

**TECHNICAL MANAGEMENT TEAM  
MEETING NOTES  
March 31, 2004  
CORPS OF ENGINEERS NORTHWESTERN DIVISION OFFICES – CUSTOM  
HOUSE  
PORTLAND, OREGON**

FACILITATOR’S SUMMARY 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.

**WMP Spring/Summer Update:**

Cindy Henriksen reported that very few comments had been received to date on the WMP spring/summer update. The COE will update the plan in April with the final water forecast, an update on Q Adjust, and more details in the research section. A suggestion was made to include a table similar to last year’s on research. Oregon will review and comment on the WMP spring/summer update in the next couple weeks.

CRITFC is still requesting comments on their 2004 River Operations plan. The BOR plans to comment, the COE is still evaluating the plan and determining how to respond, and BPA does not plan to comment (John Welschlagler will double check on this and get back to Kyle Martin).

**McNary Operations: 1% Peak Efficiency:**

John Welschlagler reported that there has not been agreement amongst the federal executives about whether to allow operations to go outside 1% peak efficiency at McNary. BPA is interested in pursuing the issue and will give a presentation at the next TMT meeting. For now, McNary will stay within 1% peak efficiency as per the BiOp. A request was made for BPA to address, during the presentation: What, during an alternative operation (outside 1% peak efficiency), will be done to reduce delayed mortality; and how will delayed mortality be detected in-season so that the operation that, if causing mortalities, can be changed.

Cindy Henriksen said that the COE is ultimately responsible for making the operational decision, and at this time no decision has been made to operate McNary outside 1% efficiency, except for four test units. The COE will follow the Fish Passage Plan for now.

CRITFC does not support any operation outside of 1% efficiency at McNary. A handout on this was provided. Dave Wills, USFWS, noted that the salmon managers did not support operating outside 1% efficiency, except for the 4 units of test spill. TMT members were reminded that SOR 2004-1 presented at the last TMT meeting from the salmon managers specifically requests that operations stay within 1% peak efficiency at McNary.

### **Summer Spill Update:**

Cindy Henriksen reported that a new summer spill proposal from the action agencies was posted on the [www.salmonrecovery.gov](http://www.salmonrecovery.gov) website yesterday, 3/30. The comment period on the proposal is open through April 7<sup>th</sup>. The Regional Executives will meet on 4/16 to discuss the proposal and comments, and a final decision on summer spill will be made 1-2 weeks after the Regional Executives meeting. (A full briefing on the proposal was given at the IT meeting on 4/1.)

### **Start of Season Review:**

- **SOR 2004-2:**

SOR 2004-2, presented by the salmon managers, requests that spill operations begin on the Snake River on 4/3 at Lower Granite at 6 pm; then in two day intervals down the river: Little Goose on 4/5; Lower Monumental on 4/7; and Ice Harbor on 4/9. The salmon managers also requested that MOP operations begin at Lower Granite (MOP+1) on 4/3 at midnight; Little Goose (MOP+1) on 4/4; Lower Monumental (MOP) on 4/5; and Ice Harbor (MOP+1) on 4/6.

Kyle Martin noted that CRITFC prefers that spill begin in mid-March and that all projects be operated at a minimum of MOP, as expressed in the River Operations Plan.

- **Lower Granite Spill:** The salmon managers requested that spill be implemented at Lower Granite through the RSW (6-7 kcfs) and through the training spill (12 kcfs) for 24 hours until the RSW test starts; the test will begin dependent on the schedule for divers to install RSW parts, likely April 5, 8 and 9. NOAA recommended that during the time that the SOR cannot be implemented, the project be spilled to the gas cap for 12 hours and leave the RSW open. TMT agreed with this.

**ACTION:** There were no objections from TMT members to the salmon managers' proposed operation, so the COE agreed to operate as per the request. BPA would like to revisit spill and transport operations if the water supply forecast continues to decline. On Monday, 4/5, the salmon managers will get fish counts and contact Cindy at the COE to notify her whether, depending on the numbers, there should be an adjustment on the start of spill. If there are changes to the proposed operation from today, the COE will send an email to notify the rest of TMT.

### **Spill Priority List:**

A handout was provided of the COE's proposed spill priority list, for 4/3-4/14 and 4/15-4/30. The differences in the lists were due to studies being conducted in the system as well as mechanical issues. This list is flexible and on-going.

**ACTION:** The salmon managers will review the spill priority lists and comment as necessary as the season continues.

### **Current Operations:**

**Reservoir operations:** Hungry Horse is at elevation 3514.4' and filling ~.2' a day. There is some concern about refill in the area due to decreasing snow pack. Grand Coulee is at 1263.5' and filling slowly. The March 31 flood control at Grand Coulee is 1283'.

**ACTION:** Tony Norris will draft a memo that outlines maintenance work that needs to be completed at Grand Coulee, and send it to Ron Boyce.

Libby is at elevation 2398' and releasing 4 kcfs/day. Dworshak is refilling and at elevation 1528'. The 4/15 flood control elevation for Dworshak is 1534'. Brownlee is at 2052' with a March 31 flood control elevation of 2053.5'. Idaho Power requested a shift in flood control elevation at Brownlee, and it will likely not be necessary to implement the shift this year. The mid-month water supply forecast was slightly down from the early bird, slightly above the 'threshold' at The Dalles this year.

*Fish status:* Ron Boyce will update TMT on fish status at the next TMT meeting. Dave Wills reported that the USFWS is requesting, as written in the WMP, that Dworshak release 4-5 kcfs flow from 4pm-midnight on 3/31 and 4pm-midnight on 4/1 for the hatchery releases of spring chinook. The COE will implement the request.

A final report on Spring Creek hatchery releases and the effectiveness of the corner collector will be available in the next month – Dave Wills will present this to TMT when it is available. Initial results have been positive.

**Next Meeting, Thursday April 8, 9-10:15 am (NOTE NEW DATE AND TIME!):**

Agenda Items:

- Lower Columbia Spill
- Mid-Columbia Flows
- McNary Operations: 1% Peak Efficiency

***1. Greeting and Introductions***

The March 31, 2004 Technical Management Team meeting was chaired by Cindy Henriksen 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 Henriksen at 503/808-3945.

***2. WMP Spring/Summer Update.***

Henriksen said a new version of the spring/summer update to the 2004 Water Management Plan (dated March 24) is now available; relatively few comments have been received on this document to date. The update will be revised further once the April final water supply forecast is available. Henriksen went briefly through what has changed in the new draft of this document.

Paul Wagner requested that the Corps update and add the research summary included in the 2003 WMP spring/summer update. Kyle Martin noted that he had submitted CRITFC's annual operations plan on March 3; today is the deadline for comments on this document. He asked whether the action agencies plan to submit comments; Tony Norris said Reclamation will be providing comments, and Henriksen

indicated that the Corps plans to as well. Boyce said ODFW will be providing its comments on the 2004 spring/summer update some time in the next two weeks.

### ***3. RSW Operations at Lower Granite.***

This topic was covered under Agenda Item 6, below.

### ***4. McNary Operations – 1% Peak Efficiency.***

John Wellschlager said that, in a nutshell, the executives have been unable to reach consensus as to whether or not to allow the operation of the full McNary powerhouse outside 1% peak efficiency in 2004. This is an issue BPA is obviously interested in pursuing, he said; we still think it's possible to operate outside of 1% peak efficiency and not harm fish. He said he will invite the appropriate BPA personnel to provide a presentation on this topic at the next TMT meeting. He said Bonneville intends to continue to pursue this issue through the Regional Forum process; as it stands now, however, McNary will not be operated outside of 1% peak efficiency until there is consensus among the regional executives. Henriksen agreed that, at this time, the Corps, which is responsible for operations at McNary, has no plans to operate McNary outside 1%, except for the four units that are being tested in 2004.

Russ Kiefer noted that, in the mid-'90s, Significant delayed mortality was observed in both bypassed and transported fish at McNary. Those problems have since abated, but I would request that any operation outside 1% at McNary be coupled to an evaluation that will identify delayed mortality in-season, so that those conditions do not recur, Kiefer said. Wellschlager said he will try to ensure that whoever makes the presentation at the next TMT meeting addresses that issue. Martin provided a memo expressing CRITFC's strong objections to this proposed operation, noting that he wanted to ensure that CRITFC's views are included in the record. We'll make sure this topic is on the agenda next time, said Silverberg.

Stan Heller, the Corps' McNary 1% project manager, noted that if a decision is not made on this operation this week, the delay will have a serious detrimental effect on the Corps' ability to implement the McNary 1% project. My understanding is that the delay is coming from the Corps, said Silverberg. Since we don't even have a monitoring plan to discuss, it is difficult to make a decision today, said Henriksen. As long as you understand that even a one-week delay will have a detrimental effect on our contracting and other aspects of this project, Heller said. David Wills said not all salmon managers signed onto the SOR, submitted two weeks ago, opposing McNary operations outside of 1% with the exception of the four-unit test. The Fish and Wildlife Service is still actively evaluating the proposed monitoring plan, Wills said.

In response to a question from Kiefer, Henriksen reiterated that the plan at this point is to operate McNary within 1%, except for the four test units; therefore, the SOR submitted on this issue by FPAC has been accepted, at least for the time being. If a decision is made to operate differently, she said, we will discuss the SOR again.

### ***5. Summer Spill Update.***

The action agencies released a summer spill proposal yesterday, said Henriksen; it is available via the salmonrecovery.gov website. This is the federal proposal, she said; comments are being accepted through April 7, and the Regional Executives will be meeting on April 16 to discuss the operation and accept additional comments, with a decision to be made by the end of April. Silverberg reminded the group that there will be a full briefing on the proposal at tomorrow's IT meeting. Henriksen noted that the Regional Executives meeting will be held from 1-4 p.m. April 16, at the Embassy Suites Hotel at the Airport.

#### ***6. Start of Season Review.***

On March 30, the Corps received SOR 2004-2. This SOR, supported by USFWS, NOAA Fisheries, IDFG, WDFW, CRITFC and ODFW, requests the following specific operations:

- Implement spill at Lower Granite Dam as described in the 2000 Biological Opinion. Begin spill at Lower Granite Dam beginning at 6 p.m. of April 3. It is anticipated that spill will then be phased in at the downriver projects at two-day intervals, initiating spill at Little Goose Dam on April 5, at Lower Monumental on April 7 and at Ice Harbor Dam on April 9. This two-day implementation interval may be modified pending collection of juvenile passage information at these downriver passage sites. The salmon managers will review the smolt monitoring data on the morning of April 5 and advise the Corps at that time.
- Implement MOP operations beginning at Lower Granite pool at MOP +1 on April 3 to coincide with the initiation of spill. MOP +1 operations are then to be implemented sequentially at Little Goose reservoir on April 4, and at Ice Harbor reservoir on April 6, with MOP at Lower Monumental reservoir beginning April 5. It is CRITFC's policy desire to operate at MOP, as mentioned at the March 3 TMT meeting, in order to be consistent with 2000 BiOp operations.

Wills went briefly through the contents of this SOR, the full text of which is available via hotlink from the agenda for today's meeting for today's meeting.

Fish are moving? Silverberg asked. Yes, Wills replied – we're seeing indices on the order of 500 fish per day and climbing at Lower Granite, the majority of which are unclipped. In other words, normal numbers for this time of year, hence this request, Wills said. Martin noted that CRITFC's River Operations Plan called for beginning spill in mid-March. Wagner said the spill request at Lower Granite reads "in accordance with the BiOp," however, that document does not specify how. What we've agreed to is, 6 Kcfs-7 Kcfs through the RSW with 12 Kcfs training spill, 24 hours a day, until April 15, when the RSW test period begins, Wagner said. Bill Hevlin noted that the RSW test may begin a day or two later, depending on when the BGS is attached to the powerhouse.

Henriksen noted that the trash boom in the Lower Granite forebay is being reinforced; if it isn't in place, that could cause issues with RSW operations. As Bill noted, there are also divers in the water attempting to fasten the BGS to the powerhouse, and installing hydroacoustic equipment, which means that we can't operate the RSW or

several units while they're in the water, she said. This operation will begin at Unit 6 on April 5, moving down to Unit 2 once that is done and on the RSW itself on April 8-9. That means we will not be operating those units or the RSW for eight hours during the day while that installation is ongoing, said Tim Wick -- in other words, two to three Lower Granite units will not be operating during the day from April 5-9.

Ron Boyce observed that the RSW plus 12 Kcfs training spill operation outside the RSW test period should not be interpreted as the agreed-upon long-term operation; that's fine as an interim operation, but what the longterm operation of the RSW should be is still a work in progress. Hevlin noted that, to compensate for not being able to operate the RSW during the day on those days when installation is taking place and divers are in the water, NOAA Fisheries is advocating spill up to the gas cap at night, with the RSW on. Silverberg clarified that this recommendation covers only five days – April 5-9.

Is there any concern about using this volume of water at this point in the season, in a water year that is not looking that strong? Wellschlager asked. After all, we are right on the cusp, in terms of the seasonal average flow trigger for spill vs. transport in the Snake, and the water supply forecast is trending downward. BPA doesn't oppose the SOR, said Wellschlager, but I wanted to put a placeholder in the record that this could be an issue.

Have we ever seen this operation before – RSW operation, plus spill to the gas cap? Jim Adams asked. Yes, it occurred at times in the spring at 2002, Hevlin replied. We'll look that up on the record to see what the gas cap might be, Adams said.

So we will begin spill this Saturday, April 3, at 6 p.m. with RSW operation plus 12 Kcfs training spill at Lower Granite, then begin spill at 6 p.m. April 5 at Little Goose, at 6 p.m. April 7 at Lower Monumental and at 6 p.m. April 9 at Ice Harbor? Henriksen asked. Yes, unless the fish passage numbers dictate a change from that schedule, Wills replied. We will be looking at the fish passage numbers on Monday morning, April 5, and will alert the action agencies if a change is necessary, Wills added. Once we know if there is a change, or if the operation is going forward, we will alert the TMT via email, said Henriksen.

With respect to the MOP operation requested in the SOR, Henriksen said the TMT has previously agreed to this operation. She noted that a number of the Snake River projects are currently operating at fairly low elevations; with respect to the timing of that operation, would it be acceptable to agree to be at MOP + 1 at Lower Granite by midnight between April 3-4? Yes, was the reply.

The discussion then moved on to the 2004 spill priority list. Adams said the corps' proposal is the following, in terms of the order at which spill will occur as flows and TDG levels rise, and the TDG spill caps for each project:

Project	TDG 110%	TDG 115%	TDG 120%	TDG 125%	TDG 130%
Lower Granite	20 Kcfs	30 Kcfs	40 Kcfs	90 Kcfs	125 Kcfs

Little Goose	20 Kcfs	25 Kcfs	38 Kcfs	80 Kcfs	110 Kcfs
Lower Monumental	10 Kcfs	20 Kcfs	34 Kcfs	55 Kcfs	110 Kcfs
Ice Harbor	30 Kcfs	45 Kcfs	92 Kcfs	125 Kcfs	135 Kcfs
McNary	40 Kcfs	80 Kcfs	140 Kcfs	230 Kcfs	290 Kcfs
John Day	20 Kcfs	60 Kcfs	95 Kcfs	240 Kcfs	300 Kcfs
The Dalles	20 Kcfs	60 Kcfs	95 Kcfs	240 Kcfs	300 Kcfs
Bonneville	80 Kcfs	110 Kcfs	135 Kcfs	205 Kcfs	250 Kcfs
Wanapum	10 Kcfs	15 Kcfs	20 Kcfs	50 Kcfs	100 Kcfs
Wells	10 Kcfs	15 Kcfs	25 Kcfs	45 Kcfs	130 Kcfs
Rocky Reach	5 Kcfs	10 Kcfs	20 Kcfs	30 Kcfs	150 Kcfs
Rock Island	5 Kcfs	10 Kcfs	20 Kcfs	30 Kcfs	150 Kcfs
Priest Rapids	20 Kcfs	30 Kcfs	40 Kcfs	40 Kcfs	40 Kcfs
Chief Joseph	5 Kcfs	10 Kcfs	15 Kcfs	33 Kcfs	45 Kcfs

It was agreed that the salmon managers will review the Corps proposal and will comment as necessary.

### ***7. Current Operations.***

Norris said that, currently, Hungry Horse is at 3514.4 feet, filling 2/10 of a foot per day. The project is well below flood control, and the snow pack has dropped to about 80% of average – the snow pack is evaporating, which goes for the Snake River basin as well. We’re starting to get worried about refill at those projects, he said, as well as at Hungry Horse, where the June 30 refill probability is now probably down around 85%. Norris added that Grand Coulee is currently at 1263.5 feet and filling slowly. He said the April final water supply forecast will likely drop precipitously from current levels, which means Grand Coulee will have to draft significantly to meet the Priest Rapids flow target. The group also devoted a few minutes of discussion to the possible effects of the falling forecast on the planned gate maintenance operation at Grand Coulee this spring; In response to a request from Boyce, Norris agreed to provide a written description of Reclamation’s planned maintenance operations at Grand Coulee.

At Libby, the current elevation is 2398, said Henriksen; the project is releasing 4 Kcfs. The April 15 VARQ elevation at that project is 2443 feet, which is unlikely to be achieved. The current forecast at the project is 86% of average. Dworshak is refilling, she said; it is at 1528 feet and releasing minimum flow. The non-shifted April 15 flood control elevation at that project is 1534 feet, and we may make it, she said, adding that inflows to Dworshak are running 7 Kcfs-10 Kcfs.

Henriksen said Idaho Power had requested a Brownlee flood control shift, to allow that project to be above its March 31 flood control elevation, while Grand Coulee would be proportionally lower. Last night, Brownlee was at 2052 feet; the flood control elevation is 2053.5 feet. It is unlikely that there will physically be a shift, she said, but IPC has requested that flexibility. Given the fact that Grand Coulee will be well below its March 31 flood control elevation no matter what Brownlee does, it's kind of a moot point, Norris said – physically, given the fact that they are 1.5 feet below that flood control elevation, it is unlikely that they will be able to fill above 2053.5 feet by midnight tonight.

Lower Granite outflow was 43.6 Kcfs yesterday, falling from about 60 Kcfs last week, Henriksen said. McNary is releasing 130 Kcfs-150 Kcfs, closer to 130 Kcfs. Priest Rapids has been releasing 71 Kcfs-72 Kcfs, meeting the Vernita Bar minimum, Henriksen added. She noted that, based on the March final water supply forecast, Lower Granite's April 15-30 average flow would be 86 Kcfs; in May, 104 Kcfs; in June, 96 Kcfs. She added that the mid-month forecast is 86% of average at The Dalles, slightly above last year's 82% of average water supply. Again, however, the worrisome thing is that the forecast is trending downward, Wellschlager observed.

Wellschlager said there are no power system problems to report at this time.

In response to a question, Boyce said he will provide an update on 2004 chum emergence at the next TMT meeting.

## **8. Other.**

**A. Dworshak Fish Hatchery Releases.** Wills said it is now the time of year when Dworshak Fish Hatchery releases its spring chinook production. As usual, he said, we are requesting a push of extra flow from Dworshak Dam down the North Fork of the Clearwater, which is essentially a backwater at this time. Our request is similar to last year's, he said: 5 Kcfs-6 Kcfs total outflow from Dworshak from 4 p.m. to midnight tonight and tomorrow night. We can be at 5 Kcfs by 7 p.m., Henriksen said. After a brief discussion, no TMT concerns were raised about this operational request.

Boyd noted that the special dedication ceremony on April 9 for the Bonneville corner collector has been canceled. The corner collector will begin operation as scheduled once spill begins at Bonneville. Is there any fish passage information from the corner collector operation for the Spring Creek release? Jim Litchfield asked. The hydroacoustic information is still being collated, Wills replied, so that information will be forthcoming. Initial results were encouraging, however, Wills noted – the release went as planned, and during each of the four-day operations, it looked as though we passed 90% + of each release, which is what we had hoped to see.

## **9. Next TMT Meeting Date.**

The next Technical Management Team meeting was set for 9 a.m. Thursday, April 8. Meeting summary prepared by Jeff Kuechle.

## TMT Participant List

March 31, 2004

<b>Name</b>	<b>Affiliation</b>
Donna Silverberg	Facilitation Team
Robin Harkless	Facilitation Team
Cindy Henriksen	COE
Ron Boyce	ODFW
David Wills	FPC
Steve Haeseker	USFWS
Kyle Martin	CRITFC
Tom Haymaker	PNGC
Tim Heizenrater	PPM
Scott Boyd	COE
Russ George	WMCI
Mike Buchko	Powerex
Amy Reece	COE
Margaret Filardo	FPC
Cathy Hlebechuk	COE
Jim Adams	COE
Mark Smith	COE
Tim Wick	COE
David Benner	FPC
Tom Le	PSE
Jim Litchfield	Montana
John Wellschlager	BPA
Tony Norris	USBR
Bill Hevlin	NOAAF
Bruce McKay	Consultant
Dave Ryan	PPM
Lee Corum	PNUCC

Russ Kiefer	IDFG
Bill Cramden	CBB
Paul Wagner	NOAAF