

# COLUMBIA RIVER REGIONAL FORUM

## TECHNICAL MANAGEMENT TEAM CONFERENCE CALL

May 19, 2005

### 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 2005-12**

The COE requested additional data from NMFS, and scheduled a follow-up TMT call after the 5/18 TMT meeting to further discuss the issue from a technical perspective. Specifically, how will daytime spill at John Day provide a system net-benefit from a biological perspective? Gary Fredericks, NMFS, provided a technical paper on two alternatives for providing benefits to fish given the diminished spill levels at The Dalles, including the option laid out in the SOR. What NMFS found, based on data from 1999-2002, was that providing additional daytime spill at John Day would reduce forebay travel time by 8-10 hours to The Dalles. At 30% spill, smaller fish would benefit but larger fish (e.g. hatchery steelhead) would not pass, and 40% would provide the benefit for the larger fish as well. Ice Harbor and Lower Monumental have seen the benefits of this type of operation, which resulted in 5-10% improved survival.

It was noted that TDG levels could increase downstream as a result of the proposed operation, which would require lowering spill caps. TDG at the Bonneville forebay has been around 115%, close to the cap, and this is a concern for the COE. It was also noted that spill to 40% at The Dalles is possible, but would require spilling through bays that all agreed would be biologically detrimental to the fish.

NMFS explored a second alternative, to transport the fish at McNary. However, preliminary data shows no survival benefit to doing this.

Given the discussion about the TDG risks, the salmon managers still preferred to implement the request and continue to monitor with the understanding that a reduction in spill might be necessary to maintain acceptable gas levels at Bonneville. This view was shared by Oregon, Washington, Idaho, NMFS, USFWS, Nez Perce and CRITFC. The salmon managers also acknowledged that it would be difficult to measure a biological benefit from implementing the requested operation.

The action agencies (COE, BPA and BOR) voiced strong opinion that moving forward with the operation does NOT set a precedent for the future, in terms of providing compensation or offsets. The COE agreed to move forward with the proposed operation with the following caveats: The operation would be a one-time, no more than 7-day

period, and would not violate or jeopardize other COE statutory requirements to benefit fish. BPA echoed the COE, adding that there is concern for impacts to rate payers and that it was disconcerting to implement an operation not knowing what the benefits will be. The BOR agreed with the COE and BPA.

The salmon managers shared the interest in this being a one-time only operation, and expressed much appreciation to the action agencies for their efforts to meet the request.

**ACTION:** Starting Saturday morning, 5/21, operators will try to reach the objective in the SOR of spill at John Day to 40% daytime, through the weekend. The action agencies will check in on Monday, 5/23, and decide how to proceed with the rest of the 7-day period, given TDG, fish run timing and other monitoring data that becomes available. Cindy Henriksen, COE, will email TMT if changes are made, and anyone that so desires can request a TMT call.

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

Today's conference call was chaired by Cindy Henriksen and facilitated by Donna Silverberg. The following is a summary (not a verbatim transcript) of the topics discussed and decisions made at this meeting. Please contact Henriksen at 503/808-3945 with any questions or comments about these minutes.

### ***2. Spill at John Day/The Dalles.***

Henriksen said that, following yesterday's TMT meeting, she had requested more biological information from the salmon managers before elevating this issue to the IT. What we requested from NOAA Fisheries was a write-up of the biological advantages of an operation similar to the one recommended in SOR 2005-12, Henriksen explained. She noted that the lack of flexibility in operating the spillway at The Dalles in 2005 was an unanticipated development; now, when flows are higher, the salmon managers would like to see additional spill at John Day to provide positive benefits to offset the potential negative impacts of the reduced spill volume at The Dalles. We received that paper just a little while ago, and I have asked Corps biological personnel to review it, she said. In response to a question, Paul Wagner said he has not yet had an opportunity to send this paper to the other TMT members.

Gary Fredricks, who wrote the section of the paper covering The Dalles, provided a brief overview of its contents. We're asking for an increase in John Day daytime spill to about 40%, said Fredricks. What our studies show is that if we provide 24-hour spill at that project, we can reduce forebay residence time by about 8 hours. One of the problems with our studies in the past is that, at 30% daytime spill, we couldn't get the larger, hatchery steelhead smolts to move. We would like to see the higher spill level for a few days to test that hypothesis. We know we can get chinook smolts and smaller, wild steelhead smolts to move with this higher spill level. We will believe we will see a reduction in residence time

and a survival improvement of about 5% for all species at the higher spill level – that’s it in a nutshell, said Fredricks.

Have you considered what the impacts are going to be in terms of increased gas below John Day, and how that will result in reduced spill at the downstream projects? Henriksen asked. I don’t think 40% will cause us to approach the gas cap downstream of John Day, Fredricks replied. Henriksen said that, in the Corps view, there may be a negative impact on spill volumes at the projects downstream of John Day if that project goes to 40% spill. Laura Hamilton directed the TMT members to the “spill” tab on the TMT homepage; that will allow you to track the Bonneville forebay TDG levels, and see how spill upstream affects the TDG levels arriving at Bonneville, she said.

Is there any way to measure the biological effects of increased spill at John Day? another participant asked. No, I don’t think so, Fredricks replied. My point is that, if we increase spill at John Day, it could be that, under certain environmental conditions, we could put more gas in the river, which could impact spill volumes at the projects downstream, Hamilton said. Fredricks reiterated that, given current weather conditions, he is not overly concerned about such a possibility; besides, The Dalles tends to reset TDG levels. In response to a question, Hamilton said spill yesterday at Bonneville ranged between 75 Kcfs during the day, and 125 Kcfs at night.

It’s just like everything else we implement, said Ron Boyce – we can implement it, then monitor the situation and adjust the operation as needed. If we see abnormally high TDG levels at the downstream projects, at least we’ll know what’s causing that. In response to another comment, Wellschlager noted that it is possible to spill up to 40% of river flow at The Dalles, but only by using spill bays that are not preferred by the salmon managers – by using bays 14-18 at the south end of the project. That’s correct, said Fredricks – that would create very poor conditions for fish passage.

What else do we need to talk about? asked Silverberg. Do I understand that the Bonneville forebay is near the gas limit already, which means we couldn’t be spilling any more at The Dalles even if we wanted to? Kim Fodrea asked. Yesterday it was at the gas limit, yes, Laura Hamilton replied – that’s been true in four of the past five days, and my model run today said we’re going to exceed the gas limit tomorrow. That means we wouldn’t be able to raise the spill volume at The Dalles anyway, even if we wanted to.

Was NMFS planning to add some citations to the paper you provided, talking about the biological effects of increased spill and the effects on FPE? asked Rudd Turner. We can do that, Wagner replied. Getting back to the paper, we also looked at all other means of improving survival, including increased transport at McNary, he continued. The preliminary data does not indicate any survival benefit if we were to do so. There is also a permitting issue that may be

a problem. You're saving that, survival-wise, there is no difference between transport and 40% spill? Wellschlager asked. I'm not sure I can answer that question, Wagner replied; the data for yearling chinook from 2002 was that it was a wash. In 2003, we collected steelhead data; the data from that year indicated no benefit, and perhaps a slight detriment, from transporting steelhead.

So any improvement would accrue at John Day? asked another participant. There would be no change at The Dalles? That's correct, Wagner replied. And those benefits would be in the form of reduced forebay residence time, and increased spillway passage? Turner asked. That's correct, Fredricks replied – the fish would be redirected from the powerhouse to the spillway, and there are those who would say that was a benefit, in terms of overall system survival.

Has there been any study of the detrimental impacts of the reduction in spill at The Dalles? Lee Corum asked. The impact is in the form of decreased FPE and greater turbine passage, where mortality is higher than under spill passage, Fredricks replied. Fodrea reiterated that the Corps has said that, at this point, it would not be possible to increase spill at The Dalles because that is limited by forebay TDG levels at Bonneville. In response to a question, Hamilton said her model shows that increasing spill at John Day will increase TDG levels further in the Bonneville forebay.

Henriksen said she is still struggling to quantify the biological detriments of the operation at The Dalles and the biological benefits of the proposed operation at John Day. Wagner replied that NMFS is confident that increased spill at John Day will benefit in-river migrants, but that NMFS cannot quantify the magnitude of the biological impacts of that operation.

The group revisited the topic of the tradeoffs between providing full BiOp spill at The Dalles vs. TDG levels at the Bonneville forebay. Fredricks observed that part of the problem at the Bonneville forebay in 2005 may be due to the spill pattern the Corps has been forced to use at The Dalles this year, with bulk spill through bays 1 and 2. Hamilton did not disagree, but said that TDG levels coming down from the upstream projects may also have an impact.

Tom Lorz said that, from CRITFC's perspective, it makes sense to implement the John Day operation requested in the SOR, monitor TDG levels and back off spill if TDG levels rise to unacceptable levels. In response to a question, Henriksen said flows of 200-250 Kcfs are expected in the Lower Columbia through the weekend. There has been involuntary spill at McNary for more than a week because flows have been exceeding powerhouse capacity, added Hamilton.

The Oregon, Washington, Idaho, Fish and Wildlife Service and CRITFC representatives all said they would prefer to see the SOR implemented, with

adjustments made for gas if problems occur downstream. That puts it in the action agencies' court, said Silverberg – what's your response? Again, I was interested in hearing the biological piece of this, said Henriksen; we've heard that while there is a detriment at The Dalles and a potential benefit at John Day, it will be difficult to measure those effects. We were willing to consider the operation requested in the SOR as a potential way to benefit fish, but not in any way as compensation for 2005 operations at The Dalles. If we do implement this operation, it would be a limited, one-time agreement for the benefit of the fish, she said. So the action agencies are willing to implement the request, with the caveat that this is one time only, and for a limited time? Silverberg asked.

I think Cindy did a good job describing the limitations we would be agreeing to, said Wellschlager; Bonneville has concerns about the impacts of this operation on ratepayers. We also understand that it is difficult to quantify the biological value of this operation – we're being asked to do something unquantifiable. That said, we want to try to be supportive, and I guess we would go along with a limited spill, with the caveat that we will be monitoring conditions very carefully, and we'll talk some more if problems occur, Wellschlager said.

Tony Norris said Reclamation is also concerned about setting any sort of precedent through this operation, but that as long as the Corps and Bonneville are comfortable, Reclamation is willing to concur.

The group discussed the specifics of the operation. Fredricks observed that NMFS would prefer that this not be a do-or-die, 40% or nothing operation; if TDG problems occur, he said, I would prefer to try backing off the daytime spill volume to 30%, rather than stopping the operation altogether. We could also consider backing off nighttime spill volumes, while maintaining 40% spill during the day. After a few minutes of discussion, it was agreed that the action agencies will provide daytime spill at John Day for seven days, beginning either tomorrow or Saturday morning. We'll run the operation through the weekend, said Henriksen, and will revisit the operation on Monday, looking at closely at flow, spill and TDG conditions. Seven days of spill is the maximum we're willing to entertain, she said.

Wellschlager reported that, after conferring with BPA's schedulers, it will not be possible to begin this operation tomorrow. We can start Saturday morning, however, he said. There will be some involuntary spill at John Day tomorrow, however, he added.

It was agreed that the Corps will send out an email on Monday, informing the TMT of the status of the operation, and providing an opportunity for a conference call if the TMT feels one is needed.

Wagner, Kiefer and Wills thanked the action agencies for their willingness to accommodate this operational request. With that, today's conference call was adjourned.

**TMT Conference Call Participants  
May 19, 2005**

<b>Name</b>	<b>Affiliation</b>
Cindy Henriksen	COE
Donna Silverberg	Facilitation Team
Robin Harkless	Facilitation Team
Dave Statler	NPT
Nic Lane	BPA
John Wellschlager	BPA
Kim Fodrea	BPA
Ron Boyce	ODFW
Tony Norris	USBR
David Wills	USFWS
Paul Wagner	NMFS
Liz Hamilton	
John Palensky	NMFS
Lee Corum	PNUCC
Cindy LeFleur	WDFW
Dave Benner	FPC
Richelle Beck	D. Rohr & Associates
Tom Lorz	CRITFC