

**TECHNICAL MANAGEMENT TEAM  
MEETING NOTES  
October 8, 2002  
CORPS OF ENGINEERS NORTHWESTERN DIVISION OFFICES – CUSTOM HOUSE  
PORTLAND, OREGON**

**TMT Internet Homepage: <http://www.nwd-wc.usace.army.mil/TMT/index.html>**

***1. Greeting and Introductions***

The October 8 Technical Management Team meeting was chaired by Cathy Hlebechuk of the Corps and facilitated by Robin Harkless. The following is a distillation, not a verbatim transcript, of items discussed at the meeting and actions taken. Anyone with questions or comments about these minutes should call Hlebechuk at 503/808-3942.

***2. 2003 Water Management Plan.***

***3. Lower River Operations for Chum.***

At the September 3 TMT meeting, the group developed a list of questions to be answered in the course of the TMT's discussion of the 2002/2003 chum operation. These included:

1. Did last year's "staggering" (gradually raising tailwater elevation at Bonneville to allow staggered access to more and more spawning area) help or hurt chum?
2. Was reverse load factoring an issue, in terms of dewatering redds?

This agenda item began with a recap of last year's chum spawning operation; in particular, whether or not lower river flows should have been increased sooner to encourage more tributary spawning. Scott Bettin wondered whether the tributaries could have handled additional spawners over and above the thousands that were already spawning; David Wills replied that the question isn't just the tributaries – the other spawning areas around Ives and Pierce Island could have supported more spawning if higher flows had watered those areas up sooner. With respect to the reverse load factoring question, Bettin said he could not recall any instances where load factoring had resulted in dewatered redds.

Ron Boyce noted that displacement and scouring are also potential problems associated with reverse load factoring. Would it be possible to maintain a more constant flow? he asked. We tend to use the pool to smooth things out, Bettin replied, but that isn't always possible when rain or cold weather events occur. In general, we want the Bonneville operation to be as smooth as possible, he said.

The next chum-related question was "Compare and contrast the Ives and St. Cloud effect." Shane Scott explained that WDFW field staff had noted that the St. Cloud was much more affected by tidal influence than by Willamette flows. It sounds as though that is outside the sphere of Bonneville Dam influence, Paul Wagner observed. What, exactly, is the issue here? Boyce asked. We've been using the Ives Island gauge as our benchmark, Bettin replied – the question is whether there is something we could be doing differently at St Cloud to keep flows more constant. Chances are we can't, because we're so far away at that point that the tides would be more dominant than the dam discharge, Bettin said.

The group discussed the various monitoring efforts planned and ongoing at the Hamilton Creek/Hardy Springs area this fall. Bettin said there will be monitoring available this year, in-season. If there is a question about whether or not the the he creek is running at a given point in time, we'll be able to look it up on the Internet, Bettin said.

The next chum-related question was "What advice would you give after analyzing the data related to redd distribution and flow after the past several years?" It would be nice if there was a report, Wagner observed. The map on the website provides information about the redds, but not by elevation, Boyce said.

The next question was "What additional restrictions of spawners at Hamilton and Hardy need to be made or avoided during the upcoming season?" My understanding of that question is, did we reach spawning capacity in the stream? Wills said. Based on my understanding from talking to our field personnel, they can't answer that question specifically; their gut feeling is that it would be wrong to preclude access to the streams at this point, he said. This fall and winter, their studies will include logging the GPS locations of the redds, which will provide more accurate information that will allow us to track what is going on more closely, said Wills.

With respect to this year's chum operation, Bettin said the plan, at this point, is to bring Bonneville outflow up to 125 Kcfs during the first month when fish are present. The reservoirs are in much better shape this year, he said; it does not appear to be a drought year. Once fish are present, we'll start bringing up the tailwater elevation, he said – probably around November 5. We can talk about this more at our October 23 meeting, Bettin said; if fish have been observed in the lower river by that time, that will give us a better idea of where we are – if fish are observed on the spawning grounds before that, we can talk about starting the operation sooner. It does not appear that there will be much of a conflict between the chum and Vernita Bar operations at this time, Bettin added.

The group also discussed the possibility of a TMT “field trip” to the chum spawning areas; it was agreed to tentatively schedule this outing for Wednesday, November 27. Shane Scott said he will make the arrangements for this excursion.

#### ***4. Libby/Canadian Storage Final Swap Accounting.***

Hlebechuk said that, at a previous TMT meeting, there was a request for a more detailed accounting of the 2002 Libby/Canadian swap. She put up a graph showing treaty storage regulation (TSR) storage over time, noting that the proposed operation, per the August 8 TSR, was to store 70 Ksf in Libby, with Canada delivering an equivalent amount from their projects. However, actual inflows turned out to be lower than expected, Hlebechuk explained; as a result, Libby stored 62 Ksf, but Canada was unable to provide the 70 Ksf they thought they would be able to. The total storage was 98 Ksf of Treaty water with the swap operation, she said.

Because actual inflows were lower than the August 8 TSR projected inflows, there was what is called a “proportional draft” from the Canadian projects in the amount of 179 Ksf, Hlebechuk said. That is independent of the swap operation, and would have occurred whether or not there was a swap, she explained. So in other words, Canada was going to provide 70 Ksf in additional flow, but instead they stored 35 Ksf? Tony Norris asked. Correct, Hlebechuk replied.

#### ***5. Vernita Bar Flows.***

Kyle Martin said CRITFC has floated a proposal regarding Vernita Bar flows this year. Essentially, he said, we would like to see sustained flows of 60 Kcfs through the reach; according to CRITFC's analysis, this operation would not adversely impact flood control. Martin said Bob Heinith has been working with Grant County PUD to see whether such an operation might be possible. When you say 60 Kcfs, you're talking about daytime flows? Bettin asked. Essentially, yes, Martin replied.

#### ***6. Current System Conditions.***

Wagner said a total of 464,000 adult fall chinook have passed Bonneville Dam to date, very close to the highest counts in the historical record. With respect to reservoir operations, Hlebechuk said the operating agencies are mainly waiting for the fall rains to start. Current elevation at Libby is 2440 feet, and the project is releasing 6 Kcfs. Albeni

Falls is currently at elevation 2060, headed down to 2055 by November 15. Dworshak is at elevation 1518 feet and releasing minimum outflow. Tony Norris reported that Grand Coulee is currently at elevation 1287 feet, while Hungry Horse is at 3536 feet, releasing 2 Kcfs to meet the 3.5 Kcfs Columbia Falls minimum flow.

***7. New System Operational Requests.***

No new SORs were submitted prior to today's meeting.

***8. Recommended Operations.***

Recommended operations were summarized during Agenda Item 6.

***9. Next TMT Meeting Date.***

**The next Technical Management Team meeting was set for Wednesday, October 23. Meeting summary prepared by Jeff Kuechle, BPA contractor.**

**COLUMBIA RIVER REGIONAL FORUM**

**TECHNICAL MANAGEMENT TEAM**

October 8, 2002

**FACILITATOR'S SUMMARY NOTES ON FUTURE ACTIONS**

Facilitator: Robin Harkless

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.

**Water Management Plan 2003:**

The final WMP was posted on the TMT website today. February 6<sup>th</sup> Emergency Protocols are posted, but the COE needs further internal discussions before the protocols can be finalized. This issue will be raised at the November 6<sup>th</sup> TMT meeting. Fall/winter update discussions will also be on the 11/6 agenda.

**Lower River Operations for Chum:**

Cathy Hlebechuk, COE, gave a report on Portland District COE studies being done to improve spawning conditions for chum. Twenty-four project areas have been identified and will be studied over the fiscal year. As the studies continue, TMT will be updated. An interagency chum team is looking at the studies together, and includes members of TMT.

The Salmon Managers discussed their answers to a set of questions about chum. Dave Wills, USFWS, led the group in the discussion on what the impacts of chum operations

on Vernita Bar were. He responded that the question should have been framed to ask what the effects of Vernita Bar were on chum operations. Although the group did not fully agree, he said that the late flows may have caused chum to spawn in areas where they normally would not, and that this could have been detrimental to chum. Washington saw no adverse effects on chum, although did say that chum found new spawning grounds. They feel that given the low water year, a balance was struck that spread the deficits throughout the system.

The effects of reverse loads at Ive's Island will be continually monitored and included in the WMP. TMT members agreed that smooth flows are ideal but not always possible.

Ive's Island and St. Cloud effects on chum will be monitored. Washington said that the issue is too complex to speculate on at the present time.

Hamilton Creek will be monitored this year, as the COE has put in a new gauge. Real-time data will be available on the COE website. This data can help the group determine if there should be restrictions on spawning at Hardy and Hamilton Creeks.

Much data exists relative to flow and redd distributions over the past several years. Ron Boyce, Oregon, reported that as this information is sorted out, it will be presented in an annual report.

TMT then discussed chum operations for this year. BPA suggested raising the tailwater at Bonneville to 125 cfs around November 5<sup>th</sup>, or when fish are present.

**ACTION:** Shane Scott will distribute spawning data from WDFW to aid TMT in making decisions about chum operations. The group will revisit this issue and make a decision at the October 23<sup>rd</sup> meeting. Shane will also set up a field trip to look at chum spawning grounds during the week of the 18<sup>th</sup> or 25<sup>th</sup> of November. He will notify the group when a date has been set.

**Libby/Canadian Storage Swap:**

As requested, Cathy Hlebechuk handed out a graph explanation of the Libby/Canada swap. There was 98 ksfd of inadvertent storage in Canada because the actual inflows were less than the forecasted inflows.

**Vernita Bar Flows:**

Kyle Martin, CRITFC, reported that CRITFC is working with Grant County and others to implement a request for minimum flows at 60 kcfs. He will give an update on this issue at the next TMT meeting.

**Current System Conditions:**

*Fish Migration:* Paul Wagner, NMFS, reported that record numbers of adult Chinooks have been seen at Bonneville.

*Reservoir Operations:* Cathy Hlebechuk updated the group on COE project operations. USFWS has not yet submitted requests for temperature changes at Dworshak, but may do so in the near future. Tony Norris, BOR, reported on operations at the BOR projects.

**Year End Review Topics:**

The Year End Review was scheduled for Wednesday, October 23. Due to scheduling conflicts, this date may change to November 6! The facilitation team will keep everyone posted on this matter.

- Report on Snake River Operations
- Dworshak Operations: Above or Below 1520'?
- TDG Level Variations: Criteria for Modifications to Spill – COE
- Fall Chinook Survival in Snake River – Billy Connor
- Chinook and Steelhead Adult Observations – Chris Perry
- Hanford Reach Juvenile Stranding – Joe Lucas?
- History of Spawning Correspondent to Vernita Bar Levels
- Migration Status – Paul Wagner
- Survival Study: Comparison with 2001
- Performance Standards – Paul Wagner
- Weather Review – Kyle Martin

**November 6<sup>th</sup> Meeting: Agenda Items:**

- Report on RSW Meeting in Walla Walla
- Burbot Modeling Results
- Fall/winter update for WMP