

**TECHNICAL MANAGEMENT TEAM  
MEETING NOTES  
July 7, 2004  
CORPS OF ENGINEERS NORTHWESTERN DIVISION OFFICES – CUSTOM HOUSE  
PORTLAND, OREGON**

FACILITATOR'S SUMMARY NOTES ON FUTURE ACTIONS

Facilitator: Robin Harkless

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.

**Dworshak Operations:**

*SOR 2004-17:* The salmon managers met yesterday to discuss summer operations while looking at existing information, models, etc. There was a consensus between the states, tribes, NOAA, and USFWS to recommend the following operation: Maintain current flows until July 12<sup>th</sup>. Then ramp up to 12 kcfs through August 8<sup>th</sup>; on August 9<sup>th</sup> ramp down to 10 kcfs through August 31<sup>st</sup>. Target an elevation of 1535' at the end of August and 230 kaf remaining water for September. Maintain no greater than 68° in the tailwater – the salmon managers want to maintain this temperature so support adjusting flows as necessary.

The COE provided information as attachments to the agenda. Flows increased slightly over the weekend which decreased the temperature at Dworshak. CRITFC also provided graphs to show what the requested operation might look like.

The salmon managers clarified their overall objective: to use the specified flows to meet desired temperatures and reach elevation 1535' by the end of August. (Flows may need to be adjusted to accommodate temperature needs.) It was also clarified that the requested 10 kcfs is full powerhouse, which is slightly below 10 kcfs at the project.

The COE congratulated everyone that signed on to the SOR for reaching a consensus on their recommendation. The COE will begin to ramp up flows to 12 kcfs on July 12<sup>th</sup> and target 45° -- no lower than 45°. They will continue to monitor the pool elevation. If conditions warrant a change to the recommended operations, the COE will send an email notification to TMT. TMT will check in on Dworshak operations at their next meeting.

**Zone 6 Treaty Fishery:**

Kyle Martin, CRITFC, reported that the tribes are expecting to gather information with fish counts later this week. If need be, Kyle will coordinate with Cindy Henriksen about a treaty fishery for this week, and Cindy will forward the information to TMT. TMT will check in on this issue at the next TMT meeting.

**Lower Granite Powerhouse Outage:**

Cindy Henriksen reminded the group that there will be a powerhouse outage at Lower Granite August 16<sup>th</sup>-19<sup>th</sup> for doble testing. One unit will be operated at speed/ no load; spill will occur over the spillway to meet powerhouse minimums during the daytime only. Cindy asked TMT to

consider: If the total river flow is greater than 40 kcfs in the Snake River, should the COE operate outside MOP? And, should the COE use the RSW for spill if necessary? TMT will consider these two questions and discuss them further at a future TMT meeting. The issue will remain on the agenda as a placeholder for discussion and decision prior to the outage.

### **Montana SOR 2004-MT-2:**

Jim Litchfield, Montana, described the objective of SOR-MT-2, regarding Hungry Horse and Libby summer operations: to improve the aquatic environment in Montana through stable flows. This operation was first recommended by the Northwest Power and Conservation Council (NPCC) in 2003.

The specifications for operations under the Montana recommendation are as follows:

- Provide stable flows at Libby to reach elevation 2439' by the end of September. (The priority is elevation). Based on models, flows would be a weekly average of 10 kcfs.
- Due to maintenance this year, draft Hungry Horse more aggressively in July and August, and reach elevation 3545' by the end of August, which equals about 4.4 kcfs weekly average flows for the month. Reach elevation 3540' by the end of September, which equals September weekly average flows of about 2.3 kcfs. Provide stable flows at Hungry Horse.
- Maintain minimum flows for bull trout.
- COE and BPA should continue to pursue and reach agreement with Canada for a flow swap.
- Limit Grand Coulee elevation to 1284' (plus/minus 1') by the end of September.

### **Other information/comments:**

- Montana noted that they are trying to balance river impacts with reservoir impacts given this year's conditions.
- Graphs were provided to show the Montana recommendation and the BiOp base case for summer water usage. The graphs show about a 3 kcfs difference between the two operations.
- Jim Litchfield reiterated that a swap must occur in July to provide a benefit to Canada, so the issue is timely.
- **ACTION:** CRITFC requested that Montana provide references relative to the information provided in the SOR.
- How would Montana monitor the changed operation to show effects on survival? Brian Marotz, Montana Fish, Wildlife and Parks, offered that a plan for doing this has been presented and given a favorable review from the ISRP, with some suggestions to improve the study. Montana believes this study could provide useful information.
- **ACTION:** Paul Wagner, NOAA, commented that some quotes in the SOR from the ISAB report are taken out of context. Jim Litchfield will check on this.
- **ACTION:** Paul Wagner will forward new data from the NOAA Science Center (which will be included in a final tech memo on effects of the FCRPS on survival) relative to the SOR.
- Oregon expressed concern for the loss of flow in July and August and shifting water into September. It will be a challenge to meet the needs of resident fish and to maintain flows, and Oregon suggested that TMT look for offsets and be creative in looking for alternative water sources.

After a break, TMT members offered a response to Montana's proposed operation:

USFWS: Cannot sign on to a 3-year study design at this point without knowing what type of information will come out; right now on track to meet current BiOp. If the COE is willing to implement SOR 2004-MT-2, the USFWS is prepared to object and raise the issue to IT.

NOAA: The salmon are at a critical point and in steady decline. Flow objectives are critical to salmon survival. This SOR goes against flow objectives specified in the BiOp. The benefits to downstream stocks vs. risks to upstream stocks are unknown without a study, which will be difficult to conduct. Until a policy decision is made on this issue, NOAA supports maintaining the current program for summer operations at Libby and Hungry Horse.

Oregon: Supports Montana's objectives but has concerns with the impacts on salmon – without a viable alternative to offset lower flows, Oregon cannot support this SOR. Oregon recommends that the region continue to explore alternative water sources.

Idaho: Shares concerns with the USFWS on a multi-year experiment – has not seen the modified study plan so it is difficult to support or not support. Also, funding has not yet been approved. Supports BiOp objectives and doing the evaluation but at this point, does not have the technical basis for supporting Montana's SOR.

BOR: Open to any suggestions for changes. At this point, supports the NOAA and USFWS recommendation – adhere to the BiOp target of 3540' by the end of August.

BPA: Neutral on this position and will support the TMT recommendation.

COE: Because there is no consensus by the TMT for operations, the COE does not have an operation to implement.

NOAA expressed appreciation for Montana's effort in the SOR to strike a balance for all needs. TMT, with no consensus, elevated the issue to IT. The USFWS agreed to raise the issue, and TMT members developed the following policy questions for the IT to consider:

“Shall the action agencies begin implementation of the Council's Mainstem Recommendations for Libby and Hungry Horse, as requested in Montana's SOR 2004 MT-2? Montana has proposed reducing lower Columbia River flows by approximately 4 Kcfs during the months of July and August, moving a portion of the Libby and Hungry Horse flow augmentation volumes designated by the BiOp for use during the summer season into September. Should this operation be implemented under the adaptive management provisions of the BiOp, and do the proposed research and resident fish benefits balance the potential risks (and benefits) to salmon in the lower river? Are there alternative sources of water that could offset the proposed reduction in lower river flow, given 2004 environmental and flow conditions?”

UPDATE: The IT met on Thursday, July 8<sup>th</sup> to discuss the policy questions elevated from TMT. The IT was unable to reach consensus on the issue, so a Regional Executives call was scheduled for Monday, July 12<sup>th</sup> at 10:00 am.

### **Status of Operations:**

*Reservoirs*: Libby is at elevation 2448' and filling. Outflows are at 12.5 kcfs. Hungry Horse is at elevation 3559.2' and slowly drafting. Grand Coulee is at elevation 1288.8', and is also drafting. Brownlee is about 1' from full. Dworshak outflows were at 7 kcfs last week. The project is now operating at full powerhouse out, 3' from full, and drafting about half a foot/day. Priest Rapids seasonal flows were 126 kcfs, and 202 kcfs at McNary.

*Fish status:* Subyearlings are still migrating. Numbers have decreased at McNary to about 170,000 per day. Adult numbers are progressing at Bonneville; high numbers are expected this year. Ron Boyce, Oregon, reported on observed fish at Bonneville: 71,000 summer chinook; 113,000 sockeye; 27,500 steelhead, and record numbers of chad. Oregon will provide adult numbers on the TMT web page.

**Next Meeting, Wednesday, July 21<sup>st</sup>, 9am-noon:**

Agenda Items:

- Dworshak Summer Operations
- Zone 6 Treaty Fishery Update
- Lower Granite Powerhouse Outage
- Libby/Hungry Horse Operations

***1. Greeting and Introductions***

The July 7 Technical Management Team meeting was chaired by Cindy Henriksen of the Corps and facilitated by Robin Harkless. 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. Dworshak Summer Operations.***

On July 6, the action agencies received SOR 2004-17. This SOR, supported by USFWS, IDFG, ODFW, WDFW, NOAA Fisheries, the Nez Perce Tribe, the Shoshone-Bannock Tribes and CRITFC, requests the following specific operations:

- Maintain outflows at Dworshak of 10 Kcfs (or near powerhouse flows) through July 11. On July 12, increase outflows to 12 Kcfs and maintain through August 8. On August 9, decrease flows to 10 Kcfs and maintain through August 31. Draft to elevation 1535 by August 31 and maintain approximately 200 kaf of Dworshak storage water for early September flow and temperature augmentation. All recommended outflows should target 45 degrees F and are contingent upon maintaining temperature below 68 degrees F in the Lower Granite tailwater.

David Wills provided an overview of the SOR, the full text of which is available via hotlink from today's agenda on the TMT homepage. He noted that all of the salmon managers were able to reach consensus on this operation.

Henriksen distributed a graph showing Dworshak outflows and Lower Granite tailwater temperatures through July 6; she noted that Dworshak outflow was increased to 7 Kcfs and temperature reduced to 45 degrees through the weekend, and water temperatures in the Lower Granite tailwater have decreased somewhat in response. In response to a question from Henriksen, Wills said the overall target of this SOR is to use the available water to keep Lower Granite tailwater temperatures below 68 degrees F while ending August at elevation 1535. If we get into very hot weather, and water temperatures begin to exceed that threshold, we will come back to TMT with further recommendations, said Wills.

Would it be OK to end August at, say, elevation 1537, if temperatures are somewhat lower than expected? asked Scott Bettin. If we miss 1535 by a foot or two either way, that would not be unreasonable, replied Dave Statler – again, we will likely adjust this operation through the season based on actual water supply and temperature conditions. Bettin said BPA would prefer to run full powerhouse capacity and avoid spill at Dworshak for as long as possible, with the understanding that elevation 1535 might be achieved a few days later than August 31. We want to make sure we have enough flow from Dworshak to keep Lower Granite tailwater temperatures below 68 degrees, Will replied - again, we'll look at the model runs and monitor the temperature situation, and will adjust the operation through August.

The Corps applauds the salmon managers' efforts to achieve consensus on this operation, said Henriksen; Dworshak is already releasing full powerhouse capacity. On July 12, we will increase Dworshak outflow to 12 Kcfs, and will continue to monitor both the Dworshak pool elevation and temperatures in the Lower Granite tailwater. If we see any significant departures from the expected inflows at Dworshak, we'll notify the TMT, said Henriksen.

If air temperatures continue to be moderate, do you still want to increase Dworshak outflow to 12 Kcfs on July 12? Jim Litchfield asked. My forecast shows moderate temperatures over the short term, but a warming trend as we head deeper into July, said Kyle Martin. The objective is to stay ahead of the curve, added Paul Wagner. Bettin thanked the salmon managers for bringing this SOR together in a timely fashion. It was agreed to revisit this topic at the next TMT meeting.

### ***3. Zone 6 Treaty Fishery.***

Martin said the tribes are still gathering their harvest data, and should know by later today whether or not another treaty fishery will take place on 2004. Once they review that operation, they will make a decision as to whether or not another fishery will be possible, said Martin. He said he will let the Corps know what CRITFC decides; Henriksen said she will then forward that information to TMT.

#### ***4. Lower Granite Powerhouse Outage.***

Henriksen said that, from August 16-19, the Lower Granite powerhouse will be out of service for Doble testing from 7 a.m. to 5 p.m. One unit will run at speed-no-load and an additional 6 Kcfs will be spilled to achieve the minimum flow of 11.5 Kcfs through the Lower Snake. If total river flow is greater than 40 Kcfs, we may need to fill Lower Granite pool above MOP +1, and generate that water out by night, she said. Generally flow is low enough during August that this is not a problem, but it's just a heads-up. Bettin asked whether the salmon managers want to use the RSW during this test. Wagner said he doesn't see a lot of downside to RSW operation; he said FPAC and TMT will discuss that option and will make a recommendation to the action agencies.

In response to a request from Boyce, Rudd Turner said he will forward some written information to the TMT membership showing the coordination that had taken place previously in the year on this operation. And again, said Henriksen, the two questions for TMT to consider are, should the Corps pond above MOP +1 if total river flow is greater than 40 Kcfs, and should the 6 Kcfs of spill go through the RSW or the spillway. It was agreed to revisit this topic at the next TMT meeting.

#### ***5. Montana SOR.***

On July 7, the action agencies submitted SOR 2004 MT-2. This SOR, supported by Montana Fish, Wildlife and Parks, requests the following specific operations:

- Implement the Northwest power Planning Council's Mainstem Recommendations for operation of Libby and Hungry Horse dams and evaluate the resulting physical and biological changes in water quality and the effects on the aquatic environment in Montana and in the Lower Columbia River from McNary to below Bonneville Dam. Because this water year falls into the lowest 20<sup>th</sup> percentile, the Council recommends drafting both Libby and Hungry Horse to an elevation that is 20 feet from full by the end of September using a flat weekly flow adjusted as actual inflows change. The following specific operations are recommended:
  - Establish a stable flow objective for Libby Dam that is expected to draft the reservoir to elevation 2439 by the end of September.
  - Based on the latest COE models this flow objective is approximately 10 Kcfs.
  - Adjust Libby's weekly flow objectives as necessary so that Libby drafts to elevation 2439 by the end of September. It is preferred that weekly average outflows are held as flat as possible, or, if necessary, are reduced gradually from July through September.
  - Establish a stable weekly average outflow objective at Hungry Horse dam that

will result in drafting Hungry Horse to elevation 3545 by August 31. This elevation is the maximum allowable elevation necessary to permit scheduled maintenance to proceed in September. The expected outflow is approximately 4.4 Kcfs which will be adjusted on a weekly basis to achieve 3545 at the end of August. This operation is contrary to the long-term strategy recommended by the Council for Hungry Horse however, it is recommended this year to allow the planned maintenance.

- Draft the remaining 5 feet of storage from Hungry Horse in September. This is expected to provide approximately 2.3 Kcfs of stable weekly outflows with the reservoir ending September at elevation 3540.
- As with Libby, it is preferred that weekly average outflows are held flat or are gradually reduced from July through September and all changes in outflows will follow the ramp rates in the bull trout BiOp.
- Maintain flows out of Libby and Hungry Horse that are at least the minimum flows for bull trout. Minimum bull trout flows are a higher priority than the recommended ending reservoirs at the end of September. The minimum bull trout flow during September is expected to be 6 Kcfs.
- The Corps and BPA will pursue concluding an agreement with Canada that will assure that the increased flow from Libby in September will result in increased inflows to Lake Roosevelt during September.
- Refill of Grand Coulee in September will be limited to elevation 1284, plus or minus one foot. This is consistent with past refill volumes and will assure that the increased flows in September out of Libby and Horse are passed downstream to the Lower Columbia.
- Continue to implement bull trout and other aquatic research to measure changes in fish survival and productivity.

Wagner, Litchfield and Brian Marotz discussed the differences between the requested operation and a true “normative” river operation; Wagner observed that what this SOR requests is actually a highly regulated operation, rather than a normative river operation. Under a normative operation, flows would peak in July and gradually decline, Wagner observed. That’s true, Litchfield replied; what we’re attempting to provide is a stable flow through the end of August, followed by gradually declining flows through September. Henriksen observed that Wagner may be confusing “normative” with “natural;” under a natural hydrograph, we would simply be passing inflow during July and August, she said. Good point, Wagner replied.

The group devoted a few minutes of discussion to the impacts of the Montana proposal on Grand Coulee and Lower Columbia operations in August and September. Litchfield noted that the goal of this proposed operation is to ensure that Grand Coulee is no better or worse off than it would have been under a normal BiOp operation, in terms of outflow and elevation. We’re also trying to accommodate resident fish and cultural issues in Lake Roosevelt, he said. He noted that the change in outflow volume under Montana’s proposed operation – 3 Kcfs – is negligible. Wagner replied that it is probably not appropriate to trivialize this difference, given the fact that the action agencies argued that the additional 2.5 Kcfs to be provided from Brownlee was considered a significant biological offset for the reduced summer spill program. Bettin replied that the Brownlee

flow applies to the Lower Snake, where total river flow is much smaller than in the Lower Columbia.

In response to a question from Martin, Brian Merotz said Montana Fish, Wildlife and Parks is conducting the radio-tracking experiments in the Flathead and Kootenai. Litchfield said the bottom line is that Montana would really like to find a way to implement this SOR on an experimental basis in 2004. Wagner asked about Montana's ability to monitor the biological impacts of the Montana proposal in 2004; Merotz described MFWP's monitoring plans, which are designed to tease out what is happening as a result of dam operations at a population level, including survival mechanisms once the fish leave their natal tributaries. He noted that Montana's monitoring proposal has been favorably reviewed by the ISRP. The species in question are bull, westslope cutthroat and rainbow/cutthroat hybrid trout. About 60% of these fish leave their natal tributaries at Age 3, primarily during the month of June. So that emigration takes place outside the time-frame of Montana's requested operation? Wagner asked. The fish are then subjected to river operations for several years once they leave their natal streams, Marotz replied. The Montana proposal is also expected to improve conditions for native species within Libby and Hungry Horse reservoirs, in comparison to normal BiOp operations, he added.

The group discussed the ISAB's comments on the Montana proposal; Wagner noted that the reference to these comments in the justification for the Montana SOR was taken somewhat out of context, because they applied mainly to spring operations. Litchfield said he will check on that comment.

After a few minutes of further discussion, Boyce said his concern is the loss in lower river flow during July and August when the majority of the ESA-listed stocks are migrating, and shifting that volume into September, when fewer listed fish are migrating. From Oregon's perspective, he said, if this SOR is to be implemented, we will need to look creatively at alternative sources of water to offset that reduction in lower river flow. Boyce said that he had thought TMT had identified an operation that would have provided somewhat higher flows in July and August, while still filling in flows in September via re-shaping of flood control releases. My understanding was that Montana had signed on to that SOR, he said – has that changed? Our objective was to implement the Council's recommendations, Litchfield replied; drafting Libby to 2439 by the end of August is not consistent with those recommendations. There was also some question about the feasibility of the flood control shift on the part of the action agencies, Litchfield added. That's correct, said Henriksen – the concern was that any water released from Libby during September would be trapped in Kootenay Lake.

Again, the goal of this SOR was to balance reservoir impacts with river impacts, said Litchfield. Wagner observed that the Council's recommendations included a very intensive biological evaluation of the effects of this change in operation to the reservoir, to the river below Libby, and to downstream salmon stocks – that's a very tall order. Brian has laid out what we propose, in terms of a monitoring program that will give us useful information within Montana, one that should show us whether this operation provides positive or negative effects, Litchfield replied; there are other monitoring programs ongoing in the lower river that should give us information about the impacts on

salmon species there. Again, said Boyce, I think it would make more sense to agree that the biological impacts downstream would be significant, and attempt to replace that water from other sources.

Following a caucus break, Wills said the salmon managers had discussed the Montana proposal; however, it was not possible to reach consensus. He said the Fish and Wildlife Service cannot sign off on a three-year study design without further information. Even when we talked about a one-season operation, he said, we still couldn't come to a consensus. We're on track to meet the current BiOp objectives, he said; the Fish and Wildlife Service is unwilling to agree to this SOR, and if the action agencies are planning to implement it, we would have to object and elevate the issue to IT. Wagner quoted from a recent National Academy of Sciences report which concluded that listed salmon are most vulnerable during the late summer period. He said NOAA Fisheries is unwilling to support this SOR because it goes against the operations specified in the BiOp, and would prefer to stick with the current program.

Boyce said ODFW supports what Montana is trying to do for their fisheries and aquatic resources, but echoes the concern about the impacts to lower river salmon from this proposal. Without a viable alternative to offset that reduction in flow, Oregon can't support this operation, but would like to continue to explore alternatives to replace that reduction in flow. Pete Hassemer said Idaho would prefer not to state an opinion on the Montana SOR at this point; until we have a chance to evaluate the modified study plan, he said, on a technical basis, it is difficult to say whether or not we would support the Montana plan. We support the biological objectives Montana is trying to achieve, and the studies needed to evaluate this change in operation. However, at this point, we don't have a technical basis on which to agree or disagree with the Montana proposal, said Hassemer.

John Roache said Reclamation is always open to proposed changes in operation that would improve conditions for anadromous and resident fish; however, at this point, Reclamation concurs with the NOAA Fisheries and USFWS position, and supports adhering to elevation 3540 at the end of August. Bettin said BPA is neutral on this proposal, and is willing to implement either the Montana proposal or the BiOp operation. Henriksen said that, from the Corps perspective, she has heard that there is a general ideological support among the salmon managers for the biological and research objectives in the Montana SOR, although there are some technical and funding concerns about the proposal. Wills clarified by saying that USFWS opposes the Montana SOR, and will elevate this issue to IT if necessary. I understand that the salmon managers do not support the Montana SOR, she said. Wagner observed that the Montana SOR does deserve policy-level debate; he said NOAA Fisheries appreciates the thorough work Montana put into this proposal. It would be helpful if a Libby/Arrow swap could be negotiated in 2004, he added; that would allow everyone to get what they want. Henriksen said such a swap is unlikely this year.

Henriksen said that, at this point, the Corps does not have a consensus operation for the Montana projects, but is willing to implement the Montana SOR if there are no objections. We have an operation in place, which everyone supported at the time the last Libby SOR was put on the table, said Wills. If the Corps wants to implement the current

Montana SOR instead, said Wills, then the Fish and Wildlife Service will object. After a few minutes of additional discussion, it was agreed that, because the Corps is prepared to implement the Montana SOR, the Fish and Wildlife Service will elevate it to the IT.

After a brief discussion, the question for IT was framed as follows:

Shall the action agencies begin implementation of the Council's Mainstem Recommendations for Libby and Hungry Horse, as requested in Montana's SOR 2004 MT-2? Montana has proposed reducing lower Columbia River flows by approximately 4 Kcfs during the months of July and August, moving a portion of the Libby and Hungry Horse flow augmentation volumes designated by the BiOp for use during the summer season into September. Should this operation be implemented under the adaptive management provisions of the BiOp, and do the proposed research and resident fish benefits balance the potential risks (and benefits) to salmon in the lower river? Are there alternative sources of water that could offset the proposed reduction in lower river flow, given 2004 environmental and flow conditions?

It was agreed that Henriksen will attempt to coordinate an IT conference call to discuss this issue at 11 a.m. tomorrow morning, and will notify the TMT via email.

#### ***6. Status of Operation.***

Henriksen said Libby is at elevation 2448, filling slightly, with 12.5 Kcfs outflow. Roache said Hungry Horse is at elevation 3559.2 feet and drafting slowly at 5.2 Kcfs outflow. Grand Coulee is at elevation 1288.8 feet and drafting slightly. Henriksen said Brownlee is within 0.6 feet of full and passing inflow. Dworshak outflow was increased to 7 Kcfs last week, and subsequently increased again to 9.5 Kcfs (full powerhouse capacity); the project is at elevation 1597 and drafting 0.5 feet per day. The spring seasonal average flow at Priest Rapids was 126 Kcfs; at McNary, 202 Kcfs. Wagner said subyearling chinook continue to outmigrate from the Snake River at a rate of about 15,000 fish per day; indices at McNary have dropped from 450,000+ over the past week to 170,000 yesterday. Boyce said adult summer chinook counts are in the top four of the past 10 years – 71,000 to date, one of the highest observed. The adult sockeye is at 113,000 to date; steelhead, 27,552; and over 5 million shad, the all-time record.

Bettin said occasional lightening is the only problem to report for the power system; Jim Adams said there are no major water quality problems to report at this time.

#### ***7. Next TMT Meeting Date.***

The next Technical Management Team meeting was set for Wednesday, July 21. Meeting ended at 12:30 summary prepared by Jeff Kuechle.

### **TMT Participant List**

**July 7, 2004**

<b>Name</b>	<b>Affiliation</b>
Robin Harkless	Facilitation Team
Cindy Henriksen	COE
David Wills	USFWS
Paul Wagner	NOAAF
Jim Litchfield	Montana
Tina Lundell	COE
Mike O'Bryant	CBB
Kyle Martin	CRITFC
Dave Ryan	PPM
Tim Heizenrater	PPM
Michele DeHart	FPC
Ron Boyce	ODFW
Pete Hassemer	IDFG
John Roache	Reclamation
Dave Statler	NPT
Brian Marotz	MFWP
Tom Haymaker	PNGC
Russ George	WMCI
Cathy Hlebechuk	COE
Ruth Burris	PGE
Scott Boyd	COE
Mary Karen Scullion	COE
Lee Corum	PNUCC
Dave Benner	FPC
Scott Bettin	BPA
Nic Lane	BPA
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Steve Haeseker	USFWS