

**TECHNICAL MANAGEMENT TEAM
MEETING NOTES
November 28, 2001
CORPS OF ENGINEERS NORTHWESTERN DIVISION OFFICES – CUSTOM HOUSE
PORTLAND, OREGON**

COLUMBIA RIVER REGIONAL FORUM

**TECHNICAL MANAGEMENT TEAM
November 28th, 2001**

FACILITATOR'S 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.

Weather:

Cathy Hlebechuk distributed a few handouts regarding precipitation forecasts and noted that she invited the National Weather Service to give monthly presentations. Kyle Martin also gave a presentation from the NWS' NW regional information site. The website is: www.wrh.noaa.gov/Portland He forecasted a good deal of rain to come in the next week with the possibility of snow.

SOR 2001-12:

Ron Boyce introduced the SOR, which calls for the maintenance of a tailwater elevation of 11.5 feet at Bonneville. Updated observations show a substantial increase in the number of chum salmon in the Ive's Island area and Hamilton and Hardy Creeks. This SOR was discussed at FPAC the previous day. Boyce noted a caveat that no request will be made to alter tailwater elevations if redds are found at higher elevations.

The group decided to look at all the data that members brought to the meeting before continuing discussion of the SOR.

Chum Data:

Howard Schaller, USFWS, showed a number of maps of the Hardy and Hamilton Creek area, which graphed chum spawning locations from 2000 and 2001. He said that chum are now spawning in areas that have never been seen before.

ACTION: The USFWS will work with ODFW and WDFW to graph the location and elevation of redds, as TMT members considered this information important to the decision-making process regarding chum operations. The data will be presented to TMT on a regular basis.

TMT agreed to implement the SOR, keeping in mind the caveat mentioned. The request will be implemented as soon as possible, with a range of 11.4' – 11.6'.

Chum Dewatering Criteria:

The COE urged a discussion on the development of dewatering criteria as a precaution in the event that elevation levels cannot be maintained. As discussed, TMT will ask IT to direct them on who should begin developing dewatering criteria at the next IT meeting, December 5th. Howard requested that they move the IT meeting due to a conflicting CBFWA meeting, or hold the chum discussion later in the afternoon. (Note: The chum discussion will be at the beginning of the 12/5 meeting so Howard may attend.)

Field Trip:

The postponed field trip to Ive's Island has been rescheduled for next Thursday, December 6th. Kyle Martin will keep the group informed if there is a forecast of bad weather for that day. The meeting times, place and itinerary will be the same as before. Anyone interested can meet in front of NMFS at 8 am for a ride, or at the Chevron in North Bonneville, WA, at 9 am to begin the tour.

Other:

Lower Granite Balloon Tag Testing: Larry Beck gave a summary. Preliminary results showed little difference between fish released through the RSW and those released through the spillway, although some injuries were observed through the RSW. Any next steps will go through FFDRWG or SRWG.

Water Management Plan: The Federal agencies have been working on a replacement for the usual TMT WMP, through the 1-Year Implementation Plan. A presentation and text will be available at the next TMT face-to-face meeting to allow for comment.

Emergency Protocols: The Washington Attorney General has reviewed and approved the new language. Oregon still needs to respond.

Bonneville Spillway: A request was made to close Spillway 1 eight hours earlier than normal to construct flow deflectors. This would also mean closing a side entrance until construction is complete. TMT raised no objections to this request.

Project Updates: Cathy Hlebechuk and Tony Norris updated the group on operations.

Next Face-to-Face Meeting, December 19th, 9 am:

Agenda:

- Weather and Project Updates
- Chum Status
- Water Management Plan
- Emergency Protocols
- Discussion about Emergency TMT Notification
- Dewatering Criteria
- Other

These notes were taken by Cathy Hlebechuk, Corps of Engineers, in advance of receipt of the official notes.

The Bonneville flow operation for chum was changed as follows:

make best efforts to stay within the 11.4' -11.6' tailwater range from 0600-1700. If higher discharges are needed, those will occur between 1700 - 0600 hours. Best efforts will be made to concentrate the higher discharges in the 1700-2400 time frame.

1. Greeting and Introductions

The November 28 Technical Management Team meeting, held at the Customs House in Portland, Oregon, was chaired by Cathy Hlebechuk of the Corps and facilitated by Donna Silverberg. The following is a distillation, not a verbatim transcript, of items discussed at the meeting and actions taken. Anyone with questions or comments about these minutes should call Cindy Henriksen at 503/808-3945.

2. Weather.

Hlebechuk suggested that a report from the National Weather Service's River Forecast Center become a regular part of the IT agenda, given the crucial importance of the latest short- and long-term forecast information to the TMT's decision-making process. It was so agreed.

Hlebechuk distributed several handouts, showing the most recent automatic snow pillow (ASP) and snow-water equivalent information from British Columbia, a weekly precipitation summary showing the percent of normal seasonal precipitation, by basin, across the Northwest, as of November 27 (ranging between 70% of normal in the Columbia Basin above Castlegar and 130% of normal in the Clearwater Basin), and the weekly "Precipitation Analysis and Outlook" summary from the NRCS, dated November 26.

Hlebechuk added that unregulated flows at The Dalles were 61 Kcfs in September, 62% of normal; they were 58 Kcfs in October, 66% of normal. As of Monday, for the month of November to date, unregulated flows at the Dalles averaged 80 Kcfs, 89% of normal, according to the 60-year historical record. Hlebechuk noted that the official drought designation still has not been lifted; overall, according to Oregon state climatologist George Taylor, the models are likely underpredicting precipitation this year, as opposed to the last couple of years when the models have overpredicted precipitation.

Kyle Martin then spent a few minutes going through his most recent assessment of the current and near-term weather situation, noting that there are a series of storm systems hitting the state which will deliver very heavy rain to the Northwest over the next 72 hours, as well as heavy snow in the Cascades and the Rockies. These storms are also expected to swell many of the tributaries in the basin, producing flooding along the coast, the Tualatin River and Johnson Creek. Hamilton and Hardy Creeks, the two main chum spawning tributaries, are expected to swell significantly in response to these storms. There will also be wind gusts up to 40 m.p.h. in

the Willamette Valley and up to 80 m.p.h. along the coast, Martin noted. In general, he said, the percent of normal totals shown in this week's weekly precipitation summary are going to change dramatically once this series of storms is finished.

3. *SOR 2001-12.*

On November 27, the action agencies received System Operational Request 2001-12. This SOR, supported by USFWS, NMFS, ODFW, IDFG and CRITFC, requests the following specific operations:

- Beginning immediately and continuing until further notice, maintain a tailwater elevation of 11.5 feet at Bonneville Dam. On average, it is anticipated that daily average flows will not exceed 125 Kcfs.

Boyce spent a few minutes going through the specifics of this SOR, the full text of which is available via the TMT's Internet homepage. Boyce noted that, in the last few days, hundreds of new chum and chinook spawners have appeared on the spawning grounds at Ives/Pierce Island, Hamilton Creek and Hardy Springs; these tributaries are notoriously prone to "flashing" as rain events occur, hence the request for the higher tailwater elevation in this SOR.

Boyce noted that, according to the salmon managers' analysis, it should be possible to provide the requested operation simply by minimizing load factoring at Bonneville, and evening out hourly flows. He added that the salmon managers will not be requesting higher Bonneville tailwater elevations to protect redds deposited at higher elevations once the currently-high tributary flows begin to recede.

In response to a question from Martin, Howard Schaller said approximately 300 redds have been mapped to date below Bonneville. My main concern about implementing this SOR is that, if we raise the tailwater elevation, is that going to cause problems if we're forced to dewater the redds deposited at higher elevations in February or March, Hlebechuk said. For that reason, she said, we need to plan ahead and develop dewatering criteria. Again, said Schaller, these are the minimum protection levels called for in the BiOp; under the model runs that have been done to date, this protection level of 125 Kcfs at Bonneville is sustainable under virtually all of the water years in the historic record. Actually, what the model runs showed is that, if we have an 80% of normal water year, only rarely would we be able to sustain a flow of 125 Kcfs through January, February and March, Hlebechuk said – that's a concern for the Corps. Martin observed that it would be more accurate to assume a 90%-of-normal water year, based on his meteorological projections.

With respect to dewatering criteria, Schaller suggested that it makes more sense to wait until all of the redds are mapped this year before attempting to develop criteria. I agree that we should think ahead, Schaller said, but until we know where the redds are, we can't really know what flows are necessary to protect them. You will be providing us with elevation-driven GPS maps of the spawning areas? Bettin asked. That is our intent, Schaller replied – we'll work with ODFW and WDFW to develop the most accurate map possible.

The point of this SOR is that we would like to see stable tailwater elevations at Bonneville, Schaller said; our goal is to provide the best spawning opportunities we can now, while conditions are such that it costs us little or nothing, in terms of upriver storage, to provide those conditions. Later, if we have to dewater redds, we'll have a better idea of how many we have in Hamilton Creek, how many in Hardy Springs, and will be able to make a more informed decision about how dewatering should occur, Schaller said.

After a few minutes of additional discussion, Bettin said the action agencies are willing to implement the operation requested in SOR 2001-12. At this point, given the flows and spawning conditions we're seeing, we agree, Bettin said. If we get a request for much higher tailwater elevations at Bonneville, however, that will put us into a whole new ball game, Bettin added. In response to a question from Boyce, Bettin said the new chum operation can be implemented immediately; he said he will instruct project personnel to target a Bonneville tailwater elevation of between 11.4 and 11.6 feet. In the meantime, said Silverberg, I assume that field personnel will continue to monitor the situation, and we will discuss it as needed.

4. Chum Dewatering Criteria.

Schaller said he agrees that it would be appropriate for the TMT to discuss chum dewatering criteria; he reiterated, however, that he believes such an effort would bear more fruit if the TMT waits until this year's chum spawning is over, and the distribution of the redds has been mapped as accurately as possible. Hlebechuk replied that the default would be for the TMT to simply let Bonneville flows and tailwater elevations fall where they may while targeting an 80% confidence of storage project refill at the end of January, February and March.

Perhaps it would make sense for us to ask the IT at its December 5 meeting which group, or combination of groups, should be tasked with developing chum dewatering criteria, Silverberg suggested. We also need to stress that all other operational alternatives should be exhausted before this becomes a fish vs. fish decision, Boyce observed.

Silverberg noted that, at a previous meeting, the TMT had already made the decision to elevate this issue to the IT; she read the following excerpt from the TMT meeting minutes:

“The TMT agreed to raise the chum redds dewatering issue at the December IT meeting, asking the IT to direct the development of criteria for dewatering redds. Specifically, TMT members want to know if and how big a role they should play in developing criteria that would be used if conditions were to deteriorate, and the dewatering of existing redds should become necessary. The IT should be involved in these discussions because such a determination is both technical and policy-related.”

Silverberg said she will develop a brief memo describing the chum dewatering issue and will send it to Jim Ruff for discussion at the December 5 IT meeting. It was so agreed.

5. Chum Maps/Surveys/Operations.

This topic was addressed during a previous agenda item, with Schaller agreeing to work with WDFW and ODFW field staff to produce an elevation-driven GPS map of the chum redd distribution.

6. Rescheduling of Field Trip.

The TMT field trip to the Ives/Pierce Island spawning areas was rescheduled for Thursday, December 6, due to extremely inclement weather.

7. Other.

A. Results from November 5-9 Lower Granite RSW Balloon Tag Test. The Corps' Larry Beck briefed the TMT on results from the November 5-9 balloon-tag survival test at the Lower Granite removable spillway weir (RSW). He noted that, during the test, tagged fish were released at several locations: the south edge of the RSW, the middle of the RSW, at spill bay 2 and a control release in the tailrace below bay 1. A total of 130 fish were released at each of these four locations, then recovered in the tailrace by three recovery boats.

In terms of results, said Beck, all of the fish released from spill bay 2, the RSW south edge and the tailrace control group were recovered. Two of the RSW middle release fish were not recovered. Visible injuries were recorded upon recovery for two of the RSW middle fish, two of the RSW south edge fish and three of the spill bay 2 fish. Loss of equilibrium was noted in one of the RSW middle fish, three of the RSW south edge fish and two of the spill bay 2 fish. No fish from the control group exhibited either injuries or loss of equilibrium. Visible injury rates were 1.6% for the combined RSW fish and 2.3% for the spill bay 2 fish.

One fish was recovered dead from both the RSW middle and RSW south edge groups, Beck reported. Three additional fish from the RSW south edge group died within 48 hours of recovery. Estimated 48-hour survival was 97% for the RSW south edge group, 99% for the RSW middle, 98% for the combined RSW groups and 100% for the fish released to spill bay 2. Thus, while the injury rate among the spill bay 2 fish was slightly higher than it was for the RSW fish, the lethality of the injuries was slightly higher among the RSW release groups.

Overall, Bettin noted that the injury and mortality rates were very similar between the RSW and spill bay releases. He added that the biological testing protocols to be used next year will be discussed through FFDRWG.

B. Status of Water Management Plan. Scott Boyd said the action agencies, NMFS and the Fish and Wildlife Service have been working on the federal water management plan for the past several months; the original plan was to release the WMP as an appendix to the annual implementation plan. However, said Boyd, the one-year implementation plan is now out for review, and the water management plan is not included at this point. He said the Corps would like to distribute the WMP for TMT

review and comment next week. In future years, added Boyd, under the schedule laid out in the BiOp, the action agencies would like to be able to finalize the water management plan by early September. It was agreed to schedule a presentation on the water management plan at the next face-to-face TMT meeting.

C. Finalization of Emergency Protocols. Boyce said the Oregon attorney general's office is still in discussions with the COE and NMFS legal staffs; Oregon still has some questions about what the language in the emergency protocols is specifically attempting to do. We'll provide an update as more information becomes available, Boyce said. Shane Scott added that the Washington attorney general's office has now reviewed and approved the language in the emergency protocols.

D. Bonneville Spillway. Beck said the Corps has received a request to shut down Bonneville spill bay 1 about eight hours earlier than the midnight, December 1 date specified in the Fish Passage Plan. The reason for the request is that it would facilitate flow deflector construction at spill bay 1, Beck explained. We would also need to close off the Cascade Island side fishway entrance, he said; this closure would remain in force until construction is complete. Beck added that the main fishway entrance would remain in operation. No TMT objections were raised to this proposed operation.

E. Project Update. Hlebechuk said that, due to recent rain events, the RFC is predicting a three- to four-foot rise in the Willamette River stage at Portland harbor; that will impact Bonneville tailwater elevations, she said. Willamette River flow is expected to reach 90 Kcfs in the next week, she added, up from a current volume of 30 Kcfs.

Libby discharge was increased from 6 Kcfs to 9.4 Kcfs this morning, Hlebechuk continued. IDFG has requested that we increase Libby discharge to 10 Kcfs from December 1 through December 23 to accommodate their burbet studies, Hlebechuk said; the Corps plans to honor that request. Hlebechuk added that Libby project elevation was 2422 feet at midnight last night; it drafted one foot last week. Albeni Falls is in its winter operating range of elevation 2051-2051.5 feet, and is releasing about 11 Kcfs. Dworshak remains on minimum outflow; the current elevation at that project is 1521, up 1.6 feet over the past week. Over the past seven days, Bonneville discharge has averaged 123 Kcfs, Hlebechuk said.

Tony Martin noted that the current elevation at Grand Coulee is 1284.5 feet, releasing about 60 Kcfs. Hungry Horse continues to draft to meet the Columbia Falls minimum flow, he added.

8. Next TMT Meeting.

The next face-to-face meeting of the Technical Management Team was set for Wednesday, December 19. Meeting notes prepared by Jeff Kuechle, BPA contractor.

TMT ATTENDANCE LIST

NOVEMBER 28, 2001

Name	Affiliation
Larry Beck	COE
Scott Bettin	BPA
Ron Boyce	ODFW
Scott Boyd	COE
Ruth Burris	PGE
Margaret Filardo	FPC
Russ George	Water Management Consultants Inc.
Richelle Harding	D. Rohr & Associates
Robin Harkless	Facilitation Team
Cathy Hlebechuk	COE
Ningjen Liu	IPC
Kyle Martin	CRITFC
Tony Norris	USBR
Howard Schaller	USFWS
Shane Scott	WDFW
Donna Silverberg	Facilitation Team
Paul Wagner	NMFS
Steve Wallace	PacifiCorp
David Wills	USFWS
Nancy Yun	COE