

# COLUMBIA RIVER REGIONAL FORUM

## TECHNICAL MANAGEMENT TEAM

August 16, 2006 Meeting

### FACILITATOR'S SUMMARY NOTES ON FUTURE ACTIONS

Facilitator: Robin Harkless

Notes: Erin Halton

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.

#### **Lower Monumental Navigation Issue**

Cathy Hlebechuk, COE, reported on the past week's navigation activities through Lower Monumental. Of the 12 barges that passed through, 6 did not request any change in spill, 3 requested zero spill, and 3 requested the alternative spill pattern that was developed at FPOM. Hlebechuk noted that up until Tuesday evening (8/15), the alternative spill pattern worked well; however, a recent drop in flows may pose a challenge to implementing this spill pattern. Hlebechuk suggested there might also be a need for extended time at zero spill (more than 20 minutes.) John Pigott, Tow Boaters Association, offered that from the Towboater's perspective, FPOM provided a good solution (to avoid going to zero spill) and he hoped all agencies would work with the COE to develop a modified option for flat spill out of 4 bays at the project. Pickett said that there seemed to be a similar eddy issue at Ice Harbor and hoped a modified spill pattern could be developed there as well.

#### **ACTION/Next Steps:**

- An FPOM conference call was convened to discuss spill pattern options immediately following the TMT meeting. A representative of TMT will update Hlebechuk with the results of the call and recommended operations will be shared with TMT.
- The COE plans to do a survey at Lower Monumental navigation lock entrance on August 21 which will require stopping spill for one 8 hour day. The salmon managers recommended waiting until the end of spill season to do the survey.

#### **Dworshak Operations**

Jim Adams, COE, reported that the latest STP model showed volumes of 191 kaf for July –August, and that operating at full load for the remaining 16 days in August would result in -82 kaf for flow augmentation at the end of August. The Dworshak elevation was 1551'. Adams noted a slight cooling trend, with water temperatures between 67-72 degrees in the Lower Snake and 66.5-67.5 degrees at Lower Granite. Dworshak outflows were 10.2 kcfs at 45 degrees; Anatone and Orofino temperatures were 70-75 degrees, with Anatone outflows at 14-23 kcfs and Orofino at 1.4 kcfs. Per discussions with the fish managers Mike Schneider, COE, ran an operating scenario based on August 14<sup>th</sup>

conditions, reducing flows to 7.7 kcfs on Tuesday evening (8/15), which predicted an increase in temperatures at Lower Granite around August 24<sup>th</sup>, but not expected to exceed 68 degrees. However, when Jim Adams, COE, discussed the model results with FPAC, he noted that two assumptions in the model runs were likely to not be met. Specifically, that Hells Canyon outflows were likely to be higher than modeled and the Lewiston climate forecasts had increased temperatures from what was modeled. Russ Keifer, ID, reported that Greg Haller, Nez Perce Tribe, recommended staying at full power house until the evening of August 22<sup>nd</sup>, then dropping to 7.7 kcfs for the remainder of August. This recommendation was unanimously supported by all FPAC members present. The COE was asked to do a model run for this option, to forecast when elevation would hit 1535'. (The estimated date was August 28<sup>th</sup>.) Greg Haller presented this information to the Dworshak Operations Board which developed a draft plan for the 200 kaf reserved per the Dworshak agreement. Dave Statler, Nez Perce Tribe, reiterated that with the uncertainty of temperatures, operations should hold, and that the specifics on how to manage the 200 kaf would be worked out by the Dworshak Operations Board.

**Action/Next Steps:** The COE will implement the recommended Dworshak operation, and will notify Greg Haller in the event that the Dworshak elevation forecast shows reaching 1535' before the currently predicted date of August 28<sup>th</sup>. TMT will discuss Dworshak operations at their next face to face meeting on August 30, and might have a conference call at 9 a.m. on Wednesday August 23<sup>rd</sup> to check in.

### **Libby/Hungry Horse**

The week's STP graph showed a potential scenario for end of August flows at Libby: if flows were held at 14 kcfs, and then followed ramp down rates in the USFWS BiOp, elevations would be at 2442.8' at end of August and 2438.8' by the end of September. The COE offered operation scenarios depicting a slower ramp down at lower flow levels. Models for this operation showed an elevation of 2442.6' at the end of August and 2438.1' at the end of September. Brian Marotz, MT, offered that a slower ramp down with lower flows was favorable from a biological perspective. Russ Keifer, ID, suggested that there be further discussion of this and other operating proposals at the August 22<sup>nd</sup> FPAC meeting and then at the next TMT. Marotz will join the FPAC discussion next week.

**Action/Next Steps:** The salmon managers and BPA will share Libby September operation proposals by Wednesday, August 23<sup>rd</sup>. The Corps will post these on the agenda and they will be discussed at TMT on August 30<sup>th</sup>.

Tony Norris, BOR, said that no change in operations was anticipated at Hungry Horse, which was currently operating at 3 kcfs out. The expected end of August elevation is 3446'.

### **Treaty Fishing SOR's**

Tom Lorz, CRITFC, reported that the Commission would be meeting on August 17<sup>th</sup> and that Autumn treaty fishing proposals would be lined out then. He noted the likely proposed start date would be August 21<sup>st</sup>, and that the season will likely be three weeks in duration.

**Action/Next Steps:** Lorz or Kyle Dittmer, CRITFC, will notify the COE when the proposal is finalized; COE noted that there may be difficulty in reaching the 75' elevation early in the week because of low flows in the river; Dave Statler, Nez Perce, noted that as much stability as possible was preferred.

### **End of MOP at Lower Granite, Lower Monumental, Ice Harbor**

Paul Wagner, NOAA, and Russ Keifer, ID, reported that there was no recommendation from FPAC for an exact end date for a lift on MOP operations. The salmon managers did recommend that Ice Harbor be the first to have restrictions lifted.

**Action/Next Steps:** FPAC will have a recommendation for the Action Agencies on an exact date for lifting MOP at each project at the August 30<sup>th</sup> TMT meeting.

### **Operations Review**

*Reservoirs:* Libby was at 2449.15', with 14k outflows and 7-8k inflows. Dworshak was at elevation 1551' and operating outflows at full powerhouse. Lower Granite outflows were 25-26k; week average outflows at McNary were 135k; and Hells Canyon flows were 9-16k. Grand Coulee elevation was 1283', and Banks Lake was at 1567' with elevation expected to be at 1565' by the end of August. Hungry Horse was at 3549.6' and discharging 3k.

*Fish:* Cindy LeFleur, WDFW, reported that the fall migration count is underway and changes in counts were expected everywhere over the next two weeks. Commercial fishing was picking up slightly. Bonneville counts were predicted overall slightly lower than last year (474,000 vs. last year's total of 561,000.) Paul Wagner, NOAA, reported that juveniles were nearing the end of their passage season, with less than 1,000 at Bonneville recently. Russ Keifer, ID, noted that there was an ongoing effort to provide more exact data to reflect spill efficiencies in the juvenile counts.

*Power:* Nothing to report at this time.

*Water quality:* Jim Adams, COE, reported that there had been a few TDG exceedances at night at Camas/Washougal over the past week.

### **Updated Emergency Protocols List**

Russ Keifer, ID, provided a revised 'Group 3' Emergency Protocols list per consensus at FPAC, clarifying that the list was just for the end of the 2006 summer season. John Day spill reduction was moved to the bottom of the list, e.g.. It was also suggested that action 1 (request a tailwater violation at Bonneville) in Group 3 be moved to Group 2, as a 'pre-emergency' action. Cathy Hlebechuk, COE, said that she would insert the revisions into the Emergency Protocols Appendix and post it on the TMT website.

## **Next TMT Face-to-Face Meeting, August 30th, 9:00-noon**

Agenda Items include:

- Lower Monumental / Ice Harbor Spill Patterns for Navigation (Update)
- Libby / Hungry Horse Operations for September
- Dworshak Operations / Boards' Plan for Distribution of 200 kaf
- Operations Review

# **Technical Management Team Meeting Notes**

August 16, 2006

## ***1. Greetings and Introductions.***

The August 16 TMT meeting was chaired by Cathy Hlebechuk and facilitated by Robin Harkless. The following is a summary (not a verbatim transcript) of the topics discussed and decisions made at this meeting. Anyone with questions or comments about these notes should contact Hlebechuk at 503-808-3942.

## ***2. Lower Monumental Navigation Issue.***

To recap, said Hlebechuk, since last Wednesday, when we agreed to implement the towboaters' request to stop spill at Lower Monumental during barge passage, there have been 12 lockages. Three of those towboats requested spill pattern 1, developed by FPOM, three requested no spill, and six requested no change to the spill operation. One problem is that river flows have dropped so far that spill is down to 8 or 9 stops, which is making passage more difficult; we have asked FPOM to develop a new barge-friendly spill pattern involving stops 7, 8 and 9. For the no spill operation, it now appears that 30 to 40 minutes is needed to ensure safe passage, rather than the 20 minutes we hoped would be the case, Hlebechuk said.

John Pigott said some boats passed Lower Monumental last night, but he has not heard whether they encountered any problems. Prior to that, the boats that passed using Spill Pattern 1 passed the project with no problems – the eddy was significantly reduced, and they felt that, as long as that pattern can be implemented, there was no need to stop spill. All we want is for the eddy issue to go away, he said; we're not crazy about stopping spill, and feel that FPOM came up with a good solution. The only problem now is the falling river, so we're hoping FPOM can come up with another spill pattern that can replicate Pattern 1 at lower flows, said Pigott.

I had heard that there may be some navigation issues below Ice Harbor, Hlebechuk said. There are similar eddy problems below Ice Harbor, and they're

experimenting with a similar spill pattern to Spill Pattern 1 at that project, Pigott replied. Since we have had success with the modified spill pattern at Lower Monumental, we would like to ask FPOM to consider a modified spill pattern for Ice Harbor as well, he said. We can ask FPOM to look at that, said Hlebechuk.

With respect to Lower Monumental navigation, said Hlebechuk, on August 2, a tug scraped bottom. We raised the Little Goose pool in response, and one of the other boats did soundings, discovering spots where the depth was less than 11.8 feet. We agreed to take more comprehensive soundings as soon as possible; the soonest that can happen is next week. It now looks as though August 28 is going to be the soonest we can get that information. We also didn't know we would have to stop spill to do the survey, and I wanted to get the salmon managers' opinion about that. We discussed that at yesterday's FPAC meeting, and agreed that the Corps should wait until after spill season is over to do the survey, Russ Kiefer replied.

### ***3. Libby and Hungry Horse September Operations.***

Hlebechuk said the Corps has developed a possible scenario for rampdown from the current 14 Kcfs outflow at Libby beginning September 1; she directed the group's attention to this scenario, available via hot-link from today's agenda on the TMT homepage. Hlebechuk noted that Libby is expected to be at about elevation 2443 on August 31, and about 2439 at the end of September. Following the ramp rates in the BiOp, we would ramp down gradually, she said, but would ramp down faster if flows are higher. She noted that Jeff Regh, operations chief at Libby, says that 5 or 7 Kcfs would be a better loading for the units at Libby than 6 Kcfs.

The group devoted a few minutes of discussion to the Corps' rampdown scenario; ultimately, it was agreed that the Salmon Managers and BPA would provide September ramp down recommendations by August 30. The Corps will post these scenerios and they will be discussed at the group's next TMT meeting on August 30.

### ***4. Dworshak Operations.***

The group reviewed the most recent flow augmentation volume figures for Dworshak, which showed a deficit of 82 kaf below the August 31 elevation target of 1535 if the project releases full load through the end of August. We will need to reduce Dworshak outflow to 7.2 Kcfs for 16 days in order to make up that shortfall, she said. Jim Adams said there is a cooling trend at the moment; with 10.1 Kcfs outflow at 45 degrees F from Dworshak, water temperatures in the Lower Snake are holding at between 67 and 72 degrees F. Temperatures at Anatone and Orofino are in the low-to-mid 70s, so they have cooled significantly. Hells Canyon is continuing to follow load, which is complicating our forecasting somewhat, he said.

Adams discussed the current thermocline information for Dworshak, noting that temperatures near the surface of the reservoir are approximately in-line with what has been seen in previous years, but temperatures deeper in the reservoir are significantly warmer than the temperatures seen in recent years – about 46 degrees F. We may be seeing some lingering effects from drafting the deeper, colder water in previous years, in other words, Adams said.

Adams provided an overview of Mike Schneider's recent modeling work, noting that it is based on the weather conditions as known on Monday. Schneider modeled one scenario under which Dworshak outflow would be reduced to 7.5 Kcfs at 10 pm last night; it shows a jump in water temperature on August 24, but that jump is not expected to result in any exceedences of the 20-degree C water temperature standard. Idaho Power has now increased the outflow from Hells Canyon, however, and air temperatures are expected to be higher than what was forecast on Monday. Schneider re-modeled this scenario based on this new information; this latest run shows that temperatures in the Lower Granite forebay would likely touch about 68.2 degrees on August 24, if we immediately reduce Dworshak outflow to 7.5 Kcfs, Adams said.

Kiefer said FPAC had discussed this issue at yesterday's meeting; he said Greg Haller of the Nez Perce Tribe had put forth a proposal, which ultimately was endorsed by the other salmon managers: stay at full powerhouse capacity for another week, through 10 pm on August 22. At that time, we would reduce Dworshak outflow to one big unit and one small unit, Kiefer said. If that operation is implemented, Dworshak would reach elevation 1535 on about August 28, and would end August at about elevation 1531.6 feet, said Paul Koski, about 40 kaf below the elevation target.

The group devoted a few minutes of discussion to this information. Ultimately, Hlebechuk said the Corps' planned operation is to continue to release full load from Dworshak until 10 pm on August 22, at which point Dworshak outflow will be reduced to one large unit and one small unit. That operation will continue until further notice, she said. We will notify Greg Haller if Dworshak approaches elevation 1535 sooner than August 28, Hlebechuk added. In response to a question, Dave Statler said the Nez Perce Tribal Board met yesterday and approved this operation, even though it will shift a portion of the 200 kaf of Dworshak water reserved for use in September into August. It was agreed that the TMT will re-convene via conference call (if needed ) next Wednesday, August 23, to check in on this operation. In response to a question, Tony Norris said Hungry Horse will be at about elevation 3446 on August 31; outflow will then be ramped down over 5 or 6 days to the Columbia Falls minimum.

## ***5. Treaty Fishing SORs.***

Lorz said he is not sure whether the Compact has agreed to the fall treaty fishery, but it is proposed to start on Monday, August 21. Cindy LeFleur said the Compact will meet tomorrow; it is likely that three weeks of fishing will be proposed. It was agreed that either Lorz or Kyle Dittmer will contact the Corps with an operational request by the end of this week.

Hlebechuk said forebay elevation is an issue at Bonneville; with the low flows and the project trying to spill as much as possible at night, it may be difficult to reach elevation 75 on Monday and Tuesday. It shouldn't be an issue, she said, but we wanted CRITFC to be aware that it could be. After a brief discussion, it was agreed that the Corps would specify its usual 1.5-foot range (75-76.5 feet) at Bonneville during the treaty fishery. Lorz said he would let Hlebechuk know if 75 feet is not obtained by the start of the Treaty fishing period if CRITFC preferred operating in a 1.5' operating range with the lowest elevation being the elevation at the start of the period .

#### ***6. End of MOP at Little Goose, Lower Monumental and Ice Harbor.***

With temperatures cooling, it is time to lift the MOP restriction, said Scott Bettin. We discussed this at FPAC yesterday, but didn't discuss the dates on which we would fill the three projects above MOP, said Paul Wagner. This operation traditionally takes place when we change over from the juvenile outmigration to the adult migration, said Kiefer. Traditionally that occurs at the end of August, said Bettin, although flows are so low that there is no burning desire to fill the pools at this time, from a power perspective – by the end of the month would likely be OK. Part of our desire is to get the adult ladders back into criteria, which is a problem at MOP, Kiefer observed; we are concerned that more than 50 endangered adult sockeye have been counted at Ice Harbor, but only 15 have reached Lower Monumental to date. After a brief discussion, it was agreed that the salmon managers will provide the dates by which the MOP restriction will be lifted by next week at the latest.

#### ***7. Operations Review.***

The Corps reported that Libby was at elevation 2449 feet last night, with outflows of 14 and inflows of 7 Kcfs. Dworshak is currently at elevation 1551, releasing 10.1 Kcfs, with inflows as low as 0.6 Kcfs in recent days. Lower Granite is releasing 25-26 Kcfs flows have averaged 28.4 over the last 7 days; at McNary, 135 Kcfs. Hells Canyon has been releasing 11-13 Kcfs over the last three days. Reclamation reported that Grand Coulee is currently at elevation 1283; Banks Lake at elevation 1567. Hungry Horse is currently at elevation 3549.6 feet. BPA said there are no power system issues to report at this time.

LeFleur said there isn't much happening at the moment, with respect to the adult fall chinook migration. That should change in the next two weeks, she said – everything should start moving upward. A commercial fishery started on

August 2, but fishing has been slow so far. The pre-season estimate is 474,000 adult fall chinook to the mouth of the Columbia, about 100,000 less than 2005. Wagner said smolt numbers are decreasing; we are nearing the traditional end of the smolt passage season. Juvenile fall chinook indices at Lower Granite, Little Goose and Lower Monumental have now fallen below 100 fish per day; at Bonneville, below 1,000 fish per day. In response to a question, Wagner said these numbers are not adjusted for spill efficiency; at Lower Granite, for example, these numbers can probably be multiplied by a factor of 4 or 5.

Adams said there is little to report, from a water quality standpoint, although there have been a few TDG exceedences; flows continue to be low.

**8. Emergency Protocols.**

FPAC discussed the emergency protocols yesterday, said Kiefer; we made one seasonal adjustment to the emergency protocols list. Like everyone at this table, we hope that there will be no need to implement any of the measures on the list, but just in case, we have updated the list, he said. It was agreed that the revised emergency protocols list will be posted to the TMT homepage.

**9. Next TMT Meeting Date.**

The next meeting of the Technical Management Team, a conference call, was set for Wednesday, August 23. The group's next face-to-face meeting was set for Wednesday, August 30. Meeting summary prepared by Jeff Kuechle, BPA contractor.

**TMT Meeting Participants  
August 16, 2006**

<b>Name</b>	<b>Affiliation</b>
Cathy Hlebechuk	COE
Robin Harkless	Facilitation Team
Tony Norris	Reclamation
Paul Wagner	NOAAF
Russ Kiefer	IDFG
Brian Merotz	Montana
Margaret Filardo	TMT
Scott Bettin	BPA
David Wills	USFWS
Dan Spear	BPA

Tom Lorz	CRITFC
Dave Statler	NPT
Rudd Turner	CE
John Pigott	Columba River Towboat Association
Rob Wall	COE
Steve Ridour	COE
John Coffee	COE
Bill Crampton	CBB
Glenn Traeger	AVISTA
Tom Le	PSE
Richelle Beck	D. Rohr & Associates
Paul Koskie	COE
Cindy LeFleur	WDFW
Laura Hamilton	COE