID DEQ, the Corps will implement the Dworshak Dam Spill Test as follows:
  - Thursday, April 28, 1000-1600 hours: operate Dworshak Dam with two small units plus spill to target 115% TDG at the Dworshak tailwater gauge (DWQI).
  - Friday, April 29, 1000-1600 hours: operate Dworshak Dam with two small units plus spill to target 120% TDG at the Dworshak tailwater gauge (DWQI).

**The next TMT meeting will be a conference call on April 20<sup>th</sup> at 2:00PM.**

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

**April 13, 2016**

Minutes: Pat Vivian

**1. Introduction**

Representatives of NOAA, BPA, Oregon Washington, USFWS, BOR, CRITFC/Umatilla and others participated in today's TMT call chaired by Doug Baus, COE, and facilitated by Emily Plummer, DS Consulting. This summary is an official record of the conversation, not a verbatim transcript.

**2. Official Water Supply Forecasts**

Mary Mellema, BOR, and Doug Baus, COE, gave the Official Water Supply Forecasts for the month of April:

- HGH (April-July) – 1,720 kaf, 92% of average  
(January-July) – 2,000 kaf, 95% average  
(April-August) – 1,781 kaf, 92% of average  
(May September) – 1,557 kaf, 92% of average

For the remainder of 2016, minimum flows at HGH will be 3500 cfs at Columbia Falls and 900 cfs on the south fork below the dam. Hungry Horse releases are 3.2 kcfs and the project is well below its flood control elevation.

- TDA (April-August) – 87 maf, 99% of average
- LWG (April-July) – 19 maf, 95% of average
- LIB (April-August) – 6,681 kaf, 114% of average
- DWR (April-July) – 2,308 kaf, 95% of average
- GCL (April-August) – 57 maf, 100% of average
- ALF (April-August) – 11 maf, 92% of average

Since the Official Water Supply forecast was released on April 7 the volume forecast has increased slightly at TDA and LWG. The current (4/13) forecast for TDA and LWG are included below.

- TDA (April-August) – 89 maf, 101% of average
- LWG (April-July) – 20 maf, 100% of average

Wagner asked about flood control operations at GCL and DWR. The Columbia Basin flood risk management requirements (4/1) specifies the system elevation requirements at GCL of 1243.8 feet. Current project elevation is just below 1253 ft. Dworshak is operating to a flood control elevation of 1563.7 on April 15, with a shift of 294 kaf to Coulee, Steve Hall, COE, reported. The April 30 target elevation is 1543.5 ft,

with a goal of releasing all the shifted volume by the end of April. Because April is a transition month, the project will intersect the refill curve before the end of April, so it probably won't draft to 1543.5 ft as projected.

Hall said runoff was extremely early last year, while this year's runoff appears to be only a couple weeks earlier than usual. The COE has snow flight plans to confirm recent observations that only the lowest elevation snow has melted, and there is plenty of snowpack left above 4,500 ft. The water supply forecast is holding steady and; runoff volume is close to 100% of normal, according to STP projections. On April 28, the refill curve is expected to intercept the flood control elevation at 1564 ft.

### **3. Dworshak Spill Test Update**

The dates of the DWR spill test have been modified since the dates coordinated with the TMT during our last meeting on April 6. The dates were modified based on the April 8 Hatchery Meeting which presented updated biological information that indicated it was necessary to adjust the dates of the test. The new dates of the test will be April 28 and 29. Additional information regarding the test are included below.

Thursday, April 28, 1000 - 1600 hours: operate Dworshak Dam with two small units plus spill to target 115% TDG at the Dworshak tailwater gauge (DWQI).

Friday, April 29, 1000 - 1600 hours: operate Dworshak Dam with two small units plus spill to target 120% TDG at the Dworshak tailwater gauge (DWQI).

Baus reminded everyone the dates/times above are subject to change based on real time conditions and/or coordination with the Nez Perce Tribe and the State of Idaho regarding the acquisition of the Short Term Exemption from the State of Idaho Total Dissolved Gas Water Quality Standard of 110% that is required in order to perform the spill test.

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

Due to a scheduling conflict the morning of April 20, the next TMT meeting will be a 2 pm conference call that day. If there is nothing to discuss, the COE will cancel the call via email by close of business on April 19. TMT will meet next in person April 27.

<b>Name</b>	<b>Affiliation</b>
Paul Wagner	NOAA
Scott Bettin	BPA
Erick Van Dyke	Oregon
Tony Norris	BPA
Charles Morrill	Washington
Dave Swank	USFWS
Mary Mellema	BOR
Tom Lorz	CRITFC/Umatilla Tribe
Lisa Wright	COE
Doug Baus	COE

Scott English	COE
Steve Hall	COE
Laura Hamilton	COE
Paula Calvert	ODEQ
Scott Richards	Snohomish PUD
Dave Benner	FPC
Tory Hines	DSC
Sheri Sears	Colville Tribe
Joel Fenolio	COE