

# COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

August 17, 2011

## Facilitator's Summary

Facilitator: Robin Gumpert

*The following notes are a summary of issues that are intended to 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.*

### **Autumn Treaty Fishery**

Tom Lorz, CRITFC/CTUIR, reported on SOR 2011-C7, a request for operating Bonneville, The Dalles and John Day pools within a 1.5' elevation to support treaty fishing. The fishing dates are 8/23-8/26; 8/30-9/2; and 9/6-9/9. It was noted that the TAC sets fishing estimates in-season and on a weekly basis. This triggers the fishery and operations requests that come to the COE/TMT.

**Planned Operation:** Doug Baus, COE, said the COE planned to implement the request as described in the SOR.

### **Dworshak Operations:**

Doug Baus, COE, reported that the Dworshak Board had met and determined a plan for shaping releases out of Dworshak in September per the Nez Perce agreement. The plan is consistent with 2010 operations. The project was expected to reach elevation 1540' around 8/31 (above 1535' due to high inflows this year) discharging approximately 14 kcfs; when the pool reaches 1535', go to full powerhouse/10.2 kcfs around 9/3; ramp to 8 kcfs around 9/9; to 5.9 kcfs around 9/13; to 4.8 kcfs around 9/16; to 2.4 kcfs around 9/19; and to 1.5 kcfs when the reservoir reaches elevation 1520', around 9/22. Doug noted the dates for ramping down and discharge rates are approximations and subject to change pending real time conditions.

Steve Hall, Walla Walla District COE, updated TMT on current operations. The project was at elevation 1565' and being operated to provide cool temperatures for Lower Granite, maximize discharge, stay within TDG standards and minimize impacts to equipment. As such, day time outflows when TDG is highest were about 13.2-13.6 kcfs, and nighttime flows when TDG is lower were about 14 kcfs. Steve reported that when the pool reaches elevation 1560-1555', one unit will switch to overshot mode and this was expected to occur this or early next week. He also noted that temperatures were now past their peak and currently, Lower Granite tailwater temperatures were about 65-66 degrees F. TMT members noted that the operation had gone well so far.

### **Libby Operations:**

Doug Baus, Division COE, and Joel Fenolio, Seattle District COE, reported on Libby operations. The project was currently being operated according to the plan agreed on to support the Kootenai Tribe's request discussed at TMT on 8/3. A Libby July-September operations update was posted based on the latest STP flows. It projected the same outcome as had been forecast at the last update – the COE will continue to release 14.6 kcfs until the project reaches elevation 2449', around 8/27. Then it will pass inflows or

release bull trout minimums. TMT will hear updates on the operation as the season progresses.

### **End of MOP Operation**

Tony Norris, BPA, and Doug Baus, COE, described the plan for operating projects once MOP restrictions are lifted at the Lower Snake projects on 8/31. Lower Granite will continue to be operated in order to provide safe navigation conditions and the lower pools will be used as needed to support power needs. The action agencies are committed to return all projects to MOP (with the exception of Lower Granite due to navigation safety concerns) on 9/22 (at the end of the Dworshak release).

With regards to the Lower Granite survey, the COE reported that a contract was awarded this week and the survey would likely start next week, and will begin at the confluence. As data is collected, summarized and coordinated internally, information will be shared with TMT and other stakeholders – likely in the September/October timeframe.

### **Operations Review**

Reservoirs – John Roache, Reclamation, reported on projects. Hungry Horse was at elevation 3558.0’ and releasing 4 kcfs outflows to reach elevation 3550’ by 9/30. Grand Coulee was at elevation 1287.4’ and drafting to the draft limit of 1280’ by 8/31. As follow up to the 8/10 TMT meeting, John said the water supply forecasts and the latest STP model run had changed as such that flows at McNary would average below 200 kcfs for the remainder of the month with Grand Coulee drafting to 1280’. McNary summer flow objectives were met (and exceeded) this year. Doug Baus, COE, reported on projects. Libby was at elevation 2451’ with 9.6 kcfs inflows and 14.6 kcfs outflows. Albeni Falls was at elevation 2062’ with 16.5 kcfs inflows and 20.3 kcfs outflows. Dworshak was at elevation 1565’ with 2.5 kcfs inflows and 13.4 kcfs outflows. Lower Granite inflows were 35.3 kcfs. Priest Rapids inflows were 157.4 kcfs.

Doug Baus, informed TMT the COE will be removing the John Day TSWs on Aug 31. During the TSW removal process all scheduled spill will be redistributed to the remaining bays. Little Goose spillway weirs would be out of service by Aug 31. Per the FOP should low flows limit the ability to spill 30% at LGS the COE would the implement operation consistent with the 2009 and 2010 operations of changing from 30% spill to a constant spill rate.

Fish – Paul Wagner, NOAA, reported on fish passage. Adult Fall Chinook counts at Bonneville were 10,660, about 1,000/day. A strong jack return was observed so far this season. Steelhead counts at Bonneville were 213,000, about 5,000-8,000/day and on track with the 10-year average. Of those, 88,000 were wild. Sockeye counts were 1,491 at Lower Granite. Juvenile Fall Chinook subyearlings were passing Lower Granite at about 1,000/day – though a caution was shared that the passage index at Lower Granite is impacted by powerhouse outages and more fish through the spillway. Counts at McNary were running high, around 25,000/day.

Water quality – Laura Hamilton, COE, reported that there were few TDG exceedances in August. A temporary Bonneville tailwater gauge at Cascade Island was currently being installed by Portland District COE and USGS; they hoped to be able to collect data this week. A permanent gauge will be installed this Fall when the water is lower.

**Next Meeting, 8/31 (Please note: Due to a very light agenda, this meeting might be cancelled and TMT would resume discussions on 9/7. Please check the TMT web page for updates on schedule and agendas.)**

Agenda items include:

- Dworshak Operations
- Libby Operations
- Grand Coulee Operations
- Other?

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

**August 17, 2011**

Notes: Pat Vivian

***1. Introduction***

Today's TMT meeting was chaired by Doug Baus, COE, and facilitated by Robin Gumpert, DS Consulting. Representatives of Idaho, BPA, COE, NOAA, Washington, BOR, CRITFC and others attended. This summary is an official record of the proceedings, not a verbatim transcript.

***2. Review Meeting Minutes for August 3 and 10***

There were no comments today on either the facilitator's notes or official minutes. The August 10 notes and minutes were deemed final. The August 3 notes and minutes will be finalized next week.

***3. Autumn Treaty Fishery – SOR 2011-C7***

Tom Lorz, CRITFC, presented this SOR, which makes the typical treaty request of 1.5-foot operating bands at Bonneville, The Dalles and John Day pools for tribal fisheries over the next 3 weeks:

- 6 am Monday, August 22, to 6 pm Friday, August 25
- 6 am Tuesday, August 30, to 6 pm Friday, September 2
- 6 am Tuesday, September 6, to 6 pm Friday, September 9

Baus asked how harvest quantities are used in planning future treaty fisheries. A regional group of experts, including Washington representative Cindy LeFleur, does the planning based on harvest estimates and run forecasts, Lorz replied. The group meets whenever new data are available and adjusts fishery plans accordingly. Hearing no comments on this SOR today, the COE will implement the operation as requested.

***4. Dworshak Operations***

The Dworshak board has convened and made the Operational Plan for the use of the Nez Perce Tribe's 200 kaf of Stored Water in Dworshak Reservoir, Baus said. The COE plans in implementing the Operational Plan and would like to hear any comments from TMT on the plan.

The following are specific details associated with the release of the Nez Perce Tribe's 200 KAF:

A. On or about August 31, Dworshak will be drafted to approximately elevation 1540 feet (about 5 feet higher than the objective of 1535 feet due to high inflows and late refill because of the high inflows), and discharge is expected to be about 14.0 kcfs.

B. Maintain discharge at approximately 14.0 kcfs until the pool reaches elevation 1535 feet (approximately September 3<sup>rd</sup>). When the pool reaches elevation 1535 feet, reduce discharge to full power house (approximately 10.2 kcfs). The temperature of the water is expected to be in the range of 46 or 48 degrees Fahrenheit.

C. Maintain discharge at approximately 10.2 kcfs (all three units) for approximately 5 days (September 8<sup>th</sup>). The temperature of the water is expected to be in the range of 46 or 48 degrees Fahrenheit.

D. On about September 9<sup>th</sup>, reduce discharge to 8.0 kcfs (big unit and small unit) and maintain for approximately of 4 days. The temperature of the water is expected to be in the range of 46 or 48 degrees Fahrenheit.

E. On about September 13, reduce discharge to 5.9 kcfs (big unit) and maintain for a minimum of 2 days. The unit will operate in undershot mode to achieve water temperature near 47 degrees Fahrenheit.

F. On about September 16<sup>th</sup>, reduce discharge to 4.8 kcfs (two small units) and maintain for a minimum of 2 days. The discharge water temperature is expected to be in the range of 46 to 48 degrees Fahrenheit.

G. On about September 19<sup>th</sup>, reduce discharge to 2.4 kcfs (one small unit) and maintain for a minimum of 2 days or until the pool reaches 1520. The unit will operate in undershot mode to achieve water temperature near 47 degrees Fahrenheit.

H. Reduce to minimum outflow (about 1.5 kcfs), when the reservoir pool drafts to elevation 1520 feet (forecasted to be about September 22<sup>nd</sup>).

Russ Kiefer, Idaho, said this sounds like a reasonable operation.

Steve Hall, Walla Walla, gave an update on Dworshak operations. The COE is targeting discharges of 13.2-13.6 kcfs from 10 am to 10 pm, when TDG levels tend to be highest. At night, discharges increase to slightly more than 14 kcfs when TDG levels are lower, with all three units in undershot mode and a discharge target of 48 degrees F. The current reservoir elevation is 1,565 feet; spillway access will end once the operation drops below 1,560-1,555 feet. At that time, one unit will go into overshot mode, selecting warmer water. That is predicted to happen late this week or early next week.

A graph of Dworshak water temperature comparisons, attached to this item on today's agenda, shows that the warmest temperatures of 2011 probably occurred in early August. Lower Granite tailwater temperatures are now in the 65-66 degrees F range, well below the 68-degree threshold. TMT will continue to monitor Dworshak operations throughout the rest of passage season.

### **5. Libby Operations**

The COE has been implementing the operation to support SOR 2011-04, presented to TMT by the Salish-Kootenai Tribe. Baus reported there have been no changes in the COE's plan to implement the tribe's request for a flat flow of 6 kcfs in September to accommodate habitat restoration.

The current end of August elevation target at Libby is 2,448.5 feet, Joel Fenolio reported. Releases will continue at 14.6 kcfs until the reservoir hits elevation 2,449 feet. At that time, predicted to be around August 24-27, Libby will go either to bull trout minimums or passing inflows.

There were no questions today on this operation. TMT will continue to monitor Libby operations throughout the rest of passage season.

### **6. End of MOP Operations**

The COE's intention is to repeat last year's end of MOP operation, Baus said. Tony Norris, BPA, gave details of the operation. The official MOP restriction will be lifted at the end of August. After that, Lower Granite will continue to be maintained within its current operating range and BPA will use the lower Columbia pools as needed, returning those pools to the MOP range when the Dworshak release ends around September 22.

Baus noted that Lower Granite is currently operating at MOP+2, which will continue as long as there are navigation safety concerns. A contract for the channel survey was awarded on August 15. The surveys are expected to start next week at the confluence of the Snake and Columbia and work their way up the Snake. Data processing will take a few weeks once the survey is complete, with data expected around mid September. The COE will keep TMT informed as the survey progresses.

### **7. Additional Items**

John Day Dam, Baus indicated the TSWs will be removed from service on August 31. Little Goose Dam, Kiefer asked whether flows are in the range where keeping spill at 30% for all hours causes turbine cycling. Current STP information indicates that flows won't be in that range (when daily average flows in the Snake River are less than or equal to 32 kcfs) until early September, Baus and Lisa Wright, COE, replied. The COE will notify TMT if flows reach the trigger but the

planned operation would be consistent with the 2010 operation that resulted in switching from 30% spill to spilling at a constant rate. TMT will revisit this operation at its next meeting August 31. In addition at Little Goose Dam the spillway weirs will be out of service by August 31.

## **8. Operations Review**

**Reservoirs.** Hungry Horse is at 3,558.01 feet elevation with releases of 4 kcfs, targeting elevation 3,550 feet by September 30. BOR is considering reducing releases to 3.5 kcfs next week in order to reach the September 30 elevation target.

Grand Coulee is at elevation 1,287.4 feet, moving toward a draft limit of 1,280 feet elevation on August 31. Russ Kiefer, Idaho, asked why the draft limit is now 1,280 feet and the STP indicates downstream flows will be less than 200 kcfs, not elevation 1,284 feet while maintaining 200 kcfs flows at McNary as presented to TMT a week ago with the BPA proposal. John Roache, BOR, said that Reclamation's decision to draft the 1,280 foot draft limit was based on feedback from TMT whose members didn't reach full consensus on the proposal. Tony Norris, BPA, said inflow forecasts have dropped significantly such that inflows are now expected to be too low to make the 200 kcfs weekly average at McNary. There is no requirement to meet weekly average flows but flows at McNary will significantly exceed the seasonal flow objective.

Libby is at elevation 2,451 feet, with inflows of 9.6 kcfs and releases of 14.6 kcfs. Albeni Falls is at elevation 2,062 feet, with inflows of 16.5 kcfs and releases of 20.3 kcfs. Dworshak is at elevation 1,565 feet, with inflows of 2.5 kcfs and releases of 13.4 kcfs. Lower Granite inflows are 35.3 kcfs. Priest Rapids inflows are 157.4 kcfs.

**Fish. Adults:** Fall chinook passage is strong at Bonneville, with a projected total of 700,000 fish at the river mouth and 500,000 at the dam. Approximately 1,000 chinook per day are passing Bonneville. Like spring and summer chinook this year, fall chinook jacks are showing a strong return of 30% to date. Steelhead run size is projected to be 213,000 fish, with 88,000 wild steelhead. A total of 1,491 sockeye have passed Lower Granite, and 22,000 steelhead have moved up the river. Steelhead passage is on track with the 10-year average, unlike last year which was exceptional.

**Juveniles:** Over the past week, fall chinook subyearlings have been passing Lower Granite at the rate of 1,000 to 350 fish per day. Kiefer pointed out that index counts aren't very accurate when most juveniles are passing via spill, as they are now due to the Lower Granite powerhouse outages. Little Goose is passing 1,000 to 300 subyearlings per day over the past week. McNary has been passing 10,000 per day for the past few days, with an average closer to 25,000 per day over the past week. This is more fish than usual for this time of year.

Passage numbers are dropping off at John Day. Downstream passage at Bonneville has moved to the 1<sup>st</sup> powerhouse, making the passage indexes relatively meaningless.

**Water quality.** Laura Hamilton, COE, reported that spill has subsided and there have been few TDG exceedances on the lower Snake and Columbia in the past week. Replacement of the temporary Bonneville tailwater gage will occur this week or next, depending on availability of an underwater cable. The permanent gage replacement will be installed when water levels are as low as possible, probably in September or October.

**Power.** There was nothing to report today.

## **6. Next Meeting**

The next regular TMT meeting will be on August 31, with a retrospective of summer operations on the agenda.

| <b>Name</b>    | <b>Affiliation</b> |
|----------------|--------------------|
| Russ Kiefer    | Idaho              |
| Tony Norris    | BPA                |
| Lisa Wright    | COE                |
| Paul Wagner    | NOAA               |
| Doug Baus      | COE                |
| Bill Proctor   | COE                |
| Dan Feil       | COE                |
| Laura Hamilton | COE                |
| Karl Kanbergs  | COE                |
| Scott Bettin   | BPA                |
| XX             | BPA                |

### *Phone:*

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| Steve Hall       | COE Walla Walla  |
| Gunnar Leffler   | COE              |
| Bob Gagnon       | Snohomish PUD    |
| Russ George      | WMC              |
| Ruth Burris      | PGE              |
| Bruce McKay      | consultant       |
| Dave Benner      | FPC              |
| Richelle Beck    | Grant PUD        |
| Margaret Filardo | FPC              |
| Doug Vine        | Thompson Reuters |
| Tom Lorz         | CRITFC           |
| Joel Fenolio     | COE              |