

COLUMBIA RIVER REGIONAL FORUM

TECHNICAL MANAGEMENT TEAM

April 22, 2011
Conference Call

FACILITATOR'S SUMMARY NOTES

Facilitator: Robin Gumpert

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 2011-02 re: Lower Monumental Spill Pattern

As follow up from the 4/20 TMT meeting, the team revisited the salmon managers' request to change to a uniform spill pattern at Lower Monumental when flows are above 100 kcfs. Steve Barton, COE, said the COE had reviewed all the information and perspectives shared over the last two TMT discussions on this issue and said the COE was not compelled to make a change to the Fish Operations Plan guidance to use a bulk spill pattern at Lower Monumental. He added that the COE would move to uniform spill if involuntary spill occurs in the system – meaning full load spill/ lack of load spill conditions – similar to what was provided in June of 2010. He added that if the project moved to uniform spill, it would likely remain as such for a period of days or weeks.

The COE used the dam passage survival data from the 2008-09 study that resulted in the determination to use a bulk pattern. Steve reported that one of the two Lower Granite turbines would be back on line next week (sooner than expected) [Note; after additional calls from the project, this early return to service announcement was retracted. No additional units are expected to return earlier than May] and the other would be up at the end of May. The COE does not feel the difference in TDG impacts from using a bulk vs. uniform spill at Lower Monumental would be significant at the current lower flows.

- Russ Kiefer, Idaho, expressed frustration and disappointment that given regional salmon manager consensus on the issue, and additional SAR data indicating life cycle survival improvements would occur with a uniform spill pattern given the high flows, the COE was not compelled to grant the request. He pointed to 2006 data concerning bypassed fish at Lower Monumental. He questioned the process for data review and expressed concern that the salmon managers were not consulted with further re: their biological rationale for recommending the operation.
- Paul Wagner, NOAA, said when he signed on to the SOR, flows were very high and the proposed operation looked like an easy solution for managing TDG. That said, conditions have changed and flows are below what was expected. While

NOAA is interested in investigating the issue further at FPOM with the potential for making changes next year, NOAA was not opposed to the COE's decision for the near term operation.

- Tony Norris, BPA, said BPA supports the COE's disposition on this issue.
- John Roache, BOR, said Reclamation also supports the COE's disposition.
- Jim Litchfield, Montana, said Montana does not object to the COE's disposition.
- Rick Kruger, Oregon, said he, like Russ Kiefer, was disappointed in the COE's narrow focus on limited data to make this decision. He also noted that all the salmon managers had signed on to the SOR and he did not understand the COE's reasoning for going against the request. He requested that this issue be elevated to the RIOG for further deliberation and decision.
- USFWS and CTUIR, both signatories to the SOR, were not present on the call.

Next Steps/Action:

- The facilitator will work with TMT to frame the policy question for RIOG.
- RIOG meets on 4/27 at 1:00 pm and this item will be added to the agenda.
- TMT members will brief their RIOG representatives on the issue before the 4/27 meeting.
- Notes from the TMT meetings will be distributed to TMT members on 4/25 to remind them of the overview of discussions around this issue.
- There will be a report out on this item at the next TMT meeting.

Columbia River Regional Forum
TECHNICAL MANAGEMENT TEAM OFFICIAL MINUTES

April 22, 2011

Notes: Pat Vivian

1. Introduction

Today's TMT conference call was chaired by Steve Barton, COE, and facilitated by Robin Gumpert, DS Consulting. Representatives of the COE, BPA, Idaho, NOAA, BOR, Oregon, Montana and others attended. USFWS, Washington, CRITFC and Tribal representatives were not present on the call. This summary is an official record of the proceedings, not a verbatim transcript. Any questions or comments should be directed to the TMT chair.

2. SOR 2011-2, Lower Monumental Spill Patterns

The purpose of today's TMT call was disposition of SOR 2011-02 submitted by the Salmon Managers on April 13 to address TDG concerns at high flows by switching Lower Monumental operations from bulk to uniform spill. TMT discussed this request at length on April 13 and again on April 20, when the COE scheduled today's call to announce a decision.

After reviewing available data in search of biological evidence to support departure from the spring 2011 FOP, the COE has not identified a compelling reason to switch from the bulk to uniform spill pattern at Lower Monumental, Barton said. However, the COE will switch to the uniform pattern under involuntary spill conditions, as in past years. For example, in June 2010, the river system was at full load on all available units, with involuntary spill due to lack of turbine capacity. This spring could bring similar involuntary spill conditions due to lack of turbine capacity and lack of load as well. The COE will switch to uniform spill when conditions are such that it will be needed for several days or possibly weeks at a time.

Margaret Filardo, FPC, asked about the qualitative criteria for compelling biological evidence. Barton defined "compelling" as a significant difference, whereas data from a 2009 paired-release study show virtually no difference in dam passage survival rates between bulk and uniform spill. These are the same data that led to a choice of bulk spill in the FPP. The COE has seen no other data to take into consideration at this point. During the course of the 2009 paired-release study, flows at Lower Monumental ranged from 31-172 kcfs, Dan Feil, COE, said. River flows at present are just over 100 kcfs, with 30 kcfs spill at Lower Monumental, which is above average for the bulk pattern used during the 2009 study. The two units out at Lower Granite are expected back on line soon, one next week and the other on May 13.

The gas production phenomenon between Lower Granite and Lower Monumental happens only under certain conditions, Barton explained. At current flows, with Lower Granite spilling approximately 50 kcfs and the tailwater below 120% TDG, a unit outage tends to trigger TDG impacts at Lower Monumental. However, when one unit comes back on line next week [after the meeting new information from the project indicated the unit would not come back until some time in May], the gas cap at Lower Granite should rise to around 140 kcfs. At that point Lower Monumental would be spilling involuntarily.

TMT members stated their views of the disposition of SOR-2011-02:

- **Idaho** – Using the bulk spill pattern means passing an estimated 5-10% more wild yearling Chinook through the bypass than using uniform spill, which is not good in terms of meeting life-cycle goals. With two turbines out at Lower Granite, using the bulk spill pattern means having to cut back on spill at Lower Monumental due to TDG constraints and run more fish through the bypass. Spilling or transporting fish has been shown to produce higher smolt-to-adult return rates than bypassing them. The most recent year for which complete adult return data is available is 2006, when SARs for wild Chinook were 0.76% for transported fish, 0.97%; for spillway-passed fish, and 0.36% for bypassed fish. SARs for steelhead were 1.31% for transported fish, 1.54% for spillway-passed fish, and 0.60% for bypassed fish. This year, survival rates will be well above 53%, the cutoff point beyond which transport has been shown to provide little benefit. These findings together provide a compelling reason to switch to the uniform spill pattern at Lower Monumental.
- **NOAA** – Supported the SOR more strongly when flows at Lower Granite were in the 120-150 kcfs range and producing excessive TDG, while Lower Monumental ramped back on spill to regulate gas downriver. Initial support for the SOR was for the purpose of taking pressure off Lower Monumental. Now that flows are well below excess generation, implementing the SOR is not so urgent. More information is coming soon on this issue, including findings from the recent ERDC modeling trip and the upcoming delayed mortality workshop. This issue should be revisited soon – by no later than next year.
- **BPA** – Supports the COE decision.
- **BOR** – Supports the COE decision.
- **COE** – New information on this issue needs to be fully vetted by the region via FPOM. Encouraged the Salmon Managers to continue this conversation at FPOM and to work toward regional consensus on interpretation of the new data.

- **Montana** – No objection.
- **Oregon** – Elevate it to RIOG.

This is the first time since RIOG was formed that TMT has elevated an issue for policy review. Feil and Gumpert urged TMT members to inform their RIOG representatives thoroughly of the technical nuances behind this SOR. Gumpert offered to help TMT members frame the policy question being asked of RIOG and to take the lead in preparing a half-page issue summary using the template RIOG provided.

Bulk vs. uniform spill at Lower Monumental will be added to the agenda for the next RIOG meeting on the afternoon of April 27.

7. Next Meeting

The next regular TMT meeting will be a conference call on April 27.

<i>Name</i>	<i>Affiliation</i>
Tony Norris	BPA
Nick Lane	BPA
Russ Kiefer	Idaho
Paul Wagner	NOAA
John Roache	BOR
Steve Barton	COE
Doug Baus	COE
Dan Feil	COE
Laura Hamilton	COE
Dan Spear	BPA
Dave Benner	FPC
Margaret Filardo	FPC
Richelle Beck	DRA
Shane Scott	PPC
Rick Kruger	Oregon
Paul Wagner	NOAA
Jim Litchfield	Montana
Scott Bettin	BPA
Jason Sweet	BPA