

**COLUMBIA RIVER REGIONAL FORUM
TECHNICAL MANAGEMENT TEAM**

April 13, 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

Tom Lorz, CTUIR/CRITFC, on behalf of the salmon managers, described a request to operate Lower Monumental using a uniform spill pattern while flows remain at or above 100 kcfs. The request, he said, was offered as a way to alleviate gas issues in the river given the high flows and the turbine outages at Lower Granite. He added that the salmon managers would explore with ERDC next week the impacts that this uniform spill would have relative to eddying effects if flows were in the range of 80-90 kcfs. Tom also noted that the salmon managers felt that, while the Fish Operations Plan includes language describing Lower Monumental using a bulk spill pattern, it also leaves room for in season adaptive management, particularly on issues for which there is regional consensus.

The COE reported that current flows were above 100 kcfs and short term forecasts had mixed predictions about how long the flows would remain that high (one forecast said 100 + kcfs flows could occur through April and in to May, other forecasts indicated the flows might be a bit lower). BPA asked whether it was certain that the proposed operation would result in higher survival of listed fish, given that it had been determined through previous studies that a bulk spill pattern was better for survival. Tom Lorz responded that the intent with this operation is to balance fish passage and address TDG concerns at these high flows. When asked about the expected start of transportation, the salmon managers clarified that their intent is for this operation to be guided by flows, not influenced by the start of transportation operations.

The action agencies caucused on this issue, and determined that a policy decision would need to be made on this issue. That said, the COE requested a polling of TMT members to determine their support for the requested operation:

- Idaho – Support
- Oregon – Support
- Washington – Support
- USFWS – Not on the call; signatory to the SOR
- NOAA – Support
- CTUIR – Support
- BOR, BPA, COE – Policy decision needed

- *Montana and Nez Perce, regular TMT member attendees, were not on the conference call.

Action/Next Steps: The action agencies requested more time to discuss this issue and scheduled a follow up TMT call on Friday, April 15 at 10:00 am at which time a decision will be made. [Note – the Friday call was cancelled since flows were projected to stay under 100 kcfs for some time.] The salmon managers expressed a desire for the decision to be made as quickly as possible.

Water Supply Forecasts

Karl Kanbergs, COE, reported on the April final forecasts, noting that The Dalles forecast had gone up slightly and the April – August forecast now stands at 101 maf or 100% of average. The Lower Granite April-July forecast had gone up to 25.1 MAF and Grand Coulee April-August forecast was 68.7 MAF. Karl also reported that snow conditions were average or above average across the basin and that temperatures were still cool so runoff had not begun in earnest – though the COE was readying for changing conditions. Finally, Karl reported that the Dworshak April-July forecast was ranging 3.1-3.3 MAF.

Spill Priority List

No recommended changes were shared during today's call but there was some discussion on whether John Day and/or The Dalles might be moved down the list when performance testing begins. The salmon managers and action agencies will continue to monitor conditions and operations (e.g. presence of sea lions, Spring Creek hatchery release, performance tests) and make recommended refinements to the list in the future as deemed appropriate. This item will be included on the 4/20 TMT agenda.

Spring Creek Hatchery Releases

Margaret Filardo, Fish Passage Center, reported that 6.4 million fish had been released as planned on 4/12 and started showing up at Bonneville within 8 hours. About 2,000 fish were currently in the sample tank and being 'worked up'. So far, she said, the fish looked good and mortality was below 1%. The data will be posted to the FPC website daily, and a report on the operation will be shared at the next TMT meeting. Project operators were operating the turbines to the lower part of 1% to keep the fish safe as they pass through at Bonneville.

Dworshak Operations Update

Karl Kanbergs, COE, reported that Dworshak was at elevation 1456.06' with 10.2 kcfs inflows and 24.9 kcfs outflows. Project outflows would be reduced to 20 kcfs later today to stay on track to reach a 1451.4 ' target (per Walla Walla deviation request) on 4/15; then will be reduced further as the refill curve is intersected to target approximately 1471' on 4/30. Steve Hall, Walla Walla District COE, added that a snow flight of the area would be done next week and the data will be reported to TMT. In response to a question, John Roache, Reclamation, said the Upper Snake reservoirs are being drafted for local flood control purposes.

Next Face to Face Meeting, April 20, 9 am

Agenda items include:

- Hanford Reach/Vernita Bar update
- Follow up on MOP operations/navigation issues at Lower Granite
- Spring Creek hatchery release operations debrief
- Chum emergence
- Dworshak operations update
- Follow up on TDG/spill management issues
- Follow up on SOR 2011-02
- Operations review

Columbia River Regional Forum
TECHNICAL MANAGEMENT TEAM OFFICIAL MINUTES

April 13, 2011

Notes: Pat Vivian

1. Introduction

Today's TMT meeting was chaired by Doug Baus, COE, and facilitated by Robin Gumpert, DS Consulting. Representatives of the COE, BPA, Idaho, Oregon, Washington, BOR, CRITFC, FPC, NOAA, USFWS and others attended. 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

At yesterday's FPAC meeting the Salmon Managers created SOR 2011-2 in an effort to deal with high flows by providing some spill relief, while also helping to alleviate gas in the river, Tom Lorz, CRITFC, reported. The SOR requests that the Lower Monumental operation switch from a bulk to a flat spill pattern. NMFS, USFWS, WDFW, IDFG, ODFW, CRITFC and the Shoshone-Bannock Tribe signed the SOR. While flows are high like this, having 2 turbines out at Lower Granite can gas up the river, and flat spill is one way to deal with that problem, Russ Kiefer, Idaho, said. Next week's ERDC trip will help confirm that the change to uniform spill will provide better conditions for juveniles without creating eddies, which have been a problem. There's still uncertainty whether uniform spill at 80-90 kcfs creates eddies. Based on observations in previous years, uniform spill of 100 kcfs doesn't create eddies.

Yesterday inflows at Lower Monumental were around 120 The COE received the SOR yesterday afternoon and will need to coordinate with external parties.

Tony Norris, BPA, said the Action Agencies should defer today and caucus. TMT members stated their views of the proposed operation:

- **Idaho** – Supports the SOR
- **Oregon** – Supports the SOR
- **Washington** – Supports it
- **NMFS** – Supports it
- **CRITFC** – Signed and supports it
- **BOR** – Caucus needed
- **BPA** – Caucus
- **COE** – Caucus

There was discussion of the expected start of transport this year at Lower Monumental under the FOP, and how that relates to the Salmon Managers'

request. Kruger asked, are we're deviating form the FOP because of a gas issue or for transport operations? Bulk spill is less advantageous once transport begins, Lorz replied. Scott Bettin, BPA, asked, doesn't bulk spill allow us to transport more fish? Steelhead numbers aren't much different, but Chinook passage increased slightly under bulk vs. uniform spill, Lorz replied. The SOR doesn't specify that the uniform spill operation should end when transport begins.

TMT took a brief break so the Action Agencies could caucus. When TMT reconvened, Doug Baus announced that the COE would need to do further coordination of this issue. Thus TMT will reconvene at 10 am Friday, April 15, for further discussion of the SOR.

3. Water Supply Forecast

Karl Kanbergs, COE, reported on the final April forecasts:

- The Dalles, April-August – 101 maf, 110% of average
- Lower Granite, April-July – 25.1 maf, 115% of average
- Grand Coulee, April-September – 68.7 maf, 107% of average

Both the RFC snow site and SNOTEL data, linked to today's agenda, show average or above average snow conditions. Some sites in the northern area are starting to reach peak snow pack, while others are still building. Long-term modeling shows that The Dalles flows are likely to reach 400 kcfs or higher this spring, depending on runoff shape. Climate indicators suggest most of April will be cooler and wetter than average. The Weather Service forecast for Dworshak is 3.1 maf, while the COE's official forecast is 3.3 maf. Under current weather conditions the snowpack at lower elevations is ripening. TMT will track this issue closely in the coming weeks.

4. Spill Priority List

There's not much new since TMT discussed the spill priority list 2 weeks ago, Kanbergs said. During that meeting the Salmon Managers expressed interest in revisiting this issue throughout spill season to see how the list should apply to changing conditions.

Norris asked whether FPOM has discussed moving the Snake to the bottom of the list during performance testing at John Day and The Dalles at the end of April. Another question is how John Day spill will look on the 115% and 120% lists. They're already close to the bottom of the list, with only Chief Joseph, Grand Coulee and Dworshak below them, Lorz replied. The COE and BPA will have additional discussions of this issue before TMT revisits it next week.

5. Spring Creek Hatchery Releases

On April 12, approximately 6.4 million fish were released and began showing up in the river within 8 hours, Margaret Filardo, FPC, reported. The sampled fish are looking good, with no indications of scaling and a mortality rate below 1%. Project turbines are being operated to keep the mortality rates low. Final data on the release will be posted to the FPC website next week.

6. Dworshak Update

Current elevation at Dworshak reservoir is 1,456.06 feet, with inflows yesterday of 10.2 kcfs and releases of 24.9 kcfs including 14.1 kcfs spill, Kanbergs reported. This morning the project ramped down to 20 kcfs which still included almost 10 kcfs spill. The April 15 flood control target is 1,451.4 feet based on a deviation request from the COE Walla Walla district. The end of April target elevation is approximately 1,471 feet based on flood control refill curve estimates. The COE expects to release approximately 5 kcfs of flow during the last 2 weeks of April depending on inflows, Steve Hall, COE Walla Walla, said.

Rich Dominigue, NOAA, asked whether there's a plan to draft Palisades and other irrigation reservoirs primarily in the Snake River basin to provide additional flood storage. That's correct, John Roache, BOR said, Reclamation reservoirs in the Snake River Basin including Palisades, Jackson, and the Boise and Payette systems all are releasing flows in order to reach their flood control targets. Flows past Milner will be increasing depending on residual runoff. Flows past Milner are currently around 10 kcfs. The COE also has responsibility for flood control in the Snake. Conditions have changed dramatically since March 1 when we were well ahead of the flood control curve, Hall noted.

Lorz asked whether 5 kcfs flow would continue from later today or tomorrow through the end of April. No, discharges are now 20 kcfs with about 10 kcfs spill through April 15, Hall replied. Dworshak will ramp down to a total discharge of 5 kcfs once it achieves its flood control elevation.

7. Next Meeting

There will be a conference call on April 15 to resolve the discussion of SOR 2011-2 (Note – this conference call was cancelled due to lower Snake River flows being under 100 kcfs). TMT will meet next in person on April 20.

Name	Affiliation
Tony Norris	BPA
Russ Kiefer	Idaho
Rick Kruger	Oregon
Scott Bettin	BPA
Charles Morrill	Washington
John Roache	BOR
Tom Lorz	CRITFC

Doug Baus	COE
Kim Johnson	COE
Rich Hilt	COE
Karl Kanbergs	COE
Laura Hamilton	COE
Scott English	COE
Steve Hall	COE Walla Walla
Kathy Rogers	COE
Shane Scott	PPC
Dave Benner	FPC
Margaret Filardo	FPC
Tim Heizenrader	Centaurus
Russ George	WMC
Tom Le	Puget Sound Energy
Doug Vine	Thompson Reutters
Rich Dominigue	NOAA
Derek Fryer	COE Walla
Richelle Beck	DRA
Margaret Filardo	FPC
Scott Bettin	BPA
Steve Hall	COE Walla Walla
Dave Wills	USFWS
Jason Sweet	BPA
Nick Lane	BPA