

# Technical Management Team Meeting Notes

September 21, 2005

## ***1. Greetings and Introductions.***

The September 21 Technical Management Team meeting was chaired by Cindy Henriksen. The following is a summary (not a verbatim transcript) of the topics discussed and decisions made at today's meeting. Anyone with questions or comments about these notes should contact Henriksen at 503/808-3945.

## ***2. Kokanee Update.***

Russ Kiefer said IDFG has completed its adult kokanee surveys; the estimate is 96,000-116,000 adult female kokanee available for spawning this year, well above the 70,000-female threshold. We have been working on an SOR, Kiefer said, but in yesterday's FPAC discussion, what we moved toward was a decision tree that will guide decisions over multiple years, rather than an SOR covering this year only. We are making progress on the decision tree, but meanwhile, my fellow salmon managers have requested that we operate according to the decision tree this fall, Kiefer said.

What we're considering is that, since we have over 70,000 females available, and the lake was down two years ago, this year, we would like to hold the lake up for kokanee spawning, he said. We also realize that flow augmentation from Lake Pend Oreille can provide critical flow improvements for chum spawners below Bonneville. If conditions remain dry, we would like to be able to provide at least some flow augmentation, if needed, from Lake Pend Oreille. We're working out those details, and will report back as soon as the decision tree is available, Kiefer said.

What we're thinking about, in the decision tree, is that the target elevation would be 2055 at Lake Pend Oreille by October 31, said Kiefer. If it is beneficial to provide flow for chum, and to clean the gravel for future spawning years, we can then draft Lake Pend Oreille, preferably without spill. The flow augmentation would only be provided in dry years. We think the decision tree is the best way to manage risk and provide maximum biological benefit, he said. Tony Norris suggested that the decision tree be keyed to precipitation, rather than water year forecasts. We understand, Kiefer replied – the mid-range forecast would be only one tool we would use, in conjunction with base flow, Grand Coulee elevation and weather forecast information. John Wellschlager said he likes the idea of the decision tree, which would provide guidance for operations over multiple years.

In response to a question from Henriksen, Kiefer said the salmon managers would prefer to wait until the end of October in order to inform the decision with the best available meteorological and forecast information. If this information shows that base flows and reservoir elevations are high, and precipitation is in the forecast, then we would hold Lake Pend Oreille up, he explained. We would also like some additional information as to how the Lake Pend Oreille flow augmentation water would benefit chum, said Kiefer. Idaho's preference would be to say, if we get these conditions, we'll hold the lake up; however, other salmon managers want to wait until all the available information is in before making that decision, Kiefer said.

In response to a question from Bob Hallock, Henriksen said the the action agencies are attempting to model the difference in chum flows this winter if flow augmentation is or is not provided from Lake Pend Oreille. BPA is doing the model runs. It sounds like there may be some flexibility in the timing of the Lake Pend Oreille decision, said Hallock, which is helpful, from our perspective. There is limited time, Henriksen noted. Making a recommendation as soon as possible is desirable, so we can notify our stakeholders. The winter operation must be decided by October 31, said Henriksen.

Have you discussed the impact of flows on the success of chum spawning? Jeff Laufle asked. The salmon managers have discussed that, and should have something to show you in the next couple of weeks, Paul Wagner replied.

### ***3. Status of Discussions on 2005-2006 Lake Pend Oreille Winter Elevation.***

See previous agenda item.

### ***4. Winter Temperature Operation of Libby Dam for Burbot.***

On September 20, the action agencies received SOR 2005-FWS 3. This SOR, covering winter water temperature releases from Libby Dam for burbot. This SOR requests the following specific operations:

- Use the selective withdrawal system at Libby Dam to release the coolest possible water in November and December.

The full text of this SOR is available via hot-link from today's agenda on the TMT homepage; please refer to this document for full details. Hallock directed the TMT's attention to Figure 3 ("Kootenai River Temperatures Pre- and Post-Libby Dam") in the justification section of the SOR; what this shows is that the area between the two sets of lines is what the Fish and Wildlife Service and Kootenai Valley Resource Initiative are trying to get at, he explained. Depending on what occurs during the water year, we may be coming back to you with a supplemental SOR covering flows, Hallock added, noting that this SOR has been coordinated with Montana FWP. In response to a question,

Hallock said that, according to USFWS research, water temperatures in excess of 6 degrees C are lethal to incubating burbot eggs, hence this request.

Obviously we can't totally control temperatures to their historic levels, said Hallock; however, we think this is the best we can do, given the existing system, so that's what we're asking for. In response to another question, Hallock said the spawning population of burbot in the Kootenai may be as low as 50 fish.

Henriksen said she has spoken to Libby Dam personnel about implementing this SOR; they are well aware of this request, and are looking at what can be done, and when. I think we're in pretty good shape to implement this SOR to the greatest extent feasible, she said. If the weather is extremely cold and wet, it might make it difficult to get some of the gates out; they are also talking about which units to go to first, second and third. In other words, it's mainly logistical challenges, Henriksen said.

It sounds like we will be having more information on this topic over time, said Henriksen; we'll discuss it further at the next TMT meeting.

## **5. Ghost Nets Presentation.**

Blaine Parker of CRITFC led this presentation. He touched on the following topics:

- Are ghost nets real? Yes. "Ghost" refers to fishing gear that is lost, but continues to fish. Sturgeon are particularly susceptible to entanglement in ghost nets, because they are olfactory-based feeders.
- History and recognizing a problem – commercial gillnetting has occurred in the Columbia since the 1860s; thousands of gillnets are set every year; 50 diver gillnets were reported lost or stolen from 1995-2000.
- Science – early nets made of natural fibers, which degraded fairly quickly when lost; monofilament became common in the 1960s, and this manmade material does not biodegrade.
- Goals of the ghost net project – remove lost nets, test efficacy of side-scan sonar to locate nets, document net location etc.
- the geographic scope of the project
- How do we locate lost nets? enforcement records of lost nets, local knowledge, side-scan sonar, bottom drag fishing areas
- Side-scan sonar – how it works
- Sample side-scan sonar images
- Side-scan sonar methods – survey identified areas using multiple transects; sites marked by GPS and ranked
- Side scan sonar effort – 13 days of surveying with two crew members; survey focused on suspect/fishing areas; marked and ranked suspicious targets
- Imaging results (sample images)
- Side scan sonar results – marked 173 targets, 148 ranked low, 18 medium and 7

high. Based on two recoveries, were able to positively identify lost nets using SSS

- Conclusion of side scan sonar effort: cons – time-consuming, requires near-perfect weather; images are difficult to determine; nets are difficult targets; confounding factors. Pros: less impact to sensitive habitat
- Net recovery methods – 2003: large 70-foot trawler outfitted for bottom trawling; 2004 – tribal fishers and a 26-foot vessel
- 2003 big vessel effort – pros: safe; can work in any weather; large drag equipment. Cons: poor maneuverability, uneven bottom, rock pinnacles caused problems
- Trawling gear effort – 9 working days, did 55 tows ranging from 10 to 95 minutes; had some success retrieving nets
- Results – how scary is it? recovered 8 nets, containing a total of 80 white sturgeon; no other species found
- 2004 tribal effort: pros – maneuverable; knowledge and support of tribal fishing community; 13 days effort; less impact.
- Results: 25 nets removed; 41 dead white sturgeon found; 5 live fish released.
- Estimated impact – mostly speculation: how significant compared to sport and commercial catches, as well as other loss vectors? Sturgeon lost to a variety of sources, including dam operations, illegal fishing, delayed mortality from sport fishing. Yearly impact is decreasing as nets are removed. Management impacts.
- Ghost net busting – increased awareness – outreach for commercial fishers, sportfishers and commercial river users; use telemetry equipment to radio-tag individual nets; continue project to remove lost nets.
- 10-25 nets estimated to be lost each year, not including illegal nets; a total of 120 nets have been recovered since 2002.
- Project sponsored by NOAA and the Ocean Trust

Parker noted that he has applied for funding from NOAA and the Ocean Trust – about \$30,000 annually – to continue this project in 2006.

You said you were working mainly in Bonneville and The Dalles pools – have you removed any nets from John Day pool? Larry Beck asked. We haven't had a lot of success removing nets from John Day pool, because the bathymetry is different, Parker replied. And once a net is lost, how far does it tend to drift? Norris asked. It depends on where it's lost, Parker replied – in some cases, nets can "walk" a considerable distance. And is there other technology that might be helpful to you? Nic Lane asked. Yes – underwater video, for instance, Parker replied. However, cost is a concern with some technologies. Is it reasonable to require some sort of sonic tag on the winter sturgeon nets? Kiefer asked. We could, but again, it's a cost issue, Parker replied – if we're able to continue to get annual funding, we should be able to continue to make a pretty good dent in the nets lost each year.

## **6. Fall Treaty Fishing.**

Kyle Dittmer said CRITFC had submitted two recent treaty fishing SORs, one dated September 9 and one dated September 16. We requested our usual stable pool elevations, he said; most of the fishing effort has been concentrated in John Day pool. A total of 236 of 450 nets in the September 7 net flight; yesterday, there were 439 nets total, 238 in John Day pool.

There may or may not be a treaty fishing season next week, said Dittmer; the main concern at this point in the season is impacts to wild steelhead. The Tribes will make a decision by tomorrow, and I should be able to give the Corps an answer one way or another by late this afternoon, he said.

Henriksen said the Corps has been sending out teletypes to keep Bonneville pool within a 1.5-foot range as a hard constraint, and one foot as a soft constraint. No specific instruction has been issued for The Dalles, but that pool is no longer fluctuating as much since the spill season has ended and the project is no longer constrained by the fixed spillway openings. John Day pool is operating within 1.5 feet as a hard constraint and has been mainly operating in the upper end of that range. That is appreciated by the tribal fishers, Dittmer said. Overall, I think it's been a pretty good season for coordination, Henriksen said.

### ***7. Comments on 2006 WMP.***

Henriksen said the most recent version of the 2006 Water management Plan, dated September 16, is now available via hot-link from today's agenda on the TMT homepage. She went briefly through the changes that were made to this document, including the fact that the Grand Coulee operation for drum gate work is not included in the 2006 plan, and the fact that dredging is anticipated in the Lower Snake in 2006. Henriksen asked that any additional comments on the 2006 plan be submitted as soon as possible to Larry Beck or Cathy Hlebechuk. We would like to have all comments by the end of September, if possible, she added; the BiOp recommends that we complete the plan by September 30. After that, we'll start thinking about the fall/winter update, she added. Kiefer said IDFG will be providing comments on the 2006 plan as soon as possible; he said he will be providing his comments to IDFG management and the Idaho Governor's office for review by the end of this week.

Wellschlager asked whether the TMT's emergency protocols will be updated this year; Henriksen replied that this is likely, even with the ongoing BiOp litigation. The action agencies will take a cut at that, and will post it to the TMT homepage, she said.

### ***8. Operations Review.***

Henriksen reported that Libby is releasing 8 Kcfs, which will continue through the end of September. The pool is at 2437 and drafting slightly. Hungry Horse is at 3538, said Norris; the project is drafting to meet the Columbia Falls minimum, and is releasing 849 cfs currently. Grand Coulee is at elevation 1283.3 and filling whenever possible.

Henriksen said Dworshak has been releasing 7.1 Kcfs; on September 14 outflow was reduced to the interim level, 3.5 Kcfs. Once elevation 1520 was achieved on September 18, the project went to minimum outflow, 1.6 Kcfs. The current flow at Lower Granite is 13-14 Kcfs; the Lower Snake pools are all operating in their full range, except Lower Granite pool, which is operating in a one-foot range to facilitate boat and barge passage to and from the ports of Lewiston and Clarkston.

Moving on to fish, Wagner said the smolt migration is now essentially over at Lower Granite, Little Goose and Lower Monumental. At McNary, shad were overwhelming what few migrants there were, so fish collection has been stopped. There are still juveniles migrating through the Lower Columbia projects.

Moving on to adults, Wagner said the fall chinook run has peaked and is now beginning to decline – from 17,000+ on September 15 to 7,323 yesterday. The total fall chinook run to date is about 350,000 fish, somewhat below the pre-season forecast. Steelhead are on the decline as well, with just over 3,200 steelhead per day passing Bonneville, currently. In response to a question, Beck said the 2005 fall chinook run is just above the 10-year average. What has the timing been like for the fall chinook run? Henriksen asked. I believe it was about a week late this year, in terms of the peak of the run, Wagner replied.

Wellschlager said the second tropical storm coming into the Gulf has had an impact on energy prices. Beck said there will be a line outage at Libby, which will limit the powerhouse to three units, in November. Henriksen added that, unless there is a significant precipitation event, the outage, which will last for 10 days, should not impact Libby operations.

Wagner said he had heard that, at The Dalles, the ice and trash sluiceway may become an issue. We're still working on that, Henriksen replied; historically, it operates for 12 hours during the day and is opened and closed using power from turbine unit 1. Beck noted that because turbine unit 1 is under repair, the ice/trash sluiceway is operated at untie 2 and can not be operated remotely and must be opened and closed manually. A crane crew is needed to open and close the stop logs twice each day, seven days a week during the unit 1 outage. I believe there is a proposal to operate the ice/trash sluiceway 24 hours a day, seven days a week, to benefit migrating juveniles. Because there is no screen system at The Dalles, that is really the only means of juvenile passage at that project, said Wagner; as I mentioned earlier, there are still small but significant numbers of juvenile migrants moving through the lower river.

I have to bring this up, because there is a cost to ratepayers – almost \$500,000 if the ice/trash sluiceway is operated for another 76 days, Wellschlager said. We are aware that this issue is being worked through FPOM, and the Corps is working to craft a solution that works for everyone, said Henriksen. In response to a question from Wellschlager, Beck said that, at turbine unit 2, the gate must be raised and lowered by

crane, which requires the presence of a crane crew; if the ice/trash sluiceway is operated only part of each day, it has to be raised and lowered, which also represents a cost. In response to another question, Beck said the next scheduled FPOM meeting is October 13. There will be more to come on this issue, Henriksen said.

On the water quality front, Jim Adams said that, once Dworshak went to minimum outflow, the Corps put unit 1 in undershot mode, which yielded a release temperature of about 45 degrees. After consulting with Dworshak National Hatchery personnel, the Corps shut down unit 1 and put unit 2 in overshot mode, resulting in an outflow temperature of 61 degrees F for several hours. The hatchery decided that was too high; Dworshak outflow has now returned to undershot mode, and the release temperature is back down to 45-46 degrees F. Lower Granite tailrace temperatures are running about 62 degrees F.

**9. Next TMT Meeting Date.**

The next Technical Management Team meeting was set for Wednesday, October 12. The TMT’s annual year-end review will be held on November 2 in the H&J room on the third floor of the Robert Duncan Plaza, 333 SW 1<sup>st</sup> Ave., in downtown Portland. Meeting summary prepared by Jeff Kuechle, BPA contractor.

**List of TMT Meeting Participants  
September 21, 2005**

<b>Name</b>	<b>Affiliation</b>
Cindy Henriksen	COE
John Wellschlager	BPA
Russ Kiefer	IDFG
Tony Norris	USBR
Steve Haeseker	USFWS
Ray Gonzales	COE
Laura Hamilton	COE
Nic Lane	BPA
Kyle Dittmer	CRITFC
Julie Ammann	COE
Dan Spear	BPA
Larry Beck	COE
Jim Adams	COE

Karl Kanbergs	COE
Paul Wagner	NMFS
Tracy Hicks	BPA
Linda Jackson	BPA
Dave Benner	FPC
Jeff Laufle	COE
Margaret Filardo	FPC
Tom Haymaker	PNGC
Tom Le	PSE
Richelle Beck	D. Rohr & Associates
Bob Hallock	USFWS
Eric Brown	COE