

# COLUMBIA RIVER REGIONAL FORUM

## TECHNICAL MANAGEMENT TEAM

November 18, 2009 Meeting

### FACILITATOR'S SUMMARY NOTES ON FUTURE ACTIONS

Facilitator: Erin Halton

Notes: Christa Leonard

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.

#### **Review Meeting Minutes for November 4, 2009**

No changes to the facilitator notes or official meeting minutes were made during the meeting and both sets are considered final.

#### **Vernita Bar Update**

Russell Langshaw, Grant PUD, presented TMT with an operations update: flow has been holding steady between 55-60 kcfs and redd counts have been fairly low so far.

Spawning initiation was established on October 22<sup>nd</sup> for the 36 kcfs range, on October 28<sup>th</sup> for the 36-50 kcfs range and October 24<sup>th</sup> for the above 50 kcfs range.

**Action/Next Steps:** The final redd count survey is scheduled for this Sunday 11/22 and critical elevation will be set. This item will be on the agenda for the 12/10 TMT meeting.

#### **Dalles Spillwall Project**

Pat Duyck, COE-NWP, presented TMT with a status report on this project. The leveling slabs on the rock shelf were completed last week and there will be a total of 43 pre-cast blocks, the last two of which will be set this week. Duyck said that the contractor has refined the concrete mix, which has helped the concrete process go well. The lengthy process of the drilling and grouting stages has begun, with 32 of the 116 holes completed. There are currently two drilling rigs on the wall, with work performed around the clock. Beginning next week, 4-6 anchors per block will be set.

Duyck noted that good weather and light winds have helped put the project ahead of schedule, which provides a good buffer for the schedule, should inclement weather arrive later in the season. A third construction season is not likely to be needed and the completion date for in-water work is still on schedule for end of March 2010, with heavy equipment out of the water around March 1st. Duyck clarified that the project will still require higher tailwater elevation while barges and cranes are in the water. He added that the Bonneville pool height (78') has caused a few minor issues for the Ballard at the locks but they were corrected by grating removal.

TMT members thanked Duyck for the update and complimented the good work being performed at the project.

**Action/Next Steps:** Duyck will continue to provide updates as requested by TMT.

### **Chum Operations**

Dan Feil, COE, directed TMT members to three documents, posted as links to the agenda, including a link to the Fish Passage Center site detailing tracking surveys of spawning grounds where several fish and one redd were observed on November 11<sup>th</sup>. Also posted were a summary of chum operations criteria and a summary of the first full week of tailwater operations and discharge at Bonneville. Feil noted spikes on the 8<sup>th</sup> and 9<sup>th</sup> were due to higher flows being passed at night (ideally around midnight), pursuant to the protocols in the current teletype for chum spawning operations. Paul Wagner, on behalf of the Salmon Managers, complimented the COE/BPA on the chum operations so far and clarified that timing for passing higher flows best serves the fish when it is as close to midnight as possible.

**Action/Next Steps:** Feil will post updated summaries to the TMT agenda for the December 10<sup>th</sup> meeting.

### **Lake Pend Oreille Post-Spawning Operations**

As follow up to discussion at previous TMT meetings, Tony Norris, BPA, presented a request to the region: for flexibility to fluctuate the Lake Pend Oreille pool between 2051-2056'. Norris said that BPA would hold to a max fill per day of .5' and explained that filling the pool could help avoid creating TDG issues downstream and also meet energy needs for the region, noting that increased discharge at Albeni Falls during cold snaps would support energy production. Norris stressed that there would be slow, gradual drafting and filling of the lake, only filling more quickly if there was to be a big precipitation event. He added that bank erosion monitoring and LIDAR data will be in place to help measure the effects of this operation.

Kate Wilson and Ford Elsaesser, of the Lake Pend Oreille Basin Commission, referred TMT to a memo posted as a link to the agenda the morning of 11/18. They outlined the Commission's concerns regarding the operation, including the impact of lake fluctuation on bank erosion, aquatic species, and marina property affecting the local businesses, community and economy. Wilson said an additional document had been emailed to the COE, which will be shared with regional representatives following the TMT meeting.

Russ Kiefer, ID, stated that this has been a difficult request for the State of Idaho to consider. Idaho Fish and Game representatives have been working closely with Scott Bettin, BPA, and Kiefer acknowledged that while the LIDAR monitoring work will be conducted, IDFG shares many of the concerns expressed by the Commission. Kiefer stated that while they have serious concerns, Idaho has made the decision to not officially oppose nor support the operation, noting that they will monitor the operation closely, watching for impacts that will inform decisions and management for future years. Idaho said they recognize the potential power production benefits for the region, but impacts to the resources and people of Idaho should be minimized or mitigated for. The USFWS said they concurred with ID, neither opposing nor supporting the request. Other regional agencies present at the meeting (NOAA, BOR) had no comment.

**Action/Next Steps** Dan Feil, COE, thanked the Commission for their feedback and said that the COE would review the additional document submitted by the Commission and the COE will conduct further internal discussion and consult with their other regional partners as part of their decision making process. Updates on this item will be shared with the region as they are known.

### **Operations Review**

**Reservoirs:** Libby was at elevation 2439.2', with inflows of 4.4 kcfs and outflows of 12.1 kcfs. Albeni Falls was at elevation 2051.3', with inflows of 14.7 kcfs and outflows of 13.4 kcfs. Dworshak was at elevation of 1515.1' with inflows of 1 kcfs and outflows of 1.6 kcfs. Lower Granite daily average flows were 21 kcfs, McNary daily average flows were 112.5 kcfs, Bonneville average flows were 110 kcfs. Grand Coulee was at elevation 1284.8' (supporting Chum operations). Hungry Horse was at 3544.04' with 2.0 kcfs discharge.

**Fish:** Paul Wagner, NOAA, noted the current focus is on Chum operations. Numbers continue to increase and, as typical of this time of year, will ramp up over the next month.

**Power System:** Nothing to report.

**Water Quality:** No issues to report.

**Other/Announcements:** The TMT Year-End-Review has been scheduled for Friday, 12/11 at the City of Portland Building in downtown Portland at 1121 SW 5<sup>th</sup> Avenue. Dan Feil noted that comments regarding the Water Management Plan are still being accepted.

**TMT Schedule:** The next meeting originally scheduled for December 2<sup>nd</sup> has been moved to **Thursday December 10<sup>th</sup> at 1:00pm.**

Agenda items may include:

- Notes Review
- Chum Operations
- Vernita Bar Update
- Zero Nighttime Flow on the Snake Projects
- Operations Review

**Columbia River Regional Forum  
Technical Management Team Meeting  
November 18, 2009**

**1. Introduction**

Today's TMT meeting was chaired by Dan Feil (COE) and facilitated by Erin Halton (DS Consulting), with representatives of USFWS, NOAA, BPA, COE, Idaho, BOR, CRITFC, FPC and others participating. The following is a summary (not a verbatim transcript) of the topics discussed and decisions made at the meeting. Anyone with questions or comments about these notes should provide them to the TMT chair or bring them to the next meeting.

**2. Review Meeting Minutes for November 4, 2009**

There were no changes to the minutes today, so they were deemed final.

**3. Vernita Bar Update**

The result of the basin-wide low discharge this year has been a daytime operation of 55-60 kcfs at Vernita Bar, which has kept redd counts low, Russell Langshaw (Grant PUD) reported. The initiation of spawning occurred on October 22 in the 36 kcfs zone; October 28 in the 36-50 kcfs zone; and November 4 in the zone above 50 kcfs. A final redd count on November 22 will set the critical elevation for this year's operation, which is expected to be in the 55-60 kcfs zone. Langshaw will confirm the elevation at the next TMT meeting December 10.

**4. The Dalles Spillwall Construction Update**

Good weather this month has allowed the contractor to make great progress on construction activities, Pat Duyck (COE) reported. The leveling slab, completed last week, will be the foundation on the rock shelf for the 43 precast concrete blocks that form the wall. Last season 15 blocks were set in place; the last two will probably be placed by the end of this week. Many problems encountered last year have been resolved, so the pace of production is highly improved. Refinements to the concrete mix resulted in time savings without sacrificing quality.

Now the critical element is getting anchors installed, which will hold the wall in place and keep it stable. As of yesterday, the contractor had drilled 32 of 118 anchor holes needed for the anchors. This is a complex process, and crews are working around the clock on it. The fact that construction is ahead of schedule could serve as a buffer if bad weather comes. Duyck expressed confidence that spillwall construction will be completed by the end of the in-water work period March 31, 2010. The bulk of heavy construction activities in the water should be completed by March 1.

Discussion moved to limits on Bonneville forebay elevation associated with navigational needs for the contractor's equipment. Although spillwall construction is ahead of schedule, a higher tailwater elevation will still be required throughout the end of the in-water work period because the contractor is using a large crane barge for final placement of the pre-cast blocks, Feil said. The COE is clarifying the depth requirements for the fully loaded crane.

Meanwhile, project staff have removed grating from the upper-elevation fish ladder at Bonneville to avoid possible mortalities. And the Cascade Locks marina doesn't appear to be having any functional problems as a result of the 78-foot elevation requirement at Bonneville tailwater, Norris said.

## **5. Chum Operations**

Dan Feil showed TMT links to chum spawning surveys, spawning operations criteria, and a summary of the first week of the chum spawning operation. The November 12 survey showed more chum in the Bonneville area, with one redd being observed. With the exception of a few spikes to 14-15 feet elevation during night time hours (following protocol of the chum spawning teletype and the agreed to operation), flows have remained within the 11.3-11.7-foot range requested. The COE will continue to provide TMT with summaries of the chum spawning operation.

## **6. Lake Pend Oreille Post-Spawning Operation**

Tony Norris (BPA) presented the region with a request to operate Lake Pend Oreille within the flood control operating range of elevation 2,051-2,056 feet during winter spawning. The primary purpose of the request for added flexibility is to allow adjustment of Grand Coulee inflows as needed for power production.

Norris explained how the operation would be implemented, with several mechanisms for drafting Albeni Falls. The project has a maximum draft rate of ½ foot per day. Daily discharges are limited to a minimum of 4 kcfs and a maximum change of 10 kcfs per day.

BPA proposed to use the full winter operating range as a hedge against high power demands. The lake's proposed operating range after spawning would be 2,051-2,056 feet elevation, whereas in recent previous years it would have been 2051 – 2052 feet. Average inflows in late December and early January are approximately 15 kcfs, which means a likely refill rate of less than ¼ foot per day with a 4 kcfs minimum discharge. A significant streamflow event could allow the lake to fill more rapidly, providing a benefit of reducing spill and TDG levels downstream.

Because Albeni Falls has minimal power generating capacity, the value of drafting there is to manage Grand Coulee forebay. The resulting power production at Grand Coulee could be extremely valuable to the region during a cold snap. Norris reminded everyone that the highest draft rate allowed at Albeni

Falls is 1/2 foot per day, which would limit drafting of the lake. Another possible future use of water stored upstream would be augmentation to help Grand Coulee meet its BiOp performance objectives later. In response to concerns about bank erosion at Lake Pend Oreille, BPA will be assisting IDFG in collecting data to establish a baseline condition and monitoring.

Kate Wilson (Pend Oreille Basin Commission) presented a letter, attached to today's agenda, that outlines all issues of concern to the Commission regarding the proposed December operation of Lake Pend Oreille. The way this operation was initially proposed, the lake could be drafted up and down within elevation 2,051-2056 feet no more than three times this winter, she recalled. It is doubtful the project could be drafted more often than that from a hydrologic standpoint, Norris said.

The commission's top concerns are sedimentation (TMDL concerns), erosion, and impacts to the Lake Pend Oreille marina if winter lake elevation goes higher than a one foot operating range. There is concern the proposed operation could exacerbate erosion in the Clark Fork delta. In addition, studies have shown a correlation between higher lake levels and the spread of flowering rush, an invasive species.

For these reasons, the **Pend Oreille Basin Commission** strongly opposed the BPA proposal. The opposition is based on a lack of opportunity for public vetting and does not mean the Commission would be uniformly opposed to fluctuating lake levels in winter.

Wilson offered to help set up a public meeting in Sandpoint, Idaho, if the proposal does move forward. Others then stated their views for the record.

**Idaho** – Neither supports nor opposes the operation this year. Will monitor the lake closely for any adverse effects. Allowing BPA the flexibility for power production to meet short-term needs during cold spells could greatly benefit the public of the Northwest.

**NOAA** – Did not object to the proposed operation.

**USFWS** – Like Idaho, did not support or oppose the operation this year.

**COE** – Will consider points made in the Lakes Commission letter to the COE, as well as other comments, and meet with external parties before making a decision on this issue.

## **7. Operations Review**

**a. Reservoirs.** Grand Coulee is at elevation 1,284.8 feet, operating to support the chum operation. Hungry Horse is at elevation 3,544.04 feet, with discharges of 2.0 kcfs.

Libby is at elevation 2,439.2 feet, with inflows of 4.4 kcfs and outflows of 12.1 kcfs.

Albeni Falls is at elevation 2,051.3 feet, with inflows of 14.7 kcfs and outflows of 13.4 kcfs.

Dworshak is at elevation 1,515.1 feet, with inflows of 1 kcfs and outflows of 13.4 kcfs.

Daily flow averages are 21 kcfs at Lower Granite, 112.5 kcfs at McNary, and 110 kcfs at Bonneville.

**b. Fish.** The chum operation is the main concern this time of year. While numbers continue to increase, they're not overwhelming. The next month will be prime chum spawning time.

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

**d. Water Quality.** There was nothing to report today.

## **9. Next Meeting**

The next scheduled TMT meeting will be December 10. The next day will be the TMT annual year-end review on December 11. This summary prepared by consultant and writer Pat Vivian.

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