

COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

January 20, 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.

Review of Meeting Minutes

The December 2nd, 11th, 16th, 22nd and January 6th Official Minutes and Facilitator's Summary were reviewed and approved. The January 13th Minutes and Summary will be reviewed for the February 17th meeting.

Water Supply Forecast

Doug Baus, COE-NWD, shared the current NWRFC water supply forecast for The Dalles, noting the current April-August forecast is 96% of average. Current snow water equivalents (SWE) at SNOTEL sites show an increase in snowpack, however, there is variance throughout the basin. The Cascade Range snowpack is about average while east of the range is below average. Doug noted that snowpack throughout the Canadian basin is 90-110% of average. Paul Wagner, NOAA, noted a discrepancy between the current NWRFC water supply forecast for Libby and the Corps' official water supply forecast, which shows Libby at 91% and 106% respectively. Tony Norris, BPA, noted that the official forecasts are a week old.

Chum Operation

Doug Baus, COE-NWD, noted that the Bonneville tailwater elevation as of 0800 hours was 14.6ft. He continued that Bonneville is continuing to operate with a minimum tailwater elevation of 12.2ft all hours. The RFC forecast for Bonneville shows inflows of 143kcfs today and the 10 day inflow forecast is approximately 130kcfs. Paul and the Salmon Managers agreed with maintaining the current protection level with a minimum tailwater elevation of 12.2ft. Rainfall is forecasted over the next week and may cause an increase Bonneville tailwater elevations. It was suggested that TMT meet next Wednesday for an update and check in on the Chum operation. Doug also pointed TMT members to agenda attachment 4c, which provides a summary of hourly average tailwater elevations, coordinated tailwater operating ranges, and Chum surveys for each week from November 1 through January 19.

→ **ACTION:** The AA's will continue operating Bonneville with a tailwater minimum of 12.2ft. A conference call will be held on February 27th at 9:00am to check in on the Chum operation.

Operations Review

Reservoirs

Mary Mellema, BOR, reported the Reclamation projects:

- Hungry Horse midnight elevation was at 3520.0ft with 2.3kcfs outflow to meet the Columbia Falls instream flow requirements.
- Grand Coulee midnight elevation was at 1,281.1ft.

Lisa Wright, COE-NWD, reported on Corps projects:

- Libby was at elevation 2,413.6ft, with 4.1kcfs inflow and 7.8kcfs outflow.
- Albeni Falls was at elevation 2,052.6ft, with 13.1kcfs inflow and 13.1kcfs outflow.
- Dworshak was at elevation 1,523.8ft, with 2.9kcfs inflow and 1.6kcfs outflow.
- Lower Granite average outflow was 27.2kcfs.
- McNary average outflow was 124.5kcfs.
- Bonneville average outflow was 152.3kcfs.

Charles Morrill, WA, requested that the Corps note Washington's interest in relaxation of the January end of month elevation target of 2,411 ft at Libby. Julie Ammann, COE-NWD, agreed to share WA's interest with Joel Fenolio, Corps Seattle District. Dave Statler, Nez Perce, noted that Dworshak was on minimum discharges and filling slowly, but is below the flood control rule curve target. Julie noted that Dworshak will remain at minimum flows for the foreseeable future.

Fish

Paul Wagner, NOAA, reported on fish. He noted that this is the off season so there is little activity to report. He stated that adult Steelhead passage numbers at Bonneville are low. For smolts, the bypass facilities are out of commission and there is nothing to report.

Water Quality

Laura Hamilton, COE, noted that all the water quality gauges are working well and there are no issues to report.

Power Systems

Tony noted that there is nothing to report.

The next TMT meeting will be a conference call at 9:00am on Wednesday, January 27.

Columbia River Regional Forum
TECHNICAL MANAGEMENT TEAM MEETING

January 20, 2016
Minutes: Pat Vivian

1. Introduction

Representatives of the Nez Perce Tribe, BPA, BOR, COE, Washington, NOAA, Oregon, Montana, Idaho, CRITFC/Umatilla Tribe and others attended today's TMT meeting chaired by Doug Baus, COE, and facilitated by Emily Plummer, DS Consulting. This summary is an official record, not a verbatim transcript.

2. Review Meeting Minutes – December 2, 11, 16, 22, January 6 and 13

All these meeting notes and minutes were approved as final, with the exception of January 13 to allow more time for review.

3. Water Supply Forecast

The current NWRFC forecast for The Dalles (April-August) is 96% of average, Baus reported. The latest SNOTEL snow/water equivalent site readings indicate that snowpack is increasing, but not evenly throughout the basin. Snow water equivalent (SWE) in the Cascades is about average and as you move east of the Cascades SWE is generally below average.

Mary Mellema, BOR, asked about snowpack in the Canadian portion of the Columbia basin. The NWRFC snow readings (link 3c on today's agenda) indicate that snowpack is 90-110% of normal in that part of the basin, Baus replied. After last year, it's encouraging to see increases in snowpack throughout the basin.

Paul Wagner, NOAA, wondered whether the Libby forecast is really 90% as forecasted by RFC or 100% as the COE predicts. He will follow up with Joel Fenolio, COE Seattle.

4. Chum Spawning Operation

As of 8 am today, the Bonneville Dam tailwater elevation is 14.6 ft, being supplemented by Canadian releases that are not predictable, Baus reported. As discussed previously at TMT, BON is operating to a minimum tailwater elevation of 12.2 ft for chum incubation. Baus asked whether that operation is still satisfactory for chum. The current RFC inflow forecast for BON is 143 kcfs today, and approximately 130 kcfs for the next 10 days. Substantial rain is expected over the next week, so maintaining a minimum elevation of 12.2 ft should be sufficient to keep the redds watered, Wagner replied. TMT will revisit the chum operation in a January 27 conference call.

5. Operations Review

5a. Reservoirs. Mary Mellema, BOR, and Lisa Wright, COE, reported. Hungry Horse elevation is 3520.0 ft, releasing 2.3 kcfs to meet minimum flows at Columbia Falls. Grand Coulee elevation is 1281.1 ft. Libby elevation is 2413.6 ft with average inflows of 4.1 kcfs, discharging 7.8 kcfs. Albeni Falls elevation is 2052.6 ft with inflows of 13.1 kcfs, discharging 13.1 kcfs. Dworshak elevation is 1523.8 ft with inflows of 2.9 kcfs, discharging 1.6 kcfs. Lower Granite average outflows are 27.2 kcfs, McNary average outflows are 124.5 kcfs, and Bonneville average outflows are 152.3 kcfs.

Charles Morrill, Washington, asked whether the end of January elevation target of 2411 ft at Libby will be relaxed to somewhere around 2414 ft, given that the long-term ESP forecast continues to decline. The COE is watching the water supply forecast closely and will request a flood control deviation if appropriate, Julie Ammann, COE, replied. Dave Statler, Nez Perce Tribe, said Dworshak is on minimum discharge and filling slowly but considerably below its upper flood control rule curve target. Dworshak will be on minimum flows for a while, Ammann replied. The dry weather of last year has suppressed inflows so far this year, Steve Hall, COE, added.

5b. Fish. There was nothing to report today.

5c. Water Quality. All gauges are working and there are no issues, Laura Hamilton, COE, reported.

5d. Power. There was nothing to report today.

6. Next TMT Meeting

TMT will meet next in conference calls on January 27 and February 3.

Name	Affiliation
Dave Statler	Nez Perce
Tony Norris	BPA
Mary Mellema	BOR
Scott Bettin	BPA
Zachary Hudson	BPA
Lisa Wright	COE
Christine Petersen	BPA
Tory Hines	DSC
Charles Wiggins	DSC
Charles Morrill	Washington
Paul Wagner	NOAA
Erick Van Dyke	Oregon
Julie Ammann	COE
Doug Baus	COE
Laura Hamilton	COE

Phone:

Jim Litchfield

Russ Kiefer

Tom Lorz

Laura Bird

Michael Bryant

Steve Hall

Emily Corrigan

Montana

Idaho

CRITFC/Umatilla

NW Fish Letter

CBB

COE

Energy Keepers