

COLUMBIA RIVER REGIONAL FORUM

TECHNICAL MANAGEMENT TEAM

January 30, 2008 Meeting

FACILITATOR'S SUMMARY NOTES ON FUTURE ACTIONS

Facilitator: Robin Gumpert

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.

Official Minutes/Facilitator Notes

The facilitator notes and the official meeting minutes from the 1/23 conference call had been posted to the web. Paul Wagner, NOAA, said he planned to submit a comment to the official meeting minutes. TMT members will be notified of the change and the revised notes will be posted on the web.

Draft 2008 WMP

Scott Boyd, COE, referred TMT to a revised, clean version of the draft 2008 WMP and Appendix 4 TDG Management Plan. As TMT members did not have time to review the document before today's meeting, this will be added to the agenda for discussion at the 2/13 TMT meeting.

ACTION: Following the meeting, the COE sent a word version of the draft WMP to TMT members for providing tracked change comments, which will be posted on the TMT web page upon receipt. Folks were encouraged to send in comments in advance of the 2/13 meeting.

Draft 2008 Fish Operations Plan

Rudd Turner, COE, reported that the Policy Work Group (PWG) met following last week's TMT conference call to further discuss the COE's proposed 2008 FOP. One change was made to the last draft, which added language on page 8 to describe that during low flow conditions, transportation would start on April 20 with no staggered start, and that spill would be provided under all flow conditions.

Rudd noted also that language was rolled over from the 2007 FOP indicating that Ice Harbor would be operated under a test condition, but that no test had been planned for this year. Per suggestion, the COE planned to provide some evaluation of in-river tagged fish this year. It was suggested that it would be useful to provide flexibility around test days as well, and the COE responded that any minor proposed changes could be discussed in season at TMT.

Finally, Rudd noted that while no language changes were made to the document, McNary summer transportation and TSW testing at the project may overlap and the COE will

require some operational flexibility for safe passing of barges. They will do their best to meet the criteria in the FOP to minimize impacts to transportation and research.

ACTION: COE attorneys will send a letter to the court in the coming week with notification of the finalized FOP for 2008. Jim Adams will have the final FOP posted and notify TMT that it has been posted.

Spring Creek Operations

Dave Wills, USFWS, reported that full production of Spring Creek hatchery fish will occur this year given high fecundity rates from last year that provided adequate numbers of eggs. 7.5 million are set to be released on March 3 (the same day the B2CC is opened and coincident with the start of a kelt study), about 4 million will be released sometime in April, and 3.5 million will be released in May. The USFWS is finalizing its evaluation of the 2004 test and subsequent collected data, which it will share with co-managers to aid in developing a potential proposal for operations this year.

ACTION: Dave will share any proposals for Spring Creek operations with TMT as they are developed – this item will be held as a placeholder for the 2/13 TMT meeting.

Operations Review

Reservoirs: Grand Coulee was at elevation 1274.6'; Hungry Horse was at 3520.12' and releasing 2.9-3 kcfs. Libby was at elevation 2408.4' with 4 kcfs out and ranging 1.8-3.8 kcfs in. Albeni Falls was at elevation 2055.5'. Dworshak was at 1521.3' with 1.3 kcfs out and 1.2-1.9 kcfs in. The 7-day average flows at Lower Granite were 23.3 kcfs; 141.9 kcfs at McNary and 155.8 kcfs at Bonneville. Bonneville continues to be operated at an 11.5' minimum tailwater to support chum.

Fish: Nothing to report at this time.

Power system: Tony Norris, BPA, followed up from the last TMT conference call with a report that no power emergencies were declared. He also reported that 1 MAF will be stored as of January 31 for summer flow augmentation.

Water quality: Nothing to report at this time.

Zebra/Quagga Mussels Rapid Response Plan

Stephen Phillips, States Marine Fisheries Commission, provided an overview of actions to address the threat of an infestation of zebra and quagga mussels into the Columbia River system. Just this month, it was reported that the mussels were found at the San Justo reservoir in California and Lake Pueblo in Colorado in November. Stephen noted his concern with the delay in reporting. Prevention measures have been taken in the Northwest, primarily around mandatory boat inspections in California and Washington with work to strengthen regulations in Oregon, Montana and Idaho. Education and monitoring is also happening.

In addition, a group of stakeholders led by the USFWS and the 100th Meridian Initiative have developed a Rapid Response Plan that includes a plan for interagency coordination should an infestation occur. A Multi-Agency Coordinating Group (MAC) is put in place to guide the response and includes the states, USFWS and CRITFC. They completed a table top exercise in October (with involvement of over 20 agencies) which resulted in confirmation that the response approach is a good one, and a recommendation to conduct another exercise.

Next Steps – The final Rapid Response Plan will be completed and posted to www.100thmeridian.com in the next two weeks, and available for comment. Stephen shared this and additional next steps, noted that calcium levels may play a role in the risk of infestation, and provided contact information for himself and USFWS colleague Paul Heimowitz. His power point presentation can be found as a link to today's TMT agenda.

2/13/08 TMT Meeting:

Agenda items may include the following:

- Revised Draft 2008 Water Management Plan – discussion of comments
- Spring Creek Operations
- Water Supply Forecasts
- Operations Review

NOTE: The TMT meeting scheduled for 2/13 will be held at the NOAA Fisheries 10th Floor Conference Room

**Columbia River Regional Forum
Technical Management Team Meeting
January 30, 2008**

1. Introduction

Today's TMT meeting was chaired by Jim Adams (COE) and facilitated by Robin Gumpert (D.S. Consulting), with representatives from COE, USFWS, NOAA, BPA, Montana and others participating in person or by phone. 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

Paul Wagner (NOAA) said he would comment on the official minutes for the January 23 conference call sometime soon. There were no other comments on notes today.

3. Revised Draft 2008 Water Management Plan

The revised WMP was posted yesterday to the TMT page for review. Operations will remain essentially the same as last year, Scott Boyd (COE) said. There have been two changes to the draft since the last iteration: revision of the main body of the plan, and a new Appendix 4 which discusses TDG management strategy. Section 4.13.14 refers to the 2008 Fish Operations Plan (see item 4 on today's agenda). Boyd will collect comments on the WMP over the next two weeks, and then Adams will circulate a revised draft to TMT for comments. The WMP will be on the next TMT agenda February 13.

4. 2008 Fish Operations Plan Update

The FOP has been a subject of discussion at the past two TMT meetings, and the PWG also discussed it on January 24, Rudd Turner (COE) said. As a result, the COE has added a third paragraph to the Transportation Operations section on page 8 of the January 15 draft. The paragraph reads as follows:

Dates to start transporting fish at Snake collector projects will be advanced if spring seasonal flows at Lower Granite Dam are projected to be less than 70 kcfs. In that case, transportation will begin on April 20 at all three Snake collector projects, instead of a staggered start as planned if seasonal flows are expected to be 70 kcfs or higher. Transportation operations and research are described in the juvenile fish transportation program operations section on pages 24-26 of this document. Spill for fish passage will be provided under all flow conditions.

The other anomaly in rolling over 2007 operations will be Ice Harbor Dam, Turner said. A test schedule is included in IHR operations for 2008 but no test is planned like there was in 2007. It's unlikely that a new study will be needed this year, so the COE is looking at ways to increase detection of tagged fish that are already in the system. This includes PIT-tagged fish as well as all radio-tagged and acoustically tagged fish that pass the project. It will not be an experimental test but an evaluation of spill conditions and survival results. Passage of all tagged fish at Ice Harbor could be monitored this year without much added expense. An additional year of data might help clarify which operation is best suited to conditions at IHR. However, the 2008 CRFM budget is nearly finalized at this point; SCT will begin discussing priorities for 2009 when the President's budget is released in the next few weeks. There may be some flexibility regarding scheduling of test days, Scott Bettin (BPA) noted. Once the FOP is submitted to the court, the schedule is locked in, Turner said. The Regional Forum would then become the means for making minor changes.

Discussion moved to the McNary transportation schedule. Transportation is slated to begin once conditions are no longer spring-like, as it was in 2007, which could yield a start date of sometime in early July, Turner said. However, the TSWs at McNary are scheduled to be tested on July 25, creating a potential overlap. In this case, language in the FOP will not be changed. The FOP calls for potential outages of up to 4 hours each time the transportation barge passes through the locks at McNary every other day. However, the FOP also directs MCN project operators to minimize spill outages or changes to spill while barges are in the tailrace. It's likely the project operators will be able to simply open and close the TSW gates as needed. A spill outage of about 15-30 minutes will be necessary while the barge is approaching the tailrace, followed by another 15-30 minute outage while the barge is departing the loading dock. The COE is trying to schedule very short outages rather than turn the TSWs off for the entire 4 hours. The goals of this operation are to meet safety needs while minimizing impacts on spill and research at the project.

Adams will notify TMT members when the latest version of the FOP is posted for comments.

5. Spring Creek Update

Last year, there was concern over whether the adult run would provide sufficient eggs for full hatchery production this year, due to low returns of adult females. As it turned out, fecundity was much higher than expected, Dave Wills (USFWS) said. So a full production release is planned this year – more than 7.5 million fish on March 3, 2008, with another 4.2 million to be released in April and 3 million more in May. The March release will coincide with opening of the B2 corner collector for the kelt study through March. Beyond that, nothing has been decided, Wills said. The March release could be scheduled for a single day or on multiple days.

Jim Litchfield asked Dave Wills whether he was looking at CWT data for differences in overall life cycle survival for different release groups? In 2004, USFWS split the March release into two groups, with one group passing BON via the B2 corner collector only, the other via the corner collector plus the spill bays, Wills said. This year, the corner collector will be a means of passage, as well as spill and the transport study, Scott Bettin (BPA) said. TMT will revisit the Spring Creek operation at its February 13 meeting if there is anything new to discuss.

6. Zebra/Quagga Mussels Rapid Response Plan

Stephen Phillips (Pacific State Marine Fisheries Commission) briefed TMT on the preparation of a multi-agency response plan in the event that zebra/quagga mussels invade the Columbia River basin. This highly destructive species came to the Great Lakes in the mid-80s and has proliferated, causing millions of dollars' worth of environmental damage by clogging the pipes in municipal water, irrigation and power systems, as well as fish passage facilities. They have proliferated to the point of filtering the entire volume of Lake Erie in 5 days. The impact on the food chain is devastating. For example, the weight of an average 4-year-old whitefish caught in the Great Lakes region has dropped from 5 pounds to 1.5 pounds due to loss of food supply.

In the west, San Justo Reservoir in California is the area of greatest concern, where zebra mussels were found in mid-January. Due to the reservoir's upstream location and that water is pumped into the reservoir and it doesn't appear that there are outflows from the reservoir; it's possible the infestation could be limited to San Justo. Eradication will be difficult, as the reservoir is a popular site for bass fishing. Zebra mussels have also been detected in Lake Pueblo Reservoir in Colorado as of last November, but the findings weren't released until January. In 2007, quagga mussels were discovered in Lake Mead. Since then, they have migrated into numerous reservoirs in Southern California.

Zebras and quaggas move into an area by attaching to watercraft, and the only sure way to keep them out of the Northwest is border inspections, Phillips emphasized. Currently only California and Washington have effective interception capability. Oregon, Montana and Idaho are in the early stages of strengthening their regulations to involve search and seizure of watercraft crossing state lines. Oregon is considering a \$2.5 million proposal to set up inspection stations at five major entry points to the state by 2009.

If these pests are detected in the Columbia basin, eradication may be difficult or impossible, Phillips said. The rapid response plan involves state, federal, and tribal entities coordinating their efforts via the national incident command system for fires, earthquakes and other environmental emergencies. The five Columbia River basin states (Nevada, Oregon, Idaho, Washington and Montana) and USFWS, NOAA and CRITFC are involved in the multi-agency

coordination group. Representation on the MAC is interchangeable depending on the agencies that have jurisdiction over the affected location.

On October 23-24, 2007, the MAC group staged a mock invasion to rehearse their coordination efforts. One of the recommendations from that exercise was that it be repeated. There have been some false alarms, and one of the main features of the rapid response plan is that a primary notification coordinator will be responsible for spreading the word in the event of a real invasion. In the meantime, agencies are beginning to inventory resources they have available to use in the rapid response. The next steps in the planning process will be agency legal reviews.

It's possible that the spread of zebras and quaggas would be somewhat limited by low calcium levels (less than 15 mg/L) in some areas of the Northwest. Research indicates that they have difficulty reproducing below that level. Calcium levels in the Willamette River are less than 10 mg/L, and there is very low calcium in the Puget Sound area south to the mid-Sierras. However, calcium levels tend to be higher in water bodies east of the Cascades. For example, calcium levels at The Dalles are around 20 mg/L which is plenty to support a zebra or quagga mussel population.

TMT will be notified when the next draft of the rapid response plan is posed online for review and comment, probably within the next few weeks.

7. Operations Review

a. Reservoirs. Grand Coulee is at elevation 1,274.6 feet and operating as needed to meet the Bonneville 11.5 foot tailwater requirement and to meet power demand. Hungry Horse is at elevation 3,520.12, discharging between 2.9-3 kcfs for the Columbia Falls minimum flow. Hungry Horse has been drafting steadily this past week.

Libby is at elevation 2,408.4 feet, maintaining 4.0 kcfs outflows. Inflows are fluctuating from 1.8-3.8 kcfs so the pool is drafting slightly. Albeni Falls is at elevation 2055.5 feet at the Hope gage, with inflows of 12.9 kcfs and outflows of 12.9 kcfs on January 29. The pool is still operating between elevations 2055-2056 feet. Dworshak is at elevation 1,521.3 feet, with outflows of 1.3 kcfs and inflows ranging from 1.2-1.9 kcfs, so that pool elevation is steady most of the time.

The 7-day average for inflows at Lower Granite is 23.3 kcfs. The 7-day average for inflows at McNary is 141.9 kcfs. The 7-day average for inflows at Bonneville is 155.8 kcfs. That operation will continue in order to maintain the 11.5 foot tailwater elevation for chum incubation.

b. Fish. There is nothing happening now to report, Paul Wagner said. There have been no adult counts since December 15. He asked about the contract extension to continue video counts at McNary. The results will be available this summer, Jim Adams said. There were some equipment problems during the extended count, and the video camera might have run out of tape. Scott Bettin noted that FPOM discussed this recently, and the FPP has been modified accordingly.

Adams asked when TMT should discuss pinniped management again. Wagner suggested the end of March.

c. Power System. As noted during TMT's last conference call, a NERC alert was not declared, thanks to offline resources that were brought back online to avert a power emergency, Tony Norris said. The 1 maf of summer flow augmentation, as called for by the treaty with Canada, will be stored by the end of January.

d. Water Quality. There is nothing to report, Jim Adams said.

8. Next Meeting

The next TMT meeting will be in person on February 13 at NOAA's offices in Portland. Agenda topics include the draft 2008 WMP, water supply forecasts, possibly a Spring Creek Hatchery update, and the usual operations review. This summary prepared by consultant and writer Pat Vivian.

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|------------------|--------------------|
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| Dave Wills | USFWS |
| Paul Wagner | NOAA |
| Tina Lundell | COE |
| Tony Norris | BPA |
| Jim Litchfield | Montana |
| Scott Boyd | COE |
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