

COLUMBIA RIVER REGIONAL FORUM

TECHNICAL MANAGEMENT TEAM

December 6, 2006 Meeting

FACILITATOR'S SUMMARY NOTES ON FUTURE ACTIONS

Facilitator: Robin Harkless

Notes: Erin Halton

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.

Chum Salmon Operations

Rick Kruger, OR, and Joe Skalicky, USFWS, presented the power point documents linked to the 12/6 agenda on the TMT website. Kruger reported that the 12/1 Ives Island ground survey indicated that spawning had hit its peak; a count of 340 on 11/17 was the highest number of live fish observed on any given day this season. Kruger said that the overall counts for this year are lower than recent years, and that year-to-year comparisons are available on the FPC website. The USFWS elevation distribution modeling observed that a 13' tailwater would protect 83% of redds observed in the Ives island areas 2 & 3. Skalicky added that it was difficult to use the current model to look at dewatered redds and suggested that for future studies, an appropriate water surface elevation model be developed. He also noted the difficulty in translating the Tanner Creek elevation gauge to actual elevations of redds. Paul Wagner, NOAA, said that FPAC had discussed a recommended operation for supporting chum and achieving multiple objectives: a tail water target of 12.5', with an operating range of 12.3' – 12.8'. If needed, two brief night pulses around 1800 and 0600 hours. If only one pulse is needed, it should be centered around midnight. The Action Agencies agreed to the proposed operation.

Action/Next Steps: TMT members suggested that more explanation of data in the survey reports would be helpful. Rick Kruger agreed to add language that helps describe what the data represents. TMT will continue to monitor conditions and revisit chum operations on a 12/20 conference call.

Upcoming Snake River Outages

Don Faulkner, COE, said that Dworshak Unit 3 had passed its test on 12/5 and would be available for service 12/15.

Snake River Zero Night Flow

Paul Wagner, NOAA, said that daily fish counts at Lower Granite were discontinued as of 11/21 with video counts being the only ones taken. Wagner requested that zero nighttime flow be deferred to coincide with the scheduled fish ladder outage at Lower Granite on 12/15. BPA supported this proposal.

Action/Next Steps: A teletype will be issued to allow the operational flexibility to be available beginning at 2200 hrs on 12/15.

Libby Forecast

Cathy Hlebechuk, COE, said that the forecast would be posted to the TMT website and that she would also email it to TMT members on 12/7.

2007 Water Management Plan

Dave Wills, USFWS, and Paul Wagner, NOAA, said that they would likely be sending comments on the WMP.

Action: TMT members are reminded to review the draft WMP and submit edits, comments, etc. based on 2007 expectations to Bernard Klatter, COE, by no later than 12/15.

2006 Fall/Winter Operations at Vernita Bar

Russell Langshaw, Grant Co. PUD, reported on the survey conducted on 11/26: 13 redds were counted above the 65 kcfs flow band range, with a total count of 74 redds. A final, more thorough count on 12/3 counted 37 redds above the 65 kcfs flow band range. The 2006 Vernita Bar study plan was posted as a link on the 12/6 agenda on the TMT website.

Action/Next Steps: Russell Langshaw said that the data analysis would be available in early 2007, and suggested that he make another presentation to TMT at that time. The 500 TU threshold is anticipated to be reached on 12/24. At that point post hatching operations will commence.

Operations Review

Reservoirs: Dworshak was at 1539' and had filled .7' in the previous 7 days. Grand Coulee was at 1284' and drafting slowly to meet target elevations for chum; Hungry Horse was at 3540.7', filling slowly with outflows of 1kcfs; and Libby was at 2428.4', with outflows at 22kcfs (and an end of December target elevation of 2411'.) Albeni Falls was at 2452.67', with outflows of 17kcfs; Lower Granite had outflows of 20kcfs, McNary had outflows of 130 kcfs, and Bonneville outflows were at 150 kcfs.

Fish: (See chum status)

Power: Nothing to report at this time.

Water quality: Jim Adams, COE, said that Lower Granite was operating with one unit on speed/no load, and spill at 10kcfs through 12/8. TDG levels at Lower Granite were between 112-116%.

Next TMT – Likely a Conference Call, December 20th, 9:00-noon

Agenda Items include:

- Chum Operations Update
- Operations Review

January TMT Schedule:

- **1/3/07** tentative conference call
(**1/10/07** is a FFDRWG meeting date)
- **1/17/07** face-to-face TMT meeting
- **1/31/07** face-to-face TMT meeting
- Also, Dave Wills, USFWS, will forward information about the site visit to see the construction of the Lower Monumental RSW in Oregon City. (~ 1/9/07)

Technical Management Team Meeting Notes

December 6, 2006

1. *Greetings and Introductions.*

The December 6 TMT meeting was chaired by Cathy Hlebechuk and facilitated by Robin Harkless. The following is a summary (not a verbatim transcript) of the topics discussed and decisions made at this meeting. Anyone with questions or comments about these notes should contact Hlebechuk at 503-808-3942.

2. *Hanford Reach Update.*

Russell Langshaw said the last official redd survey was conducted on November 26; weather conditions were poor, so a full count was not conducted. Field personnel found 13 redds above 65 Kcfs, and a total number of 64. It was essentially a worthless count, because of the field conditions, Langshaw said. We did a supplemental redd count for redds above 65 Kcfs last Sunday, and found 63 redds above that elevation, he added. Langshaw noted that the 2007 study plan is now available; he said he had distributed it to the TMT membership via email, and it will be discussed during next week's year-end review. We're at about 400 temperature units since the initiation of spawning, he added, so we expect the fish to begin to hatch about December 24.

3. *Chum Operations.*

Rick Kruger updated the group on the most recent chum spawning survey results, including GPS redd location data and an analysis of tailwater elevations and GPS locations. We've been posting the chum survey data bi-weekly, he said; we had the highest number of live fish and redds counted to date in the season in last Friday's survey, including both old and new redds – 77 live fish and 112 redds. As of Friday, we had 177 GS-located chum redds, Kruger said. If we went

strictly by the number of redds to date, we would be in the second-lowest chum year to date. However, given the number of live fish we're seeing on the spawning grounds, we expect to see more redds deposited – field personnel saw 170 live chum in the channel on Friday.

David Wills noted that the surveys for the Hamilton and Hardy Creek areas are now up to date on the Fish Passage Center website. The available data includes counts to date for the last four years, live fish only – the area is too small to count redds. In response to a question, Kruger said chum and redds are also being counted in the Multnomah Creek and I-205 bridge areas this year, but that data has not yet been posted to the FPC website. The 2006 Hamilton and Hardy Creek counts are similar to the counts to date for the last few years, Wills noted.

Kruger showed a series of photographs taken during some of the recent spawning ground surveys, illustrating how the surveys are conducted. Joe Skalicki then provided an overview of the GPS redd survey analysis (attached via hot-link from today's agenda on the TMT homepage). The redds have been broken out into three groups for analysis, he said. There was some interest in calculating the explicit elevations of each of the 177 redds, accurate to within a couple of feet, he said. We did recently re-survey the area to make sure the bathymetric survey we have is still accurate, he added; some areas may have changed elevation slightly in the last few years. And you got pretty good resolution? Wills asked. Yes, Skalicki replied – we have an accurate representation of the river as a whole. The hydrodynamic model we used to predict habitat for both chum and chinook is River 2D.

The bottom line is that you can't necessarily relate the GPS redd information directly to tailwater elevation information, Skalicki said – you can't just look at the tailwater elevation. The tidal and backwater effects that play on Ives Island also affect the Tanner Creek gauge, Paul Wagner observed.

The group devoted a few minutes of discussion to this information. The takeaway message is that you can't necessarily assume that these redds are going to be covered at an 11.5-foot Bonneville tailwater elevation, Wills said – there are a number of other factors that impact the actual elevation of the water over the redds at Ives Island, including tidal and backwater effects that have nothing to do with the Bonneville tailwater depth. Still, it seems apparent to me that the 2.5-foot correction puts you in the ballpark, in terms of confidence in the amount of redd coverage you'll see at a given tailwater depth, Wagner said.

How does all of this relate to the Tanner Creek elevation? Hlebechuk asked. That's the \$64,000 question, Skalicki agreed. The average flow needed to maintain a 13.5-foot tailwater depth is 137 Kcfs, but you can see that the actual range of flows at which that elevation is delivered can vary between 89 and 160+ Kcfs, Skalicki said – we need a water surface elevation model, that takes tidal

and backwater effects into account, to get an accurate picture of what's really going on in the river. We're investigating a funding source for the model development, Wills added; it's going to cost \$150,000-\$200,000. Dennis Schwartz is taking the lead on that effort, he added.

After a few minutes of additional discussion, it was noted that, based on the most recent information available, a flow of 140 Kcfs will protect about 83 percent of the redds deposited to date. A flow of 130 Kcfs, yielding a tailwater elevation of 13 feet, will dewater an additional 62 redds, Skaliicki said – in my opinion, that is an unacceptable impact. And how do the model results compare to the land survey Dave, Rick, Scott and Vern did? Hlebechuk asked. I think they compare pretty well, Kruger replied.

In response to a question, Hlebechuk said the current operation is to maintain an 11.8-12.3-foot Bonneville tailwater elevation, with two pulses at night for a minimum of 20 minutes.

The salmon managers discussed this information extensively at yesterday's FPAC meeting, said Wagner. Where we ultimately landed was a target tailwater elevation of 12.5 feet, with a range of 12.3-12.8 feet, continuing the current re-watering regime at night, he said. We still have fish spawning at this point, and don't want to see any more spawning at higher elevations. We feel this will give us adequate, though not ideal, coverage, at an elevation that it should be possible to maintain through emergence and also allow Grand Coulee to refill to URC by April 10, Wagner said. In response to a question, Wagner said this is a short-term recommendation for now, but will likely become the long-term operation. After a few minutes of additional discussion, Roche said that, in Reclamation's opinion, the 12.3-12.8-foot operating range sounds like a good operation. Scott Bettin said BPA supports this operation as well; the change will be made in the next 24 hours.

I just want to be sure that everyone understands that, even at a 12.5-foot Bonneville tailwater elevation, a significant number of chum redds could be lost, Skaliicki said. We do understand that this decision puts those redds at a higher risk, Wagner replied – again, we discussed this at length at yesterday's FPAC meeting, and this was the compromise operation we were able to agree to. FPAC also considered sustaining incubation flows and Grand Coulee refill to URC.

4. Snake River Zero Nighttime Flow.

We talked about this several weeks ago, said Wagner; at the time, there were still a high number of steelhead passing the projects. Since then, they have discontinued the daily counts, so we have no hard data to go on, he said. The salmon managers recommend that the zero nighttime flow operation be deferred at the Snake River projects until December 15. Cathy Hlebechuk said the Corps

was fine with the operation since the water control manuals state zero flow could occur 1 Dec – 28 Feb when few fish are passing. She said some projects may have powerhouse heating problems in very cold weather and the operator and BPA Realtime schedule would coordinate in those cases. She said the Corps deferred the starting date to BPA. Bettin said BPA had no problem with that.

5. Dworshak Unit 3 Update.

Unit 3 passed the test this week, said Don Faulkner, so it should be back in service by the end of next week – so far, it doesn't look like there is a major problem. They would like to take it out of service for several weeks next fall to give it a thorough cleaning, however, Faulkner added.

6. Libby Forecast.

The Libby forecast will be available tomorrow, Hlebechuk reported.

7. 2007 Water Management Plan.

Bern Klatt said the Corps is still awaiting comments on the 2007 WMP; comments are due by next Friday, December 15. It was noted that the Fish and Wildlife Service is planning to provide comments. We haven't really discussed the fall/winter update yet, Hlebechuk added, but should probably do so at the next TMT meeting.

8. Year-End Review Agenda.

Harkless said the most recent draft of the TMT year-end review agenda has been emailed to the TMT membership.

9. Operations Review.

Reclamation said the current Hungry Horse elevation is 3540.7, with 1 Kcfs outflow because the mainstem flows are so high. Inflows remain high, so the project is filling. At Grand Coulee, the current elevation is 1284; the project is drafting slowly to maintain the chum operation. Libby is 31 feet from full and releasing 22 Kcfs. The December 31 target elevation at that project is still 2411. Albeni Falls is releasing 17 Kcfs, operating within the agreed-upon winter operating range. Dworshak is currently at elevation 1539 and filling slowly. The average flow at Lower Granite is about 20 Kcfs, currently; at Bonneville, 150 Kcfs. The 2007 Libby operation is being considered. The Corps has not made a decision yet whether to implement VARQ or standard flood control in 2007. The Corps is receiving input from the states, tribes, the Fish and Wildlife Service, NOAA and the action agencies for consideration in the decision. The discussion is at the executive level, and the Corps is expected to make a decision soon.

Wagner said the only fish-related information has to do with chum, which have already been discussed. There are no power system problems to report, said Bettin.

10. Next TMT Meeting Date.

The next face-to-face TMT meeting is the year-end review scheduled for next Wednesday, December 13. It was agreed to schedule a TMT conference call for December 20.

TMT Meeting Participants
December 6, 2006

Name	Affiliation
Cathy Hlebechuk	COE
Robin Harkless	Facilitation Team
Cindy Henriksen	COE
Rudd Turner	COE
Paul Wagner	NOAAF
Rick Kruger	ODFW
Robin MacKay	BPA
Dan Spear	BPA
Cindy LeFleur	WDFW
John Roche	Reclamation
David Wills	USFWS
Scott Bettin	BPA
Jim Adams	COE
Joe Skalicki	ODFW
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