

COLUMBIA RIVER REGIONAL FORUM TECHNICAL MANAGEMENT TEAM

August 16, 2010 Conference Call

FACILITATOR'S SUMMARY NOTES

Facilitator/Notes: Robin Gumpert

The following notes are a summary of issues discussed at today's meeting. These notes are intended to be a reminder for TMT members of the issues raised and actions to be taken.

Members Present on the Call: Steve Barton, COE; Russ Kiefer, ID; Rick Kruger, OR; Jim Litchfield, MT; Charles Morrill, WA; Tony Norris, BPA; John Roache, BOR; Paul Wagner, NOAA; Dave Wills, USFWS. Unavailable: Nez Perce Tribe; Confederated Tribes of the Umatilla (CRITFC).

Dworshak Operations

Steve Barton, COE, reviewed the Dworshak operation that began on Friday 8/13 per TMT coordination, and noted that temperatures at Lower Granite had stayed around 67.5°F over the weekend with a slight decline today. Kevan Schneidmiller and Steve Hall, Walla Walla District COE, referred to the model run graphs linked to the TMT page and reported that the two operating scenarios that were run through the model, 11 kcfs and full powerhouse, revealed very little differences in temperature outputs. The forecast showed a cooling trend later this week and in to next, indicating a 'plateau' effect with temperatures hovering around 66.7°F. The COE representatives noted that the model assumed Dworshak temperatures from last week (45°) but did not include any temperature changes that occurred today out of Dworshak (43.7°). Given all this background, the COE requested feedback from TMT members.

Russ Kiefer, Idaho, shared that he updated his spreadsheet model and the results were similar to the COE's. He recommended that the COE operate Dworshak at full powerhouse (~9.9-10 kcfs) beginning today and maintain the 45-46° temperature range out of the project. Steve Hall offered a slight revision, to hold the project in undershot mode if that slightly lower temperature range (~44°) was an acceptable condition for the hatchery.

A final question was asked about the Hells Canyon (Idaho Power) inputs in to the model, and the COE responded the assumptions have remained the same, within a 2 kcfs range.

TMT members responded to the proposal to operate Dworshak at full powerhouse in undershot mode beginning today:

- Idaho: Supports this operation.
- Oregon: Supports this operation.
- Washington: Supports this operation.

- Montana: Supports this operation.
- USFWS: Want to stay ahead of warm temperatures, and trusts the model runs, so supports the operation. Powerhouse undershot mode is preferred for hatchery needs, over RO releases.
- NOAA: Supports the operation.
- Reclamation: Supports the operation.
- BPA: Supports the operation.

Support for Recommended Action: Consensus of TMT members on the call for the recommended action.

Action/Next Steps: The COE will operate Dworshak at full powerhouse (~9.9-10 kcfs) beginning today 8/16 and will maintain to meet a target elevation of 1535'. The project will operate in undershot mode. TMT will check in on this operation during their 8/25 face to face meeting, unless conditions change and an unscheduled call is required.

Next TMT Meeting: August 25 Face to Face

Agenda items will include:

- Notes/Minutes Review
- Dworshak Operations
- Lower Columbia River low Flow Criteria
- End of MOP operations
- Water Quality Report
- Operations Review
- Other

Columbia River Regional Forum
TECHNICAL MANAGEMENT TEAM OFFICIAL MINUTES

August 16, 2010

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 Oregon, Montana, Idaho, BOR, USFWS, Washington, BPA, FPC, COE, NOAA and others attended. This summary is an official record of the proceedings, not a verbatim transcript. Anyone with questions or comments about this summary should give them to the TMT chair or bring them to the next meeting.

2. Dworshak Operations and Temperature Modeling

When TMT last met August 13, members present agreed it would be prudent to continue 11 kcfs discharge from Dworshak in order to maintain favorable temperatures at Lower Granite tailwater over the weekend. Temperatures at Lower Granite tailwater peaked at 67.5 degrees F and are now on a cooling trend, Barton reported.

Graphs of comparative model runs are linked to today's agenda. One scenario depicts 10 kcfs outflows through August 28, while the other drops to powerhouse minimum flows at midnight tomorrow, August 17. The graphs simulate the same operation through August 17, and Lower Granite tailwater temperatures remain around 66 degrees F in both cases.

The difference between the two scenarios amounts in a half to a quarter of a degree F in the temperature of Dworshak outflows by August 25, with the 10 kcfs scenario providing a slight cooling effect over full powerhouse flows. There's enough volume available to maintain full powerhouse until August 25, then drop to 8 kcfs outflows, Barton said. Since TMT last met, temperatures have cooled significantly as a result of rainfall in the area. The current forecast shows no appreciable warming of inflow temperatures at Orofino and Anatone gages. Both modeling scenarios show Lower Granite tailwater temperatures hitting a plateau of 66 degrees F, plus or minus half a degree. Russ Heaton (COE Walla Walla) added that the modeling runs didn't incorporate a temperature change that occurred at 6 am this morning when Dworshak outflows dropped to 43.7 degrees F from the 45-degree range.

Barton asked TMT, given this new information, should the 10 kcfs Dworshak discharges continue or should the operation go to full powerhouse?

Russ Kiefer (Idaho) said his modeling runs also reflect the cooling trend shown in the COE models. Idaho would support a full powerhouse operation, which would maintain the current outflow temperature range of 45-46 degrees F.

Kiefer advocated full powerhouse minimums as soon as possible in order to conserve limited water supplies, noting that colder water probably isn't needed in the river at this time.

Water temperatures will probably rise by about half a degree F when spill stops at the end of August, Steve Hall (COE Walla Walla) said. The hottest day predicted in the area will be August 17, with temperatures around 100 degrees F. Hall advocated leaving both Dworshak units in undershot mode as they are now and monitoring the outflow temperatures. Switching one unit into overshot mode would require an outage, but that could be done if temperatures adversely affect hatchery operations. Otherwise, it appears there is already enough cold water in the river to temper the predicted high of 100 degrees F tomorrow.

The Dworshak hatchery functions well when outflow temperatures are around 45 degrees F, Kiefer said. Dave Wills and Howard Schaller (USFWS) agreed that 45 degrees F would be acceptable in terms of hatchery operations over the next few days.

Charles Morrill (Washington) asked how releases from Hells Canyon Dam might affect temperature management. Daily average Hells Canyon releases rose from 8.8 kcfs to 10.5 kcfs and are expected to peak at 15 kcfs today, an increase Hall described as minimal. (Releases of 22-25 kcfs, however, would be worrisome, but that doesn't appear at all likely.) Barton added that Hells Canyon only releases 15 kcfs for 6 hours or so at a time. Hall predicted that Hells Canyon daily average discharges would increase by 2 kcfs, and it would take a much bigger increase than that to create temperature problems on the Snake River.

Concurring with the recommendation from Idaho, the COE proposed to switch Dworshak flows to full powerhouse at noon today (or as soon as practical), keep the units in undershot mode, and maintain that operation until either it becomes necessary to ramp down to a two-unit operation or elevation 1,535 feet is attained at the end of August. TMT members gave their views:

- **NOAA** – Supports the proposal.
- **Oregon** – Supports the proposal; recommends dropping to full powerhouse as soon as possible.
- **USFWS** – Supports the proposal; recommends continued use of overshot mode.
- **Montana** – Supports the proposed operation.
- **BOR** – Supports the proposed operation.
- **BPA** – Supports the proposed operation.

- **Idaho** – Supports the proposed operation.

The COE will operate Dworshak accordingly and keep TMT informed of temperature results via email. TMT members agreed to meet again on August 25, unless there's a need to readjust the operation before then.

3. Next Meeting

The next TMT meeting will be in person August 25, with a possible conference call before then if needed to deal with Dworshak operations.

Name	Affiliation
Rick Kruger	Oregon
Jim Litchfield	Montana
Russ Kiefer	Idaho
John Roache	BOR
Dave Wills	USFWS
Charles Morrill	Washington
Tony Norris	BPA
Dave Benner	FPC
Russ Heaton	COE Walla Walla
Margaret Filardo	FPC
Doug Baus	COE
Steve Barton	COE
Steve Hall	COE Walla Walla
Howard Schaller	USFWS Dworshak
Paul Wagner	NOAA
Kevin Steinmuller	Walla Walla