

**TECHNICAL MANAGEMENT TEAM
MEETING NOTES
March 17, 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:

The COE hopes to finalize the spring summer update of the Water Management Plan by March 31. So far, the COE has received comments from the BOR; Oregon and Idaho plan to submit comments before March 31. TMT members will discuss and try to finalize the document at the 3/31 TMT meeting.

[NOTE]: The Department of Interior is offline, so communication with USFWS and BOR representatives needs to be done via phone or fax.

MOP+1 at Lower Snake Proects:

Continuing discussions from the last TMT meeting, the Towboat Association submitted a request that all Snake River projects be operated at MOP+1 until the dredging issue in the Lower Snake is resolved. John Pigott said the Towboaters would be willing to accept a MOP operation at Lower Monumental with all other projects operated at MOP+1, which was similar to the operation implemented in 2003. John reported that dredging is expected to begin in winter 2004-05, based on a BiOp expected out this week from NOAA particular to dredging in the Lower Snake. TMT members commented on the Towboaters’ operational request:

Oregon: The proposed operation would have some impact on fisheries, but no objection as long as there is resolution on dredging by next year.

Idaho: Appreciate the Towboaters’ willingness to alter the request to not include Lower Monumental, and support this new request.

NOAA: Given health and safety issues, no objection to the proposed operation.

USFWS: Impacts to fish are probably slight, and understand the tradeoffs, so no objection.

BOR: No objections.

BPA: No objections.

CRITFC: While the tribes have a preferred policy of MOP as a minimum operating target, they do understand the Towboaters’ concerns and wish them the best of luck.

COE: Hearing no strong objections to the proposal and agreement on concerns for health and safety, recommend that the requested operation (operate all Lower Snake

projects except Lower Monumental at MOP+1 during the 2004 spring spill season) be implemented. The specifics of the operation will depend on current conditions (i.e. fish and elevation needs). This operation is expected to begin on or after April 3, and will be included in the spring/summer update of the WMP.

The Towboat Association expressed appreciation for the TMT's willingness to consider the request and balance TMT needs with the Towboaters' needs. They stressed that they have come to the TMT in a collaborative spirit, fully supportive of the needs of the TMT.

April 10 Flood Control Elevations:

Cindy Henriksen, COE, provided a handout (also on the TMT web page) that showed the water supply forecast and flood control elevations. Water supply forecasts have decreased to 90-93% of normal for the projects. The resulting flood control elevation has increased to 1534-1538' at Dworshak and 1272-1283' at Grand Coulee. It was suggested that the projects be operated more conservatively in the future to avoid a shortage of water and missing flood control objectives. Oregon commented that it seems as though the region is in this position more often because of power needs/use.

Lower Granite RSW Operations During Non-test Periods:

NOAA has recommended that the Lower Granite project be operated the same during non-test as during test periods, which is RSW (7-8 kcfs) plus 12 kcfs training spill. A question was raised: Why not use BiOp operations during non-test periods? Two years worth of data suggests that better survival occurs with the revised operations. ODFW and WDFW requested a consideration for RSW plus spill to the gas cap. No agreement has been reached at this time. A decision is needed by April 3rd. Resolution of this issue is expected to occur at TMT or IT. The question raised was, is there a technical basis to spill at higher levels than the 12 kcfs (which is supported by studies)?

ACTION: Steve Rainey, NOAA, will send radio telemetry 2002 results to Cindy Henriksen for distribution to TMT. The salmon managers will discuss this issue further before TMT; TMT will make a decision at the 3/31 TMT meeting. If a decision is not reached, the issue will be added to the 4/1 IT agenda for resolution.

SOR 2004-1:

SOR 2004-1, presented by the salmon managers, requests that McNary turbines be operated within 1% peak efficiency during the spring/summer season. Steve Haeseker, USFWS, said that, upon review of science studies conducted last summer, a majority of evidence suggests that operating outside 1% peak efficiency is detrimental to fish. The SOR is meant to show salmon manager support for the BiOp and RPA 58. The salmon managers do not object to tests underway that already go outside of 1%.

The federal executives and FFDRWG have discussed a spring monitoring plan for McNary, on how to monitor and minimize impacts if restrictions to operate within 1% peak efficiency are removed. Agreement is needed on the monitoring plan. The salmon managers feel that the executives need to determine the basis for going outside 1% and present that to the salmon managers. Information for the monitoring plan discussions will be circulated to TMT before 3/31, at which time there will be a follow-up TMT

discussion. There will be a FFDRWG meeting to discuss the monitoring plan on 3/23 in Portland.

Start of Spring Transport:

NOAA has some new data that suggests that in-river fish do as well as transported fish, so NOAA proposed starting transport at a later date. The salmon managers requested more time to review the preliminary data, particularly new COE data which potentially supports NOAA's findings. The region decided to operate to BiOp this year and review the data for decisions next year, so collection will begin on 3/25 at Lower Granite and 4/1 at Little Goose and Lower Monumental. (Actual transport will begin 1-2 days later).

Summer Spill Proposed Decision Process Timeline:

A federal summer spill proposal for actions and offsets is expected to be released for comment at the end of March. Written comments will be received until April 16th, at which time a regional executives meeting is scheduled. The federal executives will make a decision sometime after that meeting. TMT will continue to receive updates on this issue.

Current Operations:

QAdjust: The COE presented the latest QAdjust run using the March final forecast. This information can be found on the TMT web page.

Operations: Grand Coulee is at elevation 1259.8' – when it reaches 1255' the BOR will hold that elevation for approximately two weeks for annual repair work. Hungry Horse is at 3511.8' and drafting to meet Columbia Falls. Approximately 300 kaf of water is expected from the Lower Snake. April 15 flood control at Libby is 2433' (VARQ). The COE expects to maintain Libby at minimum outflows at least through March. Dworshak is at elevation 1513.5' and filling slightly. The April flood control elevation for Dworshak is 1534'.

Fish status: Chum are being caught at numbers similar to previous years at this time; Ron Boyce provided a handout and will continue to update TMT on this. The Spring Creek corner collector was operated from last Thursday (3/11) through Monday (3/15). This operation appears to have succeeded in passing the bulk of the hatchery fish.

Other: B2 Corner Collector: There will be a dedication ceremony on April 9th, at which time the corner collector will begin operating. Jim Adams, COE, provided initial water quality monitoring data from the corner collector and added that Mike Schneider, COE, is currently gathering more information at the project.

Next Meeting, March 31, 9am-noon:

Agenda Items:

- WMP Spring/Summer Update
- RSW Operations at Lower Granite
- McNary Operations – 1% Peak Efficiency
- Summer Spill Update
- Start of Season Review

1. Greeting and Introductions

The March 17, 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.

The first draft of the spring/summer update was made available at the last TMT meeting, said Henriksen; the only comments received to date have been from the Bureau of Reclamation. Many of the unresolved issues within the spring/summer update are on today's agenda for discussion, Henriksen said; the goal is still to finalize this document at the March 31 TMT meeting. As always, she said, the update will be updated as we go through the season and additional monthly final water supply forecasts are received. Ron Boyce said he hopes to provide Oregon's comments on the spring/summer update within the next week. Sharon Kiefer said Idaho will also provide its comments prior to the March 31 TMT meeting.

3. MOP +1 at Lower Snake River Projects.

Henriksen reminded the group of the presentation it received from the Columbia River Towboat Association at its last meeting; the Association submitted an SOR requesting MOP +1 operation at the Lower Snake projects beginning in early April. The operation would continue through August 31. The reason for this request is that, due to conflicts with the BiOp, channel dredging did not take place in 2003, so river safety conditions, in the form of shoal areas that pose a hazard to barges, have not been improved since last year. We were hoping to reach resolution on this issue today, so that we can finalize this section in the spring/summer update, Henriksen said.

John Piggott of the CRTA said the Association would be happy if they could get MOP +1 at every pool with the exception of Lower Monumental pool; there is no obstruction that would prevent safe operation at MOP in Lower Monumental. So you're requesting the same operation as we implemented in 2003? asked Sharon Kiefer. Correct, Piggott replied. And in the longer term, is dredging on the horizon? Boyce asked. We're hoping to get it done in the winter of 2004/2005, Henriksen replied. Jack Sands said the Corps' Walla Walla District is proposing dredging during the upcoming winter in-water work period; it is impossible to say for sure whether or not that will happen. The proposed dredging would include Little Goose, Ice Harbor and Lower Granite pools, said Sands. Do you feel any optimism that the outstanding issues will be resolved so that dredging can go forward this winter? Boyce asked. We're just about ready to go back before the court, Sands replied; we are anticipating that the new Biological Opinion will allow for a one-year dredging program, and anticipate that the court will see the need for that activity to proceed.

Where does the TMT stand on this issue? Silverberg asked – is the Corps planning to move forward, depending on what we hear from the rest of the TMT? Yes, Henriksen replied. Boyce said this is an operation that is identified in the BiOp, so Oregon will not object to it, as long as there is a plan in place to resolve the dredging situation. Chris Ross said that, despite the slight increase in travel time caused by the higher pool elevations, given the potential for environmental disaster and human safety concerns, NOAA Fisheries is not going to object to the MOP +1 operation. Steve Haeseker echoed Oregon’s and NOAA Fisheries’ remarks, saying that the Fish and Wildlife Service does not object to the proposed operation. Kiefer said Idaho fully supports the proposed operation. Kyle Martin said the CRITFC tribes understand and appreciate the towboat association’s concerns, but remains concerned about the fisheries impacts from the Lower Snake dams. The tribes would prefer to see MOP as the minimum operation for fish; we object to this proposed operation from a policy perspective, and feel that the Biological Opinion’s MOP-only operation should be implemented, Martin said. That said, however, we will not elevate this proposed operation to the IT, he said. Bonneville and the Bureau of Reclamation had no objection to the proposed operation.

I’m not hearing any strong objection to operating Ice Harbor, Little Goose and Lower Granite pools at MOP +1 this year, said Henriksen; while there are concerns about increased travel time from the higher elevations, there are also concerns about human safety and the potential for environmental disaster. Therefore, the MOP +1 operation will begin the week of April 3-10. In response to a question, Henriksen said the exact timing and order of the operation will be determined based on where and when the fish begin to arrive. Piggott said the towboat association appreciates the TMT’s willingness to look at the broader perspective on this issue, as well as everyone’s willingness to be flexible. Hopefully, it will not be an issue in future years, he said.

4. April 10 Flood Control Elevations.

Henriksen said the most recent flood control elevation data can be found via the flood control summary link on the TMT homepage. She noted that the Corps does not calculate April 10 flood control elevations; rather, it calculates March 31 and April 15 flood control elevations. The water supply forecast has been diminishing, from well above-average to the low-90% range, currently. The snowpack has not been building as quickly as anticipated; as a consequence, inflows have remained on the low side and flood control elevations have been rising.

Henriksen said that, as a result of the falling forecast, Grand Coulee is currently about 11 feet below its April 15 flood control elevation of 1272 feet. That means that, to refill the project to 1272 feet by April 15, Columbia River flows will need to be reduced. The Vernita Bar minimum flow requirement has been driving the Grand Coulee operation, she said. Could we have done something different to prevent this situation? Boyce asked. Hindsight is 20-20, and the operational choices we made were based on the best information available at the time we made them, Henriksen replied. However, we have been consistently below flood control elevation at Grand Coulee this winter, releasing water primarily for power production, Boyce observed. We were also meeting the Vernita Bar minimum, John Wellschlager observed. Tom Haymaker noted that the

March forecast moved the April 15 flood control elevation at Grand Coulee by 17 feet. My point is that if we had been operating a little closer to flood control elevation through the winter, we wouldn't be in this position, said Boyce. Martin noted that his most recent forecast is for precipitation in the 110%+ of average range for April and May, which should help many projects refill more quickly.

Dworshak's current water supply forecast is 90% of average, down from 99% of average in the December final forecast, said Henriksen. That project's March 31 flood control elevation went up 20 feet in one day, she said. She noted that, based on those earlier forecasts, the decision was made to draft that project somewhat more aggressively than might otherwise have been done, anticipating that late winter precipitation would quickly refill Dworshak. My concern is that we seem to find ourselves in this situation with some frequency, said Boyce – in 2002, for example. If we don't get some precipitation, spring flows will be at rock bottom again. We fully understand that we're at the mercy of the weather, Henriksen replied, recall the "miracle March" of 2003 where heavy precipitation filled reservoirs quickly in March. The forecast can go either way. However, it sounds as though Ron's point about learning the lessons of the last few years is a valid one, said Silverberg.

Haeseker observed that, despite what BPA said at the last TMT meeting about running out of water, during the Spring Creek spill event, the average Bonneville tailwater elevation was 13.7 feet. The Fish and Wildlife Service calculated that an additional 184 kaf over what was needed to maintain the minimum Bonneville tailwater elevation was released during that period. Wellschlager replied that the Columbia River system is not an aquarium; hitting exact elevation targets is more of an art than a science. Still, my point is, why not operate more conservatively, given that uncertainty, said Boyce – we probably should be operating to a worst-case scenario, because again, if we don't see the precipitation, or if snowmelt is delayed, system flows are going to be very low once the migration starts this spring.

5. Lower Granite RSW Operations During Non-Test Periods.

Henriksen said the Corps will be testing the Lower Granite RSW with and without the behavioral guidance screen from April 15-May 30; during that period, the RSW will be operated with 6 Kcfs-7 Kcfs spill through the RSW plus 12 Kcfs training spill. The question is what to do during the non-test periods, she said; we wanted to discuss what those operations should be. We discussed that in some detail at the most recent Walla Walla District FFDRWG meeting, but did not reach resolution, said Boyce.

Tim Wick of the Corps' Walla Walla District said various options were discussed at FFDRWG; the decision was that FPOM would be discussing this issue further. Steve Rainey said Bill Hevlin had raised this issue at FPOM; while the issue wasn't fully reconciled, Bill feels it would be appropriate to operate the RSW the same way outside of the test period as it will be operated inside the test period – 6 Kcfs-7 Kcfs through the RSW, plus 12 Kcfs training spill. We see better survival through that operation than we do through the BiOp spill operation (to the gas cap) at Lower Granite, Rainey said.

Boyce said Oregon and Washington would like the action agencies to consider RSW operation plus higher training spill – perhaps spill up to the gas cap. We were concerned that the RSW test represents a reduction from BiOp spill levels, he said, and that the option we’re proposing is not being tested. So when does a decision need to be made on this issue? Silverberg asked. Before April 3, Henriksen replied.

Marvin Shutters said that, while Oregon and Washington’s proposal is reasonable, the Corps is unsure what would be gained through that operation. We find that 12 Kcfs is enough extra spill to meet NOAA Fisheries’ project passage expectations, so anything above that becomes an operational call, with significant power implications.

So what’s the plan for reaching resolution on this issue? Henriksen asked. For this year, it will likely be a policy call, rather than a technical decision, said Shutters. Do you think this will be resolved at FPOM? Silverberg asked. If TMT doesn’t make the decision, it could be up to FPOM, although FPOM is not going to make a policy call like that, observed Rainey. It sounds as though we need to have a detailed technical discussion at TMT prior to April 3, said Boyce. It was suggested that the TMT re-engage on this issue at its March 31 meeting; if TMT is unable to resolve it, then it can be elevated to the Implementation Team, which meets the next day. It was so agreed.

The group discussed what the Lower Granite RSW test results showed for 2002 and 2003; Boyce observed that, while the RSW plus training spill operation passed approximately 15% more fish than the BiOp spill operation, operating the RSW with higher training spill volumes passed even more fish. Wellschlager replied that the issue then becomes the increment of that improvement vs. the cost of the operation. Rainey said he will distribute 2002 Lower Granite radio telemetry results to the TMT prior to the March 31 meeting. Boyce said FPAC will discuss this issue at its next meeting. In response to a question from Wellschlager, Boyce said Oregon and Washington’s proposed operation would not increase total river flow – it would simply increase the percentage of river flow that passes Lower Granite via spill.

6. McNary Operations (1% Tests).

On March 16, the action agencies received SOR 2004-1. This operational request, supported by USFWS, IDFG, WDFW, CRITFC and ODFW, requests the following specific operations:

- Operate McNary turbine units within the 1% peak efficiency range during spring and summer 2004 as described in RPA Measure 58 in the 2000 Biological Opinion.

Haeseker noted that the salmon managers had conducted an extensive review of the available fish passage information and concluded that all of that information showed that operating McNary outside of 1% would be detrimental to fish passage at that project. So this SOR is requesting that the research planned for 2004 not be done? Ross asked. We’re supportive of the test for the three VBS units, Boyce replied; we’re talking about the other units – we don’t want them operating outside 1%. So the test would go forward? Silverberg asked. Correct, Haeseker replied, although I would characterize the

salmon managers' position on the test as grudging lack of objection, rather than support. We would like to know what the federal action agencies are proposing in terms of operation of the non-VBS units at McNary, said Boyce.

Henriksen said there has been no decision by the federal executives to operate all McNary units outside of 1% peak efficiency; Walla Walla District is putting together a monitoring plan for McNary for 2004; this plan will be discussed at a special FFDRWG meeting next Tuesday. It just seems to the salmon managers that if you're trying to develop a monitoring plan for operating McNary outside of 1%, you're needlessly studying something we know is going to be bad for fish, Haeseker observed. The direction we've received is to put together an appropriate monitoring plan that everyone can agree on, said Henriksen – my understanding is that everyone would have to agree to the plan, which would include off-ramps that would stop operation outside 1% if certain biological criteria are exceeded. Boyce said his concern is that the plan, as currently envisioned, would monitor only gatewell conditions, but would not monitor the detrimental impacts of reduced spill or increased smolt mortality through the turbines.

Silverberg noted that there is obviously more information that needs to be provided before the TMT can meaningfully engage on this issue. The monitoring plan is a separate discussion, observed Boyce; what we're discussing today is the SOR, and asking the TMT to make a decision on it. If the action agencies decide to operate McNary outside 1%, he said, then we would ask that you provide the rationale behind that decision in writing. And we would ask that you look at the proposed monitoring plan and provide your input into its development, Henriksen said. Rebecca Kalamasz described the process under which the monitoring plan will be developed, beginning with next week's FFDRWG meeting.

It seems to me that the question of whether or not it is wise to operate McNary outside 1% should be the first item to be discussed, said Boyce – what evidence is there that operating in any other way would be acceptable? It sounds as though, from the salmon managers' perspective, the action agencies need to build up their case that operation outside 1% would be acceptable, Silverberg observed. And we do plan to do that at the meeting on March 23, Kalamasz said.

Henriksen noted that the reason the Corps is doing this is because this is the task that was handed to them by the federal executives – to develop a monitoring plan that would allow McNary to be operated outside 1%. We understand your concerns, she said, but we're following up on that direction from the executives. Again, the currently-proposed monitoring plan is missing crucial elements, Boyce replied. It was agreed to discuss this issue further at the March 31 TMT meeting.

7. Start of Spring Transport.

Ross said NOAA Fisheries had suggested consideration of a plan to initiate transportation on a later date than usual in 2004; we discussed that plan with our co-managers, he said, but were unable to reach consensus, because many people wanted more time to study the data on which that recommendation was based. We're left, then, with the BiOp operation as a default, under which we would begin to collect and

transport fish at the Lower Snake projects beginning in late March. Basically, it seemed more prudent to delay this decision for a year to give us time to evaluate all of the study results, said Haeseker. In response to a question, Rudd Turner said collection for transport will begin March 25 at Lower Granite and April 1 at Little Goose and Lower Monumental. The first fish will be transported by truck; barge transport will begin in mid-April.

8. Summer Spill Discussions Update.

Silverberg noted that the action agencies had provided a document laying out the summer spill proposal decision process timeline. Henriksen said TMT and IT had discussed the summer spill decision process at previous meetings; comments were closed on February 20. Those comments are currently being evaluated and responded to; there have been ongoing discussions among the regional stakeholders in the interim. She noted that, according to this schedule, the federal proposal for a specific summer spill operation will be available on March 26. After that, the federal agencies will conduct informal briefings for state, tribal and other regional stakeholders. There will then be a short written comment period, followed by a meeting of the Regional Executives on April 16. The federal executives will then make a decision on the specific summer spill operation soon after the April 16 meeting.

9. Current Operations Update.

Mary Karen Scullion went through the most recent Q-Adjust run, based on the most recent water supply forecast. She noted that, according to this run, Priest Rapids and Bonneville are expected to meet their flow targets through the spring and summer; at Lower Granite and McNary, it looks as though the flow targets will be met during the spring period, but not the summer period. In terms of refill, Libby would refill by June 30 in only 14 of the 59 years modeled, but doesn't miss refill by much. The prospects for refill at Hungry Horse, Grand Coulee and Dworshak look much better, Scullion said; they would refill under virtually all of the 59 years modeled.

Tony Norris reported that Grand Coulee is at 1259.8 this morning, while Hungry Horse is at elevation 3511.8. Hungry Horse is still drafting to meet the Columbia Falls minimum flow. In response to a question, Norris said the Upper Snake flow augmentation volume for 2004 is expected to be about 300 kaf. Once Grand Coulee drafts to elevation 1255, we will hold at 1255 or less for about two weeks to do drum gate maintenance – likely in late April or early May. This operation is unlikely to adversely affect Grand Coulee's prospects for refill by June 30, Norris said, adding that this is the only time of year when Grand Coulee's elevation will be low enough to accomplish this operation.

Henriksen said Libby continues to release minimum outflow; the reservoir is at 2398.5 feet and drafting slightly. The April 15 flood control elevation at that project is 2443 feet; we will likely continue to release minimum flow from Libby well into April. Dworshak is currently at 1513.5 feet and filling slightly; releasing minimum flow; 1534 is the April 15 flood control elevation at that project. Dworshak inflow has increased slightly in recent days. Will Dworshak continue on minimum outflow? Ross asked.

Certainly through the month of March, Henriksen replied; we will need to increase Dworshak outflow somewhat in April for flood control. One of the generating units will be out at Dworshak in April, and there will be some transmission line issues at the project as well; we will be limited to 7.5 Kcfs at that project through April. The STP run shows that we could see flows of up to 12 Kcfs for a portion of April, which is about the maximum we can release from Dworshak without violating the gas cap, she said.

Why not release that water now? Tom Haymaker asked. We'll be releasing that water to augment flow in April to start the fish passage season, Henriksen replied. Wellschlager said there are no power issues to report, currently, other than the transmission system limitations at Dworshak in April. In response to a question from Ross, Wellschlager said no problem in meeting the chum or Hanford Reach incubation flows this spring is anticipated.

Anything to report on fish? Silverberg asked. Ross replied that there is nothing to report at present, because there is no monitoring going on in the system. Boyce provided an update on chum and fall chinook monitoring data in the lower river; we are catching chum, he said, and the emergence appears to be going along in much the same fashion as it has in previous years. We'll keep people posted if any stranding events occur, he said. Ross said smolt monitoring will begin on March 25 at Lower Granite.

Haeseker described last week's Spring Creek Hatchery release and corner collector operation; he noted that the four days of spill was deemed sufficient to pass a good portion of the fish. It appears that the corner collector passed the smolts as efficiently as spill? Wellschlager asked. It's too early to say, Haeseker replied.

10. Other.

A. Unresolved Issues Discussion. It was agreed to defer this item until the next TMT agenda.

B. Bonneville 2 Corner Collector and Other Upcoming Events. Henriksen said the Corps will be dedicating the B2 corner collector on April 9; during that ceremony, the corner collector will be started up for the season. Adams noted that, during the operation of the corner collector, TDG averaged between 105% and 108% at Warrendale and Camas/Washougal. Still, there is some evidence that the corner collector is gassing up the water, Adams said. It's hard to believe that the corner collector spill of 6 Kcfs could cause that much of an effect, said Boyce – it looks as though it's an instrument problem to me. Adams replied that the Corps believes the high plunge of spill through the corner collector into deep water may be responsible for the TDG increase. In response to a question, Adams said the Corps was monitoring TDG from a boat immediately below the corner collector during the spill event; he said he will provide that data at the next TMT meeting.

11. Next TMT Meeting Date.

The next meeting of the Technical Management Team was set for Wednesday, March 31. Meeting summary prepared by Jeff Kuechle.

TMT Participant List

March 17, 2004

Name	Representing
Donna Silverberg	Facilitation Team
Robin Harkless	Facilitation Team
Tony Norris	USBR
Tim Heizenrater	PPM
Russ George	WMCI
Cathy Hlebechuk	COE
Kevin Nordt	PGE
Scott Boyd	COE
Cindy Henriksen	COE
Laura Hamilton	COE
Mike O'Bryant	CBB
Steve Haeseker	USFWS
Ron Boyce	ODFW
Sharon Kiefer	IDFG
Jiong Ji	Avista
Jack Sands	COE
Ann Glassley	COE
Martin Hatscher	SCL
Richelle Beck	D. Rohr & Associates
Nic Lane	BPA
Tom Haymaker	PNGC
Chris Ross	NOAAF
John Wellschlager	BPA
David Benner	FPC
Bruce MacKay	Consultant
Ruth Burris	PGE

Eric Brown	COE
Dixon Shaver	Shaver Transport
John Piggott	CRTA
Glenn Vancelow	CRTA
Todd McClosky	
Kyle Martin	CRITFC
Jim Adams	COE
Mike Buchko	Powerex
Steve Rainey	NOAAF
Rudd Turner	COE