

COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

July 9, 2014

Facilitator's Summary

Facilitator & Notes: Emily Plummer, 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 group approved the July 2nd Official Minutes and Facilitator's Summary.

Official Water Supply Forecast

Doug Baus, COE, shared the current NW River Forecast Center (NWRFC) water supply forecasts, noting that the official forecast is posted on today's agenda (<http://www.nwd-wc.usace.army.mil/tmt/>). The official 5 day-QPF forecasts for July are as follows:

- The Dalles April – August 95 MAF (109% of average)
- Lower Granite April – July 20 MAF (99% of average)
- Dworshak April – September 3.1 MAF (122% of average)
- Grand Coulee April – August 64 MAF (112% of average)
- Libby April – August 7 MAF (118% of average)
- Hungry Horse April-August 2.7 MAF (138% of average)
- Albany Falls April – August 16.1 MAF (131% of average)

Dworshak Operations:

John Heitstuman, COE-NWW, provided an update on water temperature modelling for Dworshak operations. Updated modelling will be provided on the TMT agenda as the season progresses (http://www.nwd-wc.usace.army.mil/tmt/agendas/2014/0702_Agenda.html). John noted that currently water in the Lower Granite tailrace is 66 degrees Fahrenheit. Additionally, he noted that Dworshak outflows are 12kcf/s; the project may increase to 13kcf/s if today's modelling suggests a significant temperature change. Current TDG levels in the Dworshak tailrace are between 105-106% and thus there is some room to increase to 13kcf/s if necessary.

Bonneville Dam PH2 Model Validation Testing

Doug Baus, COE, shared that the COE would like to get TMT input on a proposed unit priority modification and short duration operation outside of 1% for Bonneville PH2. He noted that typically this operation would be coordinated through FPOM, however, this month's FPOM meeting was cancelled. The unit priority modification would be from July 14th through 16th in order to allow for required unit testing. The COE is interested in input on how to best minimize the impact of the testing on sockeye, as adult sockeye passage is high at this time. Tom Lorz, CRITFC/Umatilla, requested that the COE follow FPOM process and submit a Memo of Coordination for the operation, that way FPOM members can review the operation and appropriate data in order to provide informed input; OR, USFWS, ID, and WA TMT representatives echoed Tom Lorz' request.

- **ACTION:** Doug Baus and Ray Guajardo will work with COE-Portland District on a Memo of Coordination and will submit it to FPOM. FPOM will review and provide recommendations to COE on the operation.

Operations Review

Reservoirs: Mary Mellema, BOR, reported on Reclamation projects:

- Hungry Horse midnight elevation was 3,559.38ft (3,560 is full) with 7.8kcfs outflow; BOR is expecting to lower discharge to 5.8kcfs tonight.
- Grand Coulee midnight elevation was 1,287.5ft. The end of August draft can be no higher than 1,279.7. Paul Wagner, NOAA, inquired as to why the end of August draft can be no higher than 1,279.7, to which Mary responded that it is based off of the incremental storage release program.

Lisa, USACE, reported on Corps projects:

- Libby was at elevation 2,450.1ft, with 27kcfs inflow and 15kcfs outflow.
- Albeni Falls was at elevation 2,062.5ft, with 57.3kcfs inflow and 52.5kcfs outflow.
- Dworshak was at elevation 1,598.1ft with 6.2kcfs inflow and 11.9kcfs outflow.
- McNary average inflow was 235.4kcfs.
- Bonneville average inflow was 244.2kcfs.

Fish: Paul Wagner, NOAA, reported on fish. He noted that adult sockeye passage numbers may be record high this year, with 526,000 past Bonneville thus far; 19,000 passing per day, which represents 294% of the 10-year average. Summer chinook adult passage at BON is higher than the 10-year average, with 89,000 past thus far, around 2,000/day. Summer chinook passage is at 127% of the 10-year average. Jacks at Bonneville have reached 121% of the 10-year average and lamprey are at 130%. Lamprey passage at The Dalles Dam is also picking up, at 160% of the 10-year average. At Lower Granite, sockeye are doing well and have reached 250% of the 10-year average. Summer chinook at Lower Granite are at 76% of the 10-year average, and jacks are at 119%. At Priest Rapids, sockeye are at 270% of the 10-year average, with 250,000 past; 40,632 summer chinook have passed, which is 157% of the 10-year, and jacks are at 123%. Steelhead and fall chinook will be coming up next in the system; however, it is still too early to tell how the runs are doing. Paul noted that there is a slight conversion issue between Lower Granite and Little Goose and TMT will need to pay attention for passage delays due to temperatures. Russ Kiefer, ID, noted that the Snake River sockeye numbers are looking good. Dave Wills, USFWS noted that the Lower Granite adult trap is out of service and may end up impacting collection.

Paul also reported on juveniles. He noted that sub-yearling passage has peaked, with 16,000 past Lower Granite 10 days ago, and 5,000 now passing daily. Little Goose and Lower Monumental have similar passage numbers at this point. McNary had 537,000 a week ago and had 200,000 last Monday. Paul noted that this passage index is higher than average. Some juvenile lamprey have passed Lower Granite and Little Goose; 6,800 have passed McNary.

Water Quality: Scott English, COE, reported that there is some intermittent involuntary spill; however, it is not causing significant TDG concerns. Additionally, he noted that all of the monitoring stations are up and running.

Power System: Nothing to report.

NOTE TMT LOCATION CHANGE: The next TMT meeting will be face to face on July 16th at 9:00am at the 911 Building.

Agenda Topics:

- Dworshak operation update
- Water supply forecast
- BON PH2 operation
- Little Goose and Lower Granite conversion
- Granite adult trap outage

Columbia River Regional Forum
TECHNICAL MANAGEMENT TEAM – OFFICIAL MINUTES

July 9, 2014
Minutes: Pat Vivian

1. Introduction

Doug Baus, COE, chaired this TMT meeting facilitated by Emily Plummer, DS Consulting. Representatives of the COE, BPA, NOAA, Idaho, Montana, Washington, Oregon, Colville Tribe, BOR, CRITFC and others participated. These minutes are an official record of the proceedings, not a verbatim transcript.

2. Meeting Minutes – July 2

The July 2 facilitator's summary and official minutes were approved as final.

3. Water Supply Forecast

Baus presented the official 5 day QPF Northwest River Forecast Center water supply forecasts for individual projects. It was noted that forecasts throughout the region have improved significantly from earlier this year. The forecasts for July are:

- TDA (April-August) – 109% of average, 95 maf
- LGR (April-July) – 99% of average, 20 maf
- DWR (April-September) – 122 % of average, 3.1 maf
- GCL (April-August) – 112% of average, 64 maf
- LIB (April-August) – 118% of average, 7 maf
- HGH (April-August) – 138% of average, 2.7 maf
- ALF (April-August) – 131% of average, 16.1 maf

4. Dworshak Operations

John Heitstuman, COE Walla Walla, reported. Dworshak has been releasing 12 kcfs since July 7, based on current modeling of tailwater temperatures at Lower Granite. With Lower Granite temperatures hovering in the 66 degrees F range, the plan is to continue the same operation at Dworshak or possibly increase releases to 13 kcfs if subsequent model runs indicate temperatures might increase. Current TDG levels are 105-106% depending on the time of day, which allows some room for an increase. The graph posted to today's TMT agenda is based on modeling done July 4. Modeling done July 7 indicates that temperatures could be more moderate than the posted graph indicates.

Paul Wagner, NOAA, asked whether Dworshak is spilling through the regulating outlets; the answer was yes. Erick Van Dyke, Oregon, asked at what elevation the regulating outlets draw water from Dworshak reservoir. The COE will get back to him with that information.

5. Bonneville Powerhouse 2 Model Validation Testing

The COE wants TMT's input regarding modifying Bonneville powerhouse 2 unit priorities for upcoming testing on July 14-16, Baus said. While this operation would normally be coordinated through FPOM, this month's FPOM meeting was canceled. The three-day operation could involve short excursions outside the 1% operating range at the Bonneville powerhouse 2 units, as well as modified unit priorities for units 12-18 (unit 11 is out of service). Excursions outside the 1% operating range will occur for an hour or two when powering the units back on after installation of new governors. The units will be tested one at a time. This work is being done to meet NERC/WECC requirements.

The COE recognizes a significant number of adult sockeye (19,087 on July 8) are currently passing Bonneville Dam. In an effort to minimize any potential impact from modifying the unit priority at PH2 required for the testing on adult sockeye the COE recommends the following short term modified unit priority at PH2: 12, 13, 14, 15, 16, 17, and 18. Adult sockeye predominantly pass the project via the Washington Shore Fish Ladder and operation of unit 18 is important because it provides attraction flow to the WA Shore Fish Ladder entrance. Having unit 18 low in the unit priority would delay testing unit 18 operations until later in the testing period when it is likely less adult sockeye could potentially be impacted as adult sockeye passage is currently on the decline. The COE would like to hear from TMT members if they would prefer a different modified unit priority for testing of PH2 units.

Tom Lorz, CRITFC, advocated using the FPOM decision process, starting with a coordination memo released today for the salmon managers to use in gathering data relevant to the operation. He suggested the salmon managers could respond by Friday if they receive the memo today. Oregon, USFWS, Idaho and Washington agreed they need to see the request in writing. Lorz suggested scheduling the unit tests after 2 pm when sockeye passage recedes for the day. Ray Guajardo, Bonneville chief of operations, said project staff will abide by time-of-day restrictions for testing. He and Baus will prepare a memo for quick turnaround as soon as possible. TMT will revisit this issue at its next meeting.

6. Operations Review

a. Reservoirs. Hungry Horse is at elevation 3559.38', less than a foot from full at 3560'. Outflows are 7.8 kcfs and will drop to about 5.8 kcfs tonight.

Grand Coulee is at elevation 1287.5' with an end of August elevation target of no higher than 1279.7' based on the July 1 water supply forecast. The 1279.7' target instead of 1280' is due to a 0.3' offset for the BOR's incremental storage release program, Mary Mellema explained.

Dworshak is at elevation 1598.1' with inflows of 6.2 kcfs and releases of 11.9 kcfs. Libby is at elevation 2450.1' with inflows of 27 kcfs and releases of 15 kcfs. Albeni Falls is at elevation 2062.5' with inflows of 57.3 kcfs and releases of 52.5 kcfs.

McNary daily average inflows are 235.4 kcfs. Bonneville daily average inflows are 244.2 kcfs.

e. Fish. Paul Wagner, NOAA, reported.

Adults: Sockeye passage at Bonneville is robust, with 526,000 fish passing to date or about 19,000 per day. That's a record-setting 294% of the 10 year average. Summer chinook are passing Bonneville at the rate of about 2,000 fish per day in the past week, for 89,000 fish to date, 127% of the 10 year average. Summer chinook jack passage at Bonneville is 121% of the 10 year average.

The lamprey count at Bonneville is 130% of the 10 year average, and 160% of the 10 year average at The Dalles, David Wills, USFWS, reported. There are plans to fix the air entrainment problem at the lamprey flume at Bonneville Dam. Meanwhile, it's passing fish successfully.

Adult sockeye passage at Lower Granite is 586 fish to date which is 250% of the 10 year average, Wagner reported. A conversion issue seems to be arising for sockeye between Little Goose and Lower Granite, with a slight disparity of 752 at Little Goose vs. 586 at Lower Granite. Summer chinook passage at Lower Granite is only 75% of average, but jack passage is 119% of average.

Sockeye passage at Priest Rapids Dam is 250,000 to date, which is 270% of the 10 year average. Summer chinook passage at Priest Rapids Dam is 40,632 to date, which is 157% of average. Jack passage is 123% of average.

Approximately 2,000 Snake River sockeye have passed Bonneville to date, Russ Kiefer, Idaho, reported. The adult trap at Lower Granite is out of service due to failed cable connections, which will take up to 2 weeks to repair. The trap is used only to sample runs and collect broodstock and has no effect on passage.

Juveniles: Subyearling passage peaked at Lower Granite about 10 days ago with 16,000 fish in a day, Wagner reported. McNary subyearling passage peaked about a week ago at 537,000 fish. Juvenile lamprey passage at McNary was 6800, which is good news.

c. Water Quality. Scott English reported. Levels of TDG are well under control despite intermittent involuntary spill. All water quality monitoring stations are operational.

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

7. Next TMT Meeting

The next TMT meeting will be in person July 16 in the 911 building next to BPA. Agenda topics will include a water supply forecast update, Bonneville powerhouse 2 unit testing, sockeye conversions from Little Goose to Lower Granite, and repairs to the Lower Granite adult trap.

Name	Affiliation
Tony Norris	BPA
Lisa Wright	COE
Scott English	COE
Julie Doumbia	BPA
Michelle Yuen	COE
Paul Wagner	NOAA
Doug Baus	COE

Phone:

Russ Kiefer	Idaho
Jim Litchfield	Montana
Charles Morrill	Washington
Brian Marotz	Montana
Sheri Sears	Colville
Erick Van Dyke	Oregon
Mary Mellema	BOR
John Heitstuman	COE Walla Walla
Barry Espenson	CBB
Andy Traylor	BON Dam COE
Eric Rothwell	BOR
Margaret Filardo	FPC
Don Tinker	SCL
Greg Lawson	Thompson Reuters
Shane Scott	PPC
Tom Lorz	CRITFC
Ray Guajardo	BON Dam COE