

**TECHNICAL MANAGEMENT TEAM
MEETING NOTES**

April 12, 2003

**CORPS OF ENGINEERS NORTHWESTERN DIVISION OFFICES – CUSTOM HOUSE
PORTLAND, OREGON**

FACILITATOR'S SUMMARY NOTES ON FUTURE ACTIONS

Facilitator: Donna Silverberg

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.

SOR 2004-04:

The salmon managers presented SOR 2004-04 requesting spill up to 120% TDG at all of the Lower Columbia projects except Bonneville beginning today, 4/12. Spill Bonneville at 50 kcfs for 24/hours daily, and maintain an instantaneous tailwater elevation of 13' to protect chum and avoid exceeding TDG. Also, operate the corner collector at Bonneville simultaneous with spill. The request was based on the recommendation in the BiOp and on numbers of fish observed at McNary. On the bullet referring to the tailwater elevation at Bonneville Dam, the word “instantaneous” in the SOR was changed to “minimum” to better reflect the intent of the request. The salmon managers, in response to a question from the COE, recommended that TDG levels stay at or below 110% at the Bonneville tailwater, and for the COE to contact Paul Wagner or Dave Wills if a problem arises.

CRITFC noted a preference for operating Bonneville at 75 kcfs and continuing monitoring, but did not object to the salmon managers' SOR. No objections were raised, so the SOR will be implemented. The salmon managers reported that 1,044 yearling chinook were observed at McNary, and 7,770 subyearling (which is up about 6,000 from previous years).

QAdjust Summaries:

The April final water supply forecast was used to run models presented today by the COE, per requests at the last TMT meeting. The model ran Priest Rapids at 70 kcfs through 4/15, then 135 kcfs 4/16-30. It also ran the ramp-up operation used last year of 70 kcfs through 4/15, 105 kcfs from 4/16-30, and 135 kcfs from 5/1-31. The BOR proposed implementing the first operation (135 kcfs starting on 4/16) as the model run shows that this operation supports maintenance work that needs to be done at Grand Coulee this year. Oregon expressed concerns with lowering spring flows in the Mid-Columbia, and the COE responded that the issue is not over the amount of water, but rather the shape of flow. CRITFC raised a concern that the alternative operation might affect the Hanford Reach agreement, and would like to see a more refined analysis. The salmon managers agreed to review the agreement and consider CRITFC's concerns, then come back to TMT on Wednesday, April 14th, with a proposal for operations. Appreciation was expressed to the COE for running the models. Jim Litchfield noted that Montana would like to put Libby operations back on the table for discussion concurrent with summer spill operations discussions.

SOR 2004-3:

The salmon managers requested that spill continue at Lower Granite and Little Goose, begin spill today (4/12) at Lower Monumental and Ice Harbor, and continue spill at the projects through April 30th. They also requested that spill at Lower Monumental and Ice Harbor continue as necessary to conduct research tests. (NOAA supported the full SOR, but did not object to ending the research at Lower Granite early.) This request was put forth as a result of consideration for NOAA data that shows no significant benefit to transporting fish in the early part of spring. Paul Wagner clarified that while no conclusions from the studies were drawn by the NOAA Science Center, it was made clear during the BiOp remand collaboration that the intent was for the information to be used by management to make decisions. Paul also clarified that the 9.5 C criteria that NOAA presented at the 4/8 TMT meeting pertained only to the already-collected fish, not those left in-river. (So, if temperatures rise above 9 C, transport the collected fish.)

- Oregon, Idaho, NOAA and USFWS supported spill through April 30th, and consider this a “spread the risk” operation.
- Montana felt that the 85 kcfs criteria is more compelling than the recent data/criteria presented, so does not support the SOR.
- BPA commented that during low flow years such as this, the BiOp recommendation for using an 85 kcfs threshold for spill/transport is a good management tool. BPA did not object to continuing spill at Lower Granite and Little Goose (for now), but did not support starting spill at Lower Monumental until further discussion and if/when a consensus is reached on the issue.
- TMT will re-visit this issue at a subsequent TMT meeting on 4/14. Until then, spill will continue at Lower Granite and Little Goose, but will not start at Lower Monumental. John Wellschlager will request operators to set the system up for Wednesday, 4/14 so that spill can begin at Lower Monumental; and so that spill can end at Lower Granite and Little Goose. TMT members agreed to consider Ice Harbor operations separately from the other Lower Snake projects.

Next Meeting, April 14th, 9am-noon:

Agenda Items:

- Status of Hanford Reach
- Lower Snake Spring Spill
- McNary Operation Outside 1% Efficiency
- Mid-Columbia Flow

1. Greeting and Introductions

The April 12 Technical Management Team meeting was chaired by Cindy Henriksen of the Corps and facilitated by Donna Silverberg. 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 Henriksen at 503/808-3945.

2. Update on Spring Spill at the Lower Columbia Projects.

At today's meeting, the salmon managers submitted SOR 2004-4, a new SOR covering Lower Columbia spill. David Wills said that, after looking at the fish passage numbers, the salmon managers would like to initiate spill at typical BiOp levels at The Dalles, John Day and McNary, starting at 6 p.m. tonight. At Bonneville, the salmon managers are recommending a minimum of 50 Kcfs spill (rather than the BiOp level of 75 Kcfs) and corner collector operation 24 hours a day, again starting at 6 p.m. tonight, in order to protect emerging chum from high TDG levels. The salmon managers are requesting that a minimum tailwater elevation of 13 feet be maintained at Bonneville. It was agreed that spill at The Dalles, John Day and McNary will run from 6 p.m. to 6 a.m. until May 19, when spill will begin at 7 p.m. and run until 6 a.m. Is there a TDG reading at Warrendale that should trigger a response, in terms of curtailing Bonneville spill? Jim Adams asked. We don't want to see TDG levels at Warrendale any higher than 110%, Wills replied. And spill would be turned off if TDG at Warrendale begins to exceed 110%? Adams asked. Correct, Wills replied – if there is any question, please contact Paul Wagner or myself.

When is the estimated end-of-emergence date for the stocks below Bonneville? John Wellschlager asked. April 26 for chum and May 26 for chinook, Ron Boyce replied. The group then devoted a few minutes of discussion to current smolt passage index data.

Are there any objections to starting spill at 6 p.m. tonight at the four Lower Columbia projects? Silverberg asked. None were raised; Wellschlager said that, in response to the discussion at last Thursday's TMT meeting, BPA went ahead and set up a schedule that would allow spill to begin tonight. Tom Lorz said CRITFC would prefer that Bonneville spill 75 Kcfs 24 hours a day, with monitoring at the redd sites to ensure that no TDG-related adverse biological impacts occur; however, CRITFC will not object to the SOR spill operation.

3. QADJ Summaries Based on April Final Forecast.

The discussion then moved on to the current Q-Adjust run. Henriksen distributed copies of the most recent version of this document, generated in response to a request at last week's TMT meeting. The group spent a few minutes going through the various Grand Coulee operating scenarios modeled by the Corps based on the April final water supply forecast; the bottom line is that, if we target meeting an average flow of 135 Kcfs at Priest Rapids from April 16-May 31, Grand Coulee will be at 1252 feet by April 30 and 1263 feet by May 31. The average flow at McNary for the month of June would then be about 190 Kcfs, because Grand Coulee will be refilling, Henriksen said.

The group discussed the impact of the Grand Coulee drum gate repair operation on flows in the Lower Columbia. Wellschlager and Norris observed that, according to the Q-Adjust run, there is little difference in May and June flows between the drum gate repair/non-drum gate repair scenarios. In response to a question, Norris said the drum gate repairs will begin as soon as Grand Coulee elevation reaches 1255 feet, probably some time in the end of April. The same volume will come out of Grand Coulee between now and the end of April, regardless of whether the drum gate repairs go ahead as scheduled, Henriksen observed. It was agreed that the TMT will revisit this operation at its April 14 meeting. Bob Heinith asked whether it would be possible

to get an analysis of how the difference in Grand Coulee elevations caused by the drum gate repair work might impact flow fluctuations through the Hanford reach; Henriksen replied that the model is not set up to do that. She suggested that Heinith develop the operational scenarios he would like to see modeled to the other signatories to the Hanford Reach fish protection agreement. The proposed operation should allow those parties to implement the agreement as written, Norris added – again, there isn't going to be a significant departure from normal operations as a result of the repairs. It was agreed that the TMT will take a look at the 2004 Vernita Bar agreement (to be posted soon to the TMT homepage) to inform discussion of this topic at Wednesday's TMT meeting. We'll talk about this at tomorrow's FPAC meeting, said Boyce. Norris added that the drum gate repairs are a dam safety issue; we put it off last year, and we really can't put it off again.

4. Technical Memo for FCRPS Impacts.

5. Spring Spill at the Lower Snake Collector Projects.

As you will recall, said Silverberg, several meetings ago, the salmon managers submitted SOR 2004-3, covering spring spill at the Snake River projects. Following the last TMT meeting, said Wills, the salmon managers agreed to discuss this issue, specifically, how best to use spill early in the spring season at the Snake. We want you to continue spill at Lower Granite and Little Goose, and to begin BiOp spill at Lower Monumental and Ice Harbor tonight. Spill would then continue at Ice Harbor through June 20, but would end on April 30 at the other projects, except for spill needed for the ongoing research at some dams.

The group discussed the justification for this SOR; Wellschlager observed that, under the BiOp, given the current forecast, there would be no spring spill at the Snake River collector projects. We still feel it is appropriate to bring this to the TMT table at this point, said Wills. And NOAA Fisheries concurs? Silverberg asked. Yes, Wagner replied.

Wellschlager said the biological data BPA has been able to review does not seem conclusive, in terms of whether or not spring spill and in-river migration were beneficial, in comparison to transportation, in low-water years. The group devoted a few minutes of discussion to this information, as presented in the NOAA Fisheries technical memo, titled "Effects of the Federal Columbia River Power System on Salmon Populations," dated December 21, 2003. This document is available via hot-link from today's agenda on the TMT homepage. The bottom line is that, according to this data, over multiple years, what this data shows is that, up until May 1, in most years, both chinook and steelhead in-river migrants do pretty well, in comparison to transported fish, up until about May 1, Wagner said.

So is there agreement among the salmon managers that this evidence is compelling? Wellschlager asked. Is transport an effective bridge tool in a low-water year? he asked. Transport started in 1976, Wagner replied; it quickly grew into the management tool, because it avoided mortality downstream. Yet, you look at the adult returns, and you don't see that reflected the way you would expect. The question then becomes, what have we done to these fish over the past 25-

30 years? Wagner said.

Wellschlager reiterated his question about agreement among the salmon managers about what the evidence shows. It would be fair to say that, once we reach the end of April, there is less consensus, Wills replied; earlier in April, however, we have a solid consensus among the salmon managers that we should be providing spill. This is simply a spread-the risk strategy, Wagner added.

Wellschlager observed that two of the parameters cited by the salmon managers as being needed for successful in-river migration are strong flows and water temperatures below 9.5 degrees C at Lower Granite. Obviously flows are not very strong at the moment, Wellschlager said; also, water temperatures are now being measured at 10.5 degrees C at Lower Granite. Wagner replied that all fish collected are now being transported; the requested spill is simply to ensure the best possible in-river conditions for the uncollected fish.

The discussion continued in this vein for some minutes, with various TMT participants providing alternative viewpoints as to what the transport vs. in-river survival data shows. Ultimately, Boyce asked whether anyone plans to object to this SOR. Wellschlager replied that this SOR represents a major change in the BiOp operations of the FCRPS to which everyone has agreed. I'm not saying you don't have compelling evidence in support of your position, he said; however, I have to say that, if BPA came to the table with a major operational change based on evidence we found compelling, you would likely object. Wellschlager said he is willing to revisit this issue at Wednesday's TMT meeting, but he is not willing to start spill at Lower Monumental before that discussion occurs. Russ Kiefer and Boyce said they are unwilling to wait to make a decision on this issue unless spill goes forward at Lower Monumental. Wellschlager said he is unable to agree to that.

Ultimately, Henriksen observed that, logistically, there is no way to start spill at Ice Harbor or Lower Monumental before Wednesday, because of the pre-scheduling that has already occurred. She suggested that spill continue at Lower Granite and Little Goose until the Ice Harbor/Lower Monumental spill issue can hopefully be resolved at Wednesday's TMT meeting. Does anyone object to waiting until Wednesday to resolve this issue? Silverberg asked. Cindy LeFleur noted that one concern is that, if we wait until Wednesday, we will find ourselves in the same boat, in terms of another two-day, prescheduling-caused delay in the onset of spill. We can agree to set things up such that, if the recommendation is made to spill at Wednesday's TMT meeting, we will be ready to go with spill at Lower Monumental on Wednesday night. Conversely, however, we will set things up to stop spill at the Lower Snake projects if that is the decision we make, Wellschlager said. In response to a request from Boyce, Wellschlager agreed to begin spill at Ice Harbor as soon as possible. It won't happen tonight, however, Wellschlager cautioned. It was agreed to separate out Ice Harbor spill from Lower Monumental spill, in terms of the TMT's Wednesday discussions. It was further agreed that the Corps, BPA and NOAA Fisheries will continue to discuss the 85 Kcfs spill trigger question between now and Wednesday morning.

6. Next TMT Meeting Date.

The next meeting of the Technical Management Team was set for Wednesday, April 14.

TMT Attendance List

April 12, 2004

Name	Affiliation
Cindy Henriksen	COE
Chris Ross	NOAAF
Cindy LeFleur	WDFW
Ron Boyce	ODFW
Jim Litchfield	Montana
Tom Le	PSE
Tom Lorz	CRITFC
Paul Wagner	NOAAF
Bruce MacKay	Consultant
Russ Kiefer	IDFG
Donna Silverberg	Facilitation Team
John Wellschlager	BPA
David Wills	USFWS
Tony Norris	USBR
Robin Harkless	Facilitation Team
Scott Boyd	COE
Tom Haymaker	PNGC
Rudd Turner	COE
Tim Heizenrater	PPM
Maria Van Houten	PPM
Russ George	WMCI
Lee Corum	PNUCC
David Benner	FPC
Jim Adams	COE
Mike O'Bryant	CBB

Mike Buchko	Powerex
Martin Hatscher	SCL
Steve Haeseker	USFWS
Glenn Traeger	Avista
Todd Perry	CPS
Bill Rudolph	NWFL