



**COLUMBIA
BASIN
FISH & WILDLIFE
AUTHORITY**

DRAFT

DATE: June 2, 2006

TO: Fish Screen Oversight Committee

FROM: Frank Young, Coordinator

UBJECT: Action Notes for the May 25, 2006 FSOC Meeting in Portland

FSOC Workshop
May 25, 2006
Portland Oregon – CBFWA Office

Draft Action Notes

Attendees: Brian Zimmerman (CTUIR); Susan Novak, John Johnson, R.Z. Smith and Bryan Nordlund (NOAA-F); Drew Baird, Gene Humbles and Dave Jennings (USBR); Jody Brostrom and Doug DeHart (USFWS); Bernie Kepshire, Michael Lambert and Ray Hartlerode (ODFW); Lynn Stratton and Jim Lukens (IDFG); Donald Haring, Eric Egbers, Bruce Heiner and Gina McCoy (WDFW); Mark Schuller (NRCS) and Frank Young (CBFWA)

ITEM 1: Review and Discussion of Revisions to the NOAA-F Fishway Design Document

Discussion: Bryan stated that the Draft NOAA-F Fishway Design Document is currently undergoing internal review and revision. Bryan noted that one of the charges of FSOC is to foster technical relationships between agencies in the three northwest states, and to develop consensus on criteria for the design of fishways. Bryan re-iterated his desire for the agencies represented at FSOC to be at least comfortable with the NMFS Fishway Design Document, and his expectation that the FSOC could provide valuable peer review. Bryan stated that the NMFS Fishway Design Document is expected to be a working document, and future revisions are expected based on comments received and further experience with the design, operation and maintenance of fishways.

In the current draft, the document provides agencies with the opportunity to propose alternative criteria subject to NMFS review and approval for a project or set of projects that affect fish under NMFS jurisdiction. There will also be a rationale section and bibliography added to each section of the document.

ACTION: When revised sections are completed, Bryan will provide copies to Frank Young for posting to the FSOC Webpage for further FSOC review and

comment.

ITEM 2: Update on the Status of Some Experimental Techniques in the Region

Discussion: Bryan reported that NMFS had reviewed and commented on the USFWS biological evaluation of the Gooby Bubbler screen. Since the test fish had a fair degree of difficulty locating and using the bypass (only 18% were successfully bypassed), NMFS will not include this technology as acceptable for the protection of anadromous salmonids. Doug Dehart commented that the letter sent from NMFS to USFWS on this topic clearly identified problems with this technology and provided excellent supporting background information and analysis of the effects of the screen.

Bryan also reported that NMFS is no longer allowing testing of the Swim Through fishway on anadromous fish, based on high mortality of adult chinook in a previous test at a hatchery intake, and the lack of subsequent refinements to the technology that would improve survival.

ITEM 3: Discussion Possible Study Objectives for Evaluation of Roughened Channels

Discussion: Drew Baird presented three PowerPoint presentations demonstrating testing of roughened channels at the USBR Denver Technical Service Center Hydraulics Laboratory. The presentations were titled “Physical and Numerical Modeling of Steep Rock Ramps”, “Rock Ramp Design Guidelines” and “Alphabet Weir Design Guidelines.” All of these presentations are available on the FSOC Webpage.

Bryan reported that a recent agreement with Grant County PUD provided funds for tributary enhancement work, and may help fund work on roughened channel criteria development. In addition, Chelan County and Douglas County PUD’s have similar agreements for funding tributary work. He was not entirely sure of the process involved for choosing projects, but promised to speak with the NMFS Tributary Committee representative to assure that assisting the USBR with funding for lab studies and mathematical modeling for development of criteria for roughened channels could be considered in that committee. He stated that his primary concerns with roughened channels were the durability of the structures, and the ability to maintain sufficient flow depth during low flow periods (i.e the 95% exceedence flow during migration periods). Drew reported that a goal of his work is to investigate these issues and develop tools to assist engineers in designs.

Gina McCoy commented that often the flow depths expected in roughened channels exceeded depths through natural riffles in the stream, and she could not understand the rationale behind this. Nordlund responded that NMFS currently calls for a one foot minimum depth through a roughened channel that is expected to provide passage for chinook. He acknowledged that this was conservative, and explained that

in general, NMFS guidelines and criteria are intentionally conservative to allow passage around a created impediment by providing optimal conditions for passage. Shallow depths expose fish to potential predation and injury, and will cause migrational delay if depths are too shallow. Nordlund also commented that the NMFS criteria for passage design flow calls for passage between the 5% and 95% exceedence flows, based on mean daily flows for the migration period. He expected that during the migration period for chinook, flow depths through most riffles would not be much shallower than one foot.

Bryan reported that Susan Novak, a new engineer with NMFS, will be the lead on criteria development for roughened channels with assistance and oversight from NMFS senior engineering staff.

ITEM 4: Future Funding Outlook for Fish Screening

Discussion: Bill Maslen sent the following email response to a request for information on BPA funding for screening:

- Diversion owners are required to comply with screening guidelines (e.g., NOAAAF); screening is not a BPA responsibility. Any support by BPA for construction, upgrades, retrofits, and/or O&M (or other screen-related activities) is discretionary, offsite mitigation where we expect significant cost-sharing.
- BPA may be willing to cost-share on screening activities given that there can be significant biological benefit (screening may be a high priority activity addressing important limiting factor). We also may find the screening activity to be less costly compared to alternatives. As such, we may consider a screening project a priority for BPA cost-sharing because it could "make best use of available \$\$ for benefit of fish."
- When BPA provides funds for screening activities, we do so to assist the responsible parties to help expedite priority actions. The owner or beneficiary should be responsible for O&M and any future improvements that may be necessary. That is, BPA does not want to take on new responsibilities or obligations on behalf of others.
- We would like greater consistency in our treatment of screening projects across the basin, which includes cost-sharing. We also want to clearer about issues like ownership, O&M, longer-term replacement/upgrades/retrofits/etc.

Jody Brostrom provided a handout describing the status of FRIMA funding (attached).

R.Z. Smith reported that the Mitchell Act is level-funded (around \$3M primarily for O&M) in the President's Budget for FY 07. He encouraged

the managers to speak with their congressional representatives about the importance of these funds for their programs and how the various sources of screening funds are used together to get maximum return on the dollar.

ITEM 5: Discussion of NRCS Conservation Security Program (CSP) Impact on Fish

Discussion: Mark Schuller stated that he felt that the CSP was not the appropriate program to fund fish diversion screens especially since it is basically landowner implemented with few NRCS staff available for assistance and provides the most support for upgrading of existing screens and lowest support for funding new screens. Mark recommended the Environmental Quality Program (EQP) for assistance with fish screening even though the current funding level is relatively small. The EQP funds irrigation efficiencies to allow more water to remain in the stream for fish and wildlife enhancement. Additionally, the NRCS Wildlife Habitat Incentive Program (WHIP) could be used for fish screening. Both of these programs are relatively small but could grow with more local support.

ITEM 6: Is Any Screen Better than No Screen?

Discussion: Lynn Stratton pointed out that there are some diversions in Idaho which either lack screens or have screens that do not meet current state and federal criteria. In some cases an NGO may be willing to partner with a landowner to put in an inexpensive screening system that is effective most of the time but are unwilling to fund screening that meets criteria under all conditions. Also, more diversions can be screened with the low cost systems. Lynn wanted to know how this issue is being addressed by other states. Ray Hartlerode stated that Oregon does not require (no enforcement) screening of diversions >30 cfs so if a landowner screens such a diversion that does not meet state criteria ODFW takes no action, but if any state funds are involved the screen must meet state criteria.

There was considerable discussion in the group regarding the use of “criteria” screens. In general, it was acknowledged that many screens could not be operated to criteria for the entire year, because streamflow conditions often do not allow full diversion for bypass flow. Ray Hartlerode noted that closing a bypass to keep rearing fish in a ditch was preferred over routing fish back to a dewatered stream, with the bypass reopened when streamflow allows. Nordlund agreed, and commented that the primary goal for his agency was to allow ease of egress for the primary out-migration period.

Brian Zimmerman raised a point regarding the cost of “criteria” screens, and inquired about the rationale for requiring a full criteria screen at the expense of forgoing screening at other sites due to limited funds. RZ Smith commented that in general, everyone felt good about screen installation and funding screen construction was viewed as a “win-win” situation. Brian further explained that in one instance, NMFS required

screening for the entire water right, which had never been fully utilized at the site.

Bryan Nordlund commented that NMFS engineers are typically involved in a discussion with a variety of stakeholders regarding a conceptual design. He pointed to examples where screens are often designed for flows in excess of the water right, because some state water law allows unlimited diversion during the spring freshet, and restrict diverters to water rights only when flows drop. Since the fish usually migrate with the freshet, it was important to size screens for the expected flows. He admitted that he did not fully understand the rationale for choosing to overbuild screens in the example that Zimmerman raised, and encouraged stakeholders to engage in the conceptual design process to assure that screen funds were being spent appropriately on good site specific designs.

ITEM 7: Discussion of Annual FSOC Workshop

Discussion: Eric Egbers distributed a “Call for Presentations” for the 2006 Fish Screening and Passage Workshop scheduled for September 12-14 in Yakima. Eric said that they are working on a float trip and golf tournament for attendees and encouraged everyone to make their reservations early. A registration form will be coming soon.

ITEM 8: Date and Location of Next Meeting. There was some discussion of an FSOC meeting in conjunction with the Annual Workshop. Frank said that he will work with Eric to try to find a time in the schedule.