## FISH PASSAGE CENTER OVERSIGHT BOARD Meeting Notes for January 9, 2012 – Portland, Oregon

Members present were Bruce Measure, Daniel Goodman, Ritchie Graves, Paul Kline, Tom Rien (by phone for Tony Nigro), and Doug Taki. Other participants included Rich Alldredge, Bill Bradbury, Michele DeHart, and Dean Holecek. Kerry Berg, Mark Fritsch, Tony Grover, Erik Merrill, Jim Ruff, and Karl Weist were present from the Council staff.

Chairman Measure called the meeting to order at 2:03 p.m. and asked for introductions in the meeting room and on the phone. He asked staff to email the meeting presentations to everyone participating by phone.

## **2011 Fish Passage Center Accomplishments**

Michele DeHart presented the FPC's 2011 accomplishments, noting she earlier sent out a full report. DeHart said the FPC work items are set by contract so 2011 proceeded in much the same way as 2010. She recapped the work, reporting that the year starts with the FPC seeking permits for the Smolt Monitoring Program and Comparative Survival Study (CSS) from the states of Oregon and Washington. We developed the design for smolt monitoring, coordinating with the Corps since we use their facilities, DeHart said. She described changes made in 2011 to the monitoring program, noting the program added lamprey as a target species.

DeHart described the pilot lamprey effort at John Day Dam and in response to questions, went into detail on the protocol. We reported back to the lamprey technical work group and U.S. Fish and Wildlife Service (USFWS) and are now waiting for guidance on what to do in 2012, she said. DeHart said FPC will also get advice from the agencies and tribes about the 2011 pilot.

She went on to describe the FPC's annual gas bubble trauma monitoring program, the results of which are reported to the Corps. DeHart then gave an update on the CSS. She noted that in 2011, FPC held a technical workshop on the CSS, to which they invited scientists from across the country that are doing similar analyses. We take recommendations at the workshop and see if we can improve our procedures, DeHart said, adding that a record of the workshop is posted on the FPC website.

She listed topics added to the CSS report in 2011, including whether fall Chinook are holding over before migrating and whether river operations have an effect. FPC also added a chapter to the CSS on age at maturity, which prompted ISAB comments, she said, adding that FPC would be looking at jacks and jack returns. DeHart said 2011 was the first year FPC had an analysis of upper Columbia spring Chinook, done at the request of the Washington Department of Fish and Wildlife, and we were able to calculate smolt-to-adult returns (SARs) to McNary Dam.

In adding the new CSS chapters, we had to rewrite the software program for the study, she continued. DeHart described how the rewrite is being accomplished, reporting that it will be done by the 2012 CSS analysis. She presented a table of the tags from groups of hatchery fish

that FPC uses for its studies. We try to find more and more tagged groups we can use in our analyses, DeHart said.

Providing technical assistance and information to fish and wildlife agencies and tribes is part of our mission, she said, and presented a list of the requests received in 2011. DeHart noted that lamprey were a big component of the questions in 2011. She said FPC continues to work closely with the Corps on its fish operations and maintenance program. DeHart also reported on the presentations FPC staff made at the request of agencies and others, and she provided numbers on requests for data and analyses, noting that most come from agencies and tribes and some from the public. DeHart said there were 537,158 data downloads, most from the FPC website.

She went on to a report on FPC website changes. The data downloads were 30 percent higher in 2011 than in 2010 and that may be because we added a lot of data to the site, DeHart stated. Because FPC had so many requests, it hit the limits of what its server could handle, she said. Clearly, we had to establish a web farm to control traffic, and by making that change, we think we resolved the issue, DeHart stated. She presented a map showing where the web inquiries originated and said spring and summer are the periods of highest use.

DeHart reported that the Adult Facilities Inspection Program went smoothly in 2011, and 87 inspections were conducted. This year, FPC participated in reviews of the lamprey passage facilities, she said. DeHart wrapped up by saying FPC met all of its reporting requirements.

Eric Merrill asked who was making inquiries on the FPC website. DeHart said most are from individuals, and she speculated that Internet access via phones led to the overload on the site.

She asked if the FPCOB had suggestions that would make the annual report more useful.

Measure said the "least controversial" presentation is best, but it might be useful to have some comments on what is happening in general. DeHart pointed out that 2011 was a high flow year so that might be interesting to add context.

Dan Goodman said the additional years of monitoring data are useful.

## **ISAB Review of FPC Products**

Rich Alldredge provided an ISAB report on the FPC's 2011 products. He said the 2009 amendments to the Council's F&W program called for regular independent science reviews of FPC products. And he gave a list of criteria used for identifying which FPC products the ISAB will review.

Starting with the FPC and CSS annual reports, Alldredge said the review concluded the reports are an extensive effort and are getting better. The 2011 CSS report contained many useful tables and figures, he said. The ISAB recommended further review of the approaches to modeling bypass systems in Chapter 7 of the CSS annual report, Alldredge said.

He said the ISAB reviewed three technical memos related to latent mortality of in-river migrants due to the route of dam passage, and our conclusions were much the same for all three memos: "the relationships observed between latent mortality and bypass passage are confounded with other factors that obscure unambiguous interpretation." The ISAB recently completed the follow-up review of Chapter 7 of the CSS report, Alldredge said.

He listed the key questions the ISAB raised in its Chapter 7 review, including defensibility of the original analysis; inclusiveness of evidence from other studies; alternative explanations of the data; and the overall strength of support for conclusions involving latent mortality. Alldredge gave additional detail on the questions raised and the ISAB's view of the FPC conclusions. Overall, he said, the FPC results are consistent with other studies indicating that fish passing through the bypass system at dams experience higher mortality within the river and downstream of Bonneville Dam.

The bypass-survival relationships are complex so the interpretation of effects should consider a number of factors, Alldredge said, such as size and disease status of the fish; bypass characteristics at each site; variations in spill, predators, reservoir temperatures; and estuary and ocean effects.

Richie Graves said one of the fundamental problems is that researchers can get detected fish back in hand but not others that are not detected. Could you get fish that are spilled back to evaluate? he asked. At this point, you don't have an apples-to-apples comparison, Graves said.

The FPCOB discussed with Alldredge the difficulty of getting an adequate comparison between fish that go through the bypass system and those that do not.

DeHart said the FPC and CSS oversight committee would go through the ISAB's January 3, 2012 memo and address the issues raised. We should be able to address some of the comments, she added.

There was further discussion of how a sample might be obtained for non-bypassed fish. DeHart said PIT-tag data provides information about which fish go through the bypass systems. Right now, it appears fish that go through the bypasses are having some difficulty, she said. When fish return, we know if they were bypassed by the tag detection history, DeHart stated.

The issue of selectivity was raised, and Alldredge said there may be a hypothesis to test about why some fish are in the bypass system and others are not, which could explain the SARs difference. We need more information, he said. The challenge is how you get it; if it were easy, we'd have done it, Alldredge added.

The FPCOB discussed selectivity and whether there are biases associated with the time and place of tagging.

Dean Holecek said the Corps wants to solicit managers in March to study this very question. We could take advantage of the receivers in the system this year, he said.

Alldredge said some research indicates fish bypassed once are more likely to be bypassed again. Another related selection hypothesis is that if fish are weak to begin with, they are weak later on, he said. Multiple explanations of the same phenomena are possible, Alldredge added.

Jim Ruff said with regard to damage to fish, some bypass systems are not functioning properly and some outfalls are in poor locations. We are addressing those things, he said.

DeHart explained additional details of how the CSS analysis is conducted.

The key issue is there is concern as to the process, Measure said. Do we want to refine that question for the next meeting? he asked.

Alldredge said he hoped the ISAB review would encourage continuing discussion and exploration of the issues.

DeHart reiterated that FPC would look at the January 3 ISAB memo and let the CSS oversight committee address the issues. The first step is to look at the memo and see if there are ways to address the issues, she stated.

Measure asked when that could be done. DeHart said there are comments from the technical workshop that might shed light and the issues could be considered in April in responding to the ISAB. There appears to be a bypass effect, and we haven't addressed the why, she stated. But without spill, all fish go through the bypass system or turbines, DeHart said. A response could be available by the FPCOB's spring meeting, Measure clarified.

## **Other Business**

Kerry Berg said this is the first time the guidelines for the ISAB have been tested with the review of three technical memos. Did this go okay? he asked.

Goodman suggested the FPCOB is experiencing "mission creep." It deserves thought from the Council about whether this is the role for the FPCOB, he said. We sought review from the ISAB, and we have the review, Goodman said. We can issue their report, but we are choosing to pursue the science further, he pointed out. Is that what the Council intended? Goodman asked.

Graves said he agreed with the protocols and would support continuing them for a year.

Berg also said the board previously discussed having Randy Fisher attend a meeting, but that was not arranged this time because of time constraints. Measure suggested scheduling Fisher for the FPCOB's May meeting.

Measure suggested the FPCOB 2012 meetings be scheduled for May, September, and December. There was discussion of the meeting dates and a suggestion the December meeting be moved to January 2013. The FPCOB agreed on May, September, and January meetings to be held on the Monday before the Council meetings.

Measure pointed out that Oregon and Washington share a seat on the board and he was unsure whether Oregon would continue. He also announced he would be stepping down from the chair to let someone else take over. Measure suggested Council member Bill Bradbury to replace him. The FPCOB members gave head nods of approval to have Bradbury assume the chair.

The meeting	adjourned	at 3:32	p.m.

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