IMPLEMENTATION TEAM MEETING NOTES

March 1, 2001, 9:00 a.m.-4 p.m.

NATIONAL MARINE FISHERIES SERVICE OFFICES
PORTLAND, OREGON

I. Greetings, Introductions and Review of the Agenda.

The March 1, 2001 meeting of the Implementation Team (with the participation of the Technical Management Team), held at the National Marine Fisheries Service's offices in Portland, Oregon, was chaired by Jim Ruff of NMFS and facilitated by Donna Silverberg. The agenda for the March 1 meeting and a list of attendees are attached as Enclosures A and B.

The following is a distillation (not a verbatim transcript) of items discussed at the meeting, together with actions taken on those items. Please note that some enclosures referenced in the body of the text may be too lengthy to attach; all enclosures referenced are available upon request from NMFS's Kathy Ceballos at 503/230-5420 or via email at kathy.ceballos@noaa.gov.

Silverberg welcomed everyone to the meeting, led a round of introductions and a review of the agenda.

Ron Boyce noted that, pursuant to the discussion at last month's IT meeting, Gov. Kitzhaber's office has confirmed Boyce as the State of Oregon's IT representative, while Christine Mallette has been reconfirmed as Oregon's TMT representative.

What is the purpose of today's conversation? Bob Heinith asked – what's the ultimate outcome? What we're trying to do is develop contingency plans given this year's very poor water conditions, Ruff replied, taking into account the financial situation BPA faces in what is essentially a dysfunctional power market. We need to see what we can do, as a group, to develop operational priorities for this spring and summer, he said – that's why we have asked others at this table to develop their operating scenarios and recommendations.

The Federal Executives have not made a decision yet; they are interested in what this group comes up with, Ruff said. We're hopeful that, today, we can talk about where we are with the water supply and with the various operational plans and recommendations that have been and are being developed, and look for areas of agreement and disagreement, Ruff said. We also need to talk about short-term operations over the next two weeks, he added.

Actually, I'm more interested in when the regional executives will be making their decision, so that we can get away from the current system of week-to-week management, Heinith said. If we can't reach regional consensus on a set of priorities, said Ruff, the executives will have to make some decisions. However, they would prefer to do that with the input of this group, and to turn the decision-making process back to the in-season management process.

I can't imagine we're going to be able to reach consensus on all aspects of an operational scenario within this group, said Heinith; given that fact, I would like to know when the executives will be making their call. They have not yet given us a deadline, Ruff replied. So the March 2 date has slipped? Heinith asked. It has slipped because the executives are still waiting for plans from a couple of key states, Howard Schaller said. Boyce said Oregon's plan will be submitted next week; Nielsen said Washington's plan was scheduled for final approval from the Governor's office yesterday, but that approval was postponed due to the earthquake.

2. Discussion and Development of 2001 Operating Priorities.

Rudd Turner said the March early-bird forecast was released late yesterday; the water supply has continued to slip from the February final forecast number, with basin-by-basin reductions on the order of 7% to 9%. Turner said Dworshak's April-July runoff forecast volume is now 1.5 MAF, just 57% of normal, down 9% from the February final forecast. Libby's April-September forecast volume is now 3.7 MAF, 55% of normal, down 7% from the February final forecast. The new Hungry Horse forecast is for a runoff volume of is 1.3 MAF, 67% of normal. At Lower Granite, the new April-July forecast is for a runoff volume of 12.6 MAF, 58% of normal, down 7% from the February final. At The Dalles, the January-July runoff forecast is 58.6 MAF, 56% of normal, down 8% from the February final. At Grand Coulee, April-September runoff is now expected to be 38.7 MAF, just 60% of normal, Turner said.

CRITFC believes that precipitation will only be 70% of normal in March, said Kyle Martin, rather than the near-normal precipitation assumed by the River Forecast Center. In 1977, the worst water year on record, January-July runoff at The Dalles was 53.3 MAF, just for your information, Turner said. Turner also distributed Enclosure D, a summary of accumulated precipitation, by basin, through February 28.

Moving on to chum protection issues, Ruff said NMFS is interested in knowing what percentage of the chum fry have begun to emerge from the redds; the key question is how much longer we need to continue to maintain the 11.7-foot Bonneville tailwater elevation in order to protect them. Schaller said the Fish and Wildlife Service has developed some tables (Enclosure

E) showing estimated emergence and swim-up dates for the Ives Island chum. He spent a few minutes explaining the technical nuances underlying this table; the bottom line is that fry from the 65 redds deposited through November 17 will, according to the USFWS estimates, have emerged and swum up by March 7; fry from the 61 redds deposited after November 17 will be emerging through as late as April 18. The table also made the point that 92% of the Ives Island chum fry will have emerged and swum up between March 21 and March 29, with 57% - 60% of chum emerged and out of the gravel by March 16.

Therese Lamb said it is her understanding, based on this table, that if the decision was made to protect 60% of the total chum spawning, the action agencies would need to provide protection flows until March 16 or March 23; however, she said, it sounds as though the Fish and Wildlife Service would argue that we should use the field data to make that decision. If field catches are continuing to increase on March 23, then we wouldn't have much comfort in dropping the protection flows, Schaller replied. If daily catches have peaked, then begun to decline, then we would be more comfortable with that type of operation, Schaller said. In response to a question from Ruff, Schaller said there was a bell-shaped distribution to last year's catches and emergence timing.

How many redds are out there, in the whole ESU, other than the redds shown on this table? Jim Litchfield asked. There are 24 redds in Hamilton Creek, another nine in Hardy Creek, Schaller replied. The Lower Columbia chum ESU includes the Grays River stock, added Jim Nielsen, but there is a genetic difference between the Grays River stock and the Hamilton/Hardy chum. They're not significantly different, he said, but they are different. There are also some spawners about a mile above the I-205 bridge, Nielsen said; my understanding is that they saw 80 or 90 fish in that location this year. Nielsen added that samples have been taken from the I-205 fish for genetic analysis, but the results of that analysis are still pending. In response to a question from Litchfield, Nielsen said there is a hatchery broodstock component of Grays River chum which are being raised at the Grays River Hatchery; about 200 adult chum were taken into that program this year.

I guess what I'm trying to understand is how big the pool of animals is that we're trying to protect, and just how much danger they're in, said Litchfield. We would lose water control into the redd complex in the mainstem if tailwater elevation below Bonneville falls to 11 feet, Schaller replied -- basically, these fish would be in a pond. In response to another question, Schaller said the redds currently being protected by the Bonneville operation represent 95% of the spawning for the Hamilton/Hardy Creek chum stock.

If you flush out the pond once or twice a day during peak loads, wouldn't that give these fish an exit route? Litchfield asked. You would still dewater a large percentage of the redds, Schaller said – it would depend how low the Bonneville tailwater went. Are these redds a representative sample of this entire population? Bruce Suzumoto asked. These are the fish that are directly affected by the management of the mainstem projects, Schaller replied; the other issue is later swim-up for the Hamilton and Hardy Creek chum.

What I'm hearing you say, Howard, is that if we manage to a lower tailwater elevation, say 11 feet, we would lose the vast majority of these fish just as they're starting to swim up, Ruff said. However, as I noted, even if we create a pond, these fish aren't going to die immediately, said Litchfield – we could bring the flows up once or twice a day and flush them out. Schaller replied that this would be a very risky management strategy, due to redd dewatering and the potential for heron predation.

So are you worried about dewatering, or are you worried about egress problems? Lamb asked. Both, Schaller replied – probably half of the redds would no longer be viable, and then there are plenty of concerns about the pond environment for the fish that do emerge – dissolved oxygen, temperature and predation are all serious concerns.

The group devoted a few minutes of discussion to the ongoing genetic research assessing the connections between the Grays River and Hamilton/Hardy Creek chum stocks. In response to a question from Paul Wagner, an ODFW representative noted that the highest redds could actually have been among the earliest deposited – in the November 17 time-frame. However, he added, there are a significant number of later-deposited redds that are just barely covered under the current 11.7-foot tailwater operation.

From this table, it would appear that the fish that spawned before November 13 should now have emerged and swum up, said Pat McGrane -- about 30% of the total production. We are predicting that, by tomorrow, that will be true, Schaller replied, although because of redd superimposition, production from the early redds will likely be restricted.

So how do we tee this up for decision? Boyce asked. We do have a tough decision to make, Silverberg agreed. Perhaps we should talk about power system issues, in order to make a fully-informed decision, Turner said. There are several other issues that will affect this decision, said Boyce; there are power system concerns, as well as concerns about other ESUs. Perhaps we should discuss some of the modeling work that has been done on the various operational scenarios, he said.

We did have a conversation about the chum operation and its effects on various reservoirs, said Lamb; she distributed Enclosure F, a table showing the effects of a continued chum operation, a modified chum operation and abandoning the chum operation on flows and headwater storage project elevations. The bottom line is that BPA is now estimating that, if the chum operation is maintained, Grand Coulee would reach elevation 1220 on March 10, Lamb said. In addition, it would then be necessary to draft Dworshak at a rate of 10 Kcfs, roughly 1.5 feet per day, during the month of March, in order to maintain the chum operation.

Under a modified chum operation (maintain 11.5-foot tailwater below Bonneville, 125 Kcfs average flow), Dworshak would need to release 5 Kcfs through the month of March, drafting that project by a foot per day, Lamb said. Even with this contribution, Grand Coulee would reach elevation 1220 by March 13. This operation would endanger some redds, but would

also provide more water for flow augmentation, she explained.

The "Abandon Chum Operation" results look something like this, said Lamb:

Elements	**Abandon Chum Operation**
Drafting Dworshak in March	May be needed by month end to minimize effect at Coulee
Grand Coulee elevation	Grand Coulee at 1220' by March 21
Hungry Horse/Libby draft	May be needed by month end to minimize effect at Coulee
Pros:	Provides more water for flow augmentation, better for cultural resources and ferry operation
Cons:	May lose all redds, may require draft of Libby and Hungry Horse and impacts Columbia River summer flow

The group devoted a few minutes of discussion to this table. Any other questions or considerations? Silverberg asked. I would be curious about what a flow of 120 Kcfs, rather than 125 Kcfs, would do to the chum population, Heinith said. My guess is that there would still be some water running through the chum area at 120 Kcfs discharge from Bonneville, said Don Anglin of the Fish and Wildlife Service. My guess is that this would give you a tailwater elevation of approximately 11 feet, Anglin added.

I think where Bob was going is whether there might be an intermediate operation, one that isn't purely for power, but will provide some protection for the chum redds, Lamb said. Correct, said Heinith – that's the sort of creative thinking we need to do here. Maybe at 122.5 Kcfs outflow from Bonneville, we can keep the chum redds watered up and still provide at least some return flow to the river, he said – can we come up with an operation that will provide some protection for chum without bottoming out Grand Coulee? Basically, the lower the tailwater elevation, the higher the risk that we will lose all of these fish, Schaller replied.

Boyce asked whether there are any other sources of water that may be available this year? With respect to the Reclamation projects, Jim Fodrea replied, I think everyone is aware of the status of Hungry Horse and Grand Coulee; the Snake River reservoirs are basically in the same situation. We have no institutional means to release water now, Fodrea said. The upstream reservoirs are basically it, added Robyn MacKay; anything we release now will be a tradeoff with potential releases later in the year. In response to a question, MacKay said the Canadian projects are not expected to refill this year, either, so there isn't much potential to lean on them for additional water.

Margaret Filardo observed that, even if we do go to a water-saving operation at this point, there isn't a great deal of water to be saved. Even if we do protect Dworshak slightly, she said,

what's the benefit? Basically, we would be increasing the chances for Dworshak refill this year, Lamb replied – we can talk about the qualitative benefits associated with that operation, but I can't give you quantitative benefits at this point. We're talking about 5 ksfd, said Ruff; that's 35 ksfd per week, which could be significant later in the summer when Snake River flows could be as low as 30 Kcfs. Filardo said that 5 ksfd would only be for eight days; she questioned whether it would be worth abandoning the chum operation in order to gain eight days of slightly augmented flows this summer.

Under the "abandon chum" operation, you would get 13 additional days of Grand Coulee being above elevation 1220, said Lamb; in addition, it may not be necessary to touch Dworshak at all. Obviously each of these operations has assumed benefits, said Filardo; in order to make an informed decision about the tradeoffs, you need to do a better job of quantifying those benefits.

How does all of this play into the Vernita Bar operation this year? Dennis Rohr asked. The estimated swim-up date for Vernita Bar is May 1, for planning purposes, Paul Wagner replied – April 1-May 7 is the sensitive period, with 65 Kcfs the minimum flow at Vernita Bar during that time. Based on the projections I've seen, it looks as though we may be borrowing from that pot right now – we will likely see Vernita Bar flows in the mid-50 Kcfs range during the first two weeks in April. As long as we're talking about non-listed species, said Schaller, there are also a number of non-listed chinook redds that would be dewatered if the "abandon chum" operation is chosen.

NMFS is ready to propose a near-term operation, recognizing that this year's water supply forecast is continuing to decline, Ruff said. We would like to maintain protection flows for chum emergence at some level, given the fact that we've protected them for this long. We will be at least at 30% emergence by the end of this week, and don't feel that we should just abandon this stock, Ruff said. At the same time, we have to share the pain in this very difficult water year – there are many other listed species that need to be taken into account. For that reason, NMFS proposes that we operate to a minimum 11.5-foot tailwater elevation over the next couple of weeks, and to continue to monitor through seining to help determine where we are in the emergence, Ruff said. We're willing to try to maintain 11.5-foot tailwater, recognizing that we might lose some redds if the fish haven't emerged. We would request that if it is necessary to operate above 11.5 feet, for power, that the action agencies reverse load-factor from dusk to dawn in order to minimize the impacts of that operation, Ruff said.

What is NMFS looking at, in terms of a Dworshak refill elevation this year? Heinith asked. Given the current forecast, we don't think it will be possible to get any of the projects entirely full, Ruff replied. Do you have a hard refill target at Dworshak for 2001? Heinith asked. Not at this time, Ruff replied. He added that NMFS would like some additional time to review the information in the table provided by Schaller earlier this morning. In response to a question from Scott Bettin, Ruff said NMFS would recommend maintaining the 11.5-foot tailwater elevation at least through March 15.

Pat McGrane noted that, in order to maintain 125 Kcfs at Bonneville, Grand Coulee will need to release approximately 25 Kcfs more than inflow. Once we hit elevation 1220 feet at Grand Coulee, he said, the tap is going to be turned off, and Bonneville flows will drop by at least 25 Kcfs. Ruff replied that the highest tides of the month will begin on March 7, so it may be possible to maintain 11.5 feet of tailwater depth with Bonneville flows in the 115 Kcfs range.

The group devoted a few minutes of discussion to the question of how much difference any of these operations will really make, biologically, given the fact that this is shaping up to be a 1977-type water year. We're all aware that we don't have all of the water in the world, said Silverberg; we've been talking about these issues for four weeks now, and the time has come to make some hard decisions.

Ruff distributed Enclosure G, a matrix summarizing the various operational priorities recommended in the Montana/Idaho, CRITFC and Federal principals' operating plans; the matrix included spaces for the Washington and Oregon plans, once they are delivered. The matrix lays out the similarities and differences between the three proposals on a number of key issues: chum and power flows, spring spill, June 30 refill priorities and targets, spring flows, Vernita Bar, spring transport, summer spill, summer flows, summer transport, fish facility operation, RM&E, and temperature and TDG. Please refer to Enclosure G for details.

Essentially, this picks up where we left off last week, said Ruff. We thought it would be useful for everyone to look at these proposals side-by-side, in the hopes that we could identify areas where we agree and areas where we have differences, said Silverberg. That is with the recognition that there is no way anyone is going to be happy this year, she said – it is such a poor water year that that is simply not going to be possible.

The group spent a few minutes going through Enclosure G line by line, discussing the similarities and disagreements between the various operational proposals. With respect to the chum/power flow line-item, Turner observed that the operating agencies have little or no interest in maintaining 125 Kcfs at Bonneville right up to the point when Grand Coulee hits elevation 1220, at which point it will be necessary to dramatically reduce flows in the river. Rather, they would prefer a gentler regression in flow, providing a smooth transition between current flow and elevation levels and the operations and conditions that will prevail once Grand Coulee reaches elevation 1220 feet.

The group devoted a few minutes of discussion to the question of what the cutoff point should be for providing protection flows for the chum spawners below Bonneville. Ultimately, the Fish and Wildlife Service, Washington, Oregon, BPA, Reclamation and Montana expressed support for NMFS' 11.5-foot Bonneville tailwater proposal. That's with the understanding that, over the next week or two, we have to find a way to feather out the tail end of that operation, so that we don't have to suddenly drop Bonneville outflow by 25 Kcfs the day Grand Coulee elevation reaches 1220 feet, said Litchfield.

How do we accomplish that glide path? Silverberg asked. Perhaps we could begin dropping the Bonneville tailwater elevation by a tenth of a foot per day, Wagner suggested. Litchfield suggested further that some additional study and modeling of the "glide path" concept would be helpful to him.

In response to a question, Lamb said that, for much of the month of March, an average Bonneville flow of about 120 Kcfs will be needed to meet load. Leaving the power question aside, however, what would be most helpful at this point would be for you to make a decision about what the operational priorities should be for fish, said MacKay, recognizing that any resources you use now -- water or power purchases -- will not be available for use during the spring or summer.

We've heard that a number of the entities at this table support NMFS' proposal, yet we're still hearing some consternation, said Silverberg. Actually, what I've heard is agreement on the operation for the next week, according to NMFS' proposal, during which time we will consider what a "Glide-path" operation might look like, said Jim Yost.

Silverberg wrote the following summary on the board:

- By Saturday, go to an 11.5-foot minimum tailwater at Bonneville until March 7
- Monitor emergence/swim-up of chum fry
- Operate to maintain as close as possible to 11.5-foot tailwater depth, if above, shape flows at night
- Model temperature effects of Dworshak operation

Silverberg said the next item on the matrix of 2001 FCRPS operating priorities was spring spill. The group discussed the need to develop project-by-project spill priorities, as well as how to best allocate the finite volume of spill that will be available this spring. Scott Bettin suggested that, in all likelihood, spill operations will be a topic of week-by-week discussion at TMT; it will be up to that group to decide where spill will do the most good, based on where the fish are in a given week.

Ruff said NMFS has identified minimum spill levels, as well as the BiOp spill levels; the question is what a spill operation that falls between the two might look like, he said. We would also like to hear what others have to say on this topic, he said. At Litchfield's suggestion, Ruff said he will develop a draft spring spill proposal for presentation at the March 7 TMT meeting. Boyce asked that, as part of this presentation, BPA include information about the monthly load requirements are for each project. Lamb responded that those monthly estimates are proprietary information and BPA cannot share them in a public forum; it is enough to say that load will fluctuate considerably from week to week, and that, in a water year like this one, it will be very difficult just to meet load some weeks, even if we turn off spill, she said.

What I'm trying to say is, every week, we will face choices, Lamb said – to the extent that

we can agree on spill priorities ahead of time, that will make those decisions easier.

In response to a question from Nielsen, Ruff said NMFS supports the goal of implementing the BiOp spill program as a minimum operation this spring; however, NMFS recognizes that the possibility of that happening in 2001 is slim at best.

Bruce Suzumoto asked whether, from NMFS' perspective, summer spill should be eliminated before spring spill is reduced, because NMFS has prioritized spring spill higher than summer spill. Cash flow is going to play a role in that decision, Lamb replied; it may not be possible to turn off summer spill and gain spring spill, because June is the critical cash flow month for Bonneville. In other words, economic considerations may cause the federal parties to reduce spill in the spring? Suzumoto asked. Correct, Lamb replied. Basically, the lower the flow forecast goes, the longer the periods of no spill will be this spring and summer, Bettin said.

Lamb said one study BPA would like to do is one in which any volume over and above what is needed to meet load would be stored – that way, she said, everyone could see what discretionary volume would be left at the end of August. That would be incredibly useful information, said Schaller. Lamb said BPA's modelers would like to do this study, but it will not be easy, due to the number of decisions that would need to be made about runoff shape, final water supply etc.

It sounds, then, as though there is some IT interest in the idea of having NMFS look at the results of past survival studies at mainstem dams and working with the Corps to develop project-by-project spill priorities, said Silverberg; at the same time, there is some interest in having BPA develop this spill volume analysis. Actually, it would probably make sense for everyone to simply assume that we start the spill program at zero, and work our way up from there, said Bettin. Basically, we're talking about the same process in reverse that we go through every year in developing the spill priority list, said Jim Athearn.

After a few minutes of additional discussion, there was no further resolution on this issue. Instead, the discussion moved on to June 30 refill priorities/targets. The group devoted a few minutes of discussion to the present status of the storage reservoirs, and to the federal proposal that the following June 30 refill targets be set: Dworshak to elevation 1580, Libby to elevation 2443, Hungry Horse to elevation 3540 and Grand Coulee to elevation 1285. Boyce said Oregon's preference would be for a more equitable split of the available flow augmentation volume between spring and summer; Steve Pettit said Idaho agrees with Oregon's position. Do you have a suggested flow target at McNary for the spring period? Bettin asked. Not at this time, Boyce replied. Pettit said there are 43 other species of fish that could use some flow augmentation; it makes sense, from Idaho's perspective, to strike a better balance between spring and summer flow augmentation.

What about additional water from the Upper Snake? Boyce asked. There is no water in the water bank to draw on at this point, Fodrea replied; I'll have to do some additional thinking

about that and get back to you. What about Brownlee? Boyce asked. NMFS is still in consultation with Idaho Power, Ruff replied; the goal is still to get the draft Hells Canyon BiOp on the street prior to the start of the spring migration. I will say that the runoff volume forecast at Brownlee is only 40% of normal this year, Turner said. However, Brownlee will refill this year – it's only 12 feet down from full, currently, said Wagner.

The group discussed the possible use of flow "surges," proposed by Montana and Idaho, to move the fish downstream to the collector projects at times when flows in the river are at their lowest. Wagner observed that such surges could be accomplished both through reservoir releases and through powerhouse operations. That has been suggested before, said Boyce; I would be interested in any data that shows such operations would be biologically beneficial. Litchfield observed that there is at least some anecdotal information about accelerated fish movement following rain events. In response to a question from Ruff, Boyce said he will bring in any information he can find on the biological detriments of such a pulsing operation.

Returning to reservoir refill priorities, Lamb observed that what is needed is both a specific refill target for each project as well as a target probability of meeting that target – 50%, 70% or whatever, she said. Boyce observed that it would also be helpful if BPA and the Corps could provide some model information about the impacts of various refill elevation targets on spring flows.

Litchfield suggested that Dworshak be left on minimum outflow until a problem arises in spring flow that cannot be solved any other way except by increasing Dworshak outflow. In other words, he said, I would suggest that we set complete refill at Dworshak as our goal this year, rather than 1580, Litchfield said. The 1580 target in the federal proposal is a floor, based on 1977 runoff volumes, said Turner – it will be up to TMT to decide where to store or release any water we get over and above the 1977 volume.

3. Updates.

A. In-Season Management (TMT). No in-season management update was presented at today's meeting.

B. Independent Scientific Advisory Board (ISAB). No ISAB report was presented at today's meeting.

C. Water Quality Team (WQT). Mary Lou Soscia reported that work on the mainstem TMDL is proceeding; Oregon, Washington, EPA and the tribes are all involved in that effort. We're currently working on developing the workplans, she said, and should have gas and temperature workplans to share by the next IT meeting. We're still on track to produce the gas portion of the mainstem Columbia TMDL by December of this year, Soscia said; the temperature portion probably won't be completed until mid-2002.

We're meeting with the PUDs on March 14, Soscia continued; we will also be meeting with coalitions from the pulp and paper and irrigation industries. EPA will be meeting with the states and tribes again in a couple of weeks or so, she added. We're in discussion with the action agencies about how to coordinate the TMDL development process with the development of the BiOp Water Quality Plan, Soscia said. If you have any specific questions, she added, don't hesitate to call me.

D. System Configuration Team (SCT). Bill Hevlin said the most important SCT development is the effort to get the raised spillbay weir (RSW) device installed in front of one of the spill gates at Lower Granite. Construction on the RSW is a now a month and a half behind schedule, Hevlin said, so we are going to have to defer testing on that device until the spring of 2002. We're talking about when to install the device this year, and are leaning toward June, Hevlin said, during the lull between the spring and summer migrations. What we're planning now, in coordination with FPAC, is to target its installation on the upstream face of the spill bay during that lull, Hevlin said, to minimize any possible fish impacts. As far as preliminary testing before the 2002 migration, he said, we will need to operate it with spill for a couple of hours to evaluate its hydraulics; we also want to run some balloon-tagged fish through the structure in September or October to check for any obvious signs of mechanical injury.

There was some discussion of trying to run the two-hour hydraulic test on the RSW immediately after its installation, Hevlin said; after discussing that issue with the salmon managers, however, it was agreed to defer that hydraulic test until August. It is somewhat ironic that, despite our disappointment in not having this device available for testing this year, we probably wouldn't have had enough water to spill to really operate and test this device this spring anyway, because it's such a low runoff year, he said.

Hevlin added that radio-tag and hydroacoustic contracts are in place so that, if the IT and TMT desire, it would be possible to evaluate the effects of a surging operation at Lower Granite this spring. We have the resources; they're committed and available, said Hevlin.

A couple of smaller items, he said; we've convened an SCT/FFDRWG subgroup to study long-term passage options at Bonneville Dam. The subgroup is proceeding with an analysis using the SIMPAS model and a risk analysis they've developed, as well as the timelines and costs associated with the installation of various passage options. They're making progress, Hevlin said. There was to be a decision by March 15 about whether or not to go forward with improvements on the B1 JBS in the 2001/'02 work window; it now looks as though that decision is going to be deferred. In response to a question, Hevlin said the Council's Independent Scientific Review Panel is reviewing the Bonneville program for consistency with the Northwest Power Act and the Council Fish and Wildlife Program. Hevlin also described the planned passage survival evaluations at The Dalles Dam in 2001.

At the March 15 meeting, the SCT would like to get a report from this group, Hevlin said. I'll volunteer, said Ruff. We would also like an update on water quality issues, and where the

Corps is on the judge's February 16 order, Hevlin said.

E. Quantitative Analytical Report (QAR). No QAR update was presented at today's meeting.

F. Spring Creek Hatchery Release. Schaller said because of the warmer weather and water, it will be possible to release the Spring Creek Hatchery Fish beginning the morning of March 8. We would then need up to 10 days of spill at Bonneville beginning the evening of March 9, said Schaller, adding that there are 5.2 million Spring Creek fish this year; the requested spill level at Bonneville will likely be 50 Kcfs-60 Kcfs. We'll take this request into consideration, and let you know what we can do as far as spill volume and duration, Bettin said.

4. Implementation Planning – Update on One- and Five-Year Implementation Plans.

Bettin said the action agencies are still working on the draft implementation plans; they should be available prior to the April IT meeting.

5. Next IT Meeting Date.

The next meeting of the Implementation Team was set for Thursday, April 5. It was agreed that the TMT meeting next Wednesday, March 7, will be a joint TMT/IT meeting. Meeting notes prepared by Jeff Kuechle, BPA contractor.