

TR 2 Fish Passage: Log of ODF Responses to NMFS Comments May 2005

Comments Incorporated

NMFS: What percent of upgrades are attempting to be made by 2012

- ODF: 100% on private industrial forest land. We added the following sentence:
Private and state forest landowners intended to complete upgrades on 100% of their crossings with the understanding that it is an ongoing process.

NMFS: The assumption that all projects reported to OWEB pass fish is big. Is there evidence that this is true.

- ODF: This is a very good point. The authors have added clarifying language on the importance of this assumption in the methods section:
"Fish passage status was provided by landowners and we assumed all OWEB stream crossings passed fish. For the purposes of this study we did not verify if crossings passed or blocked fish access. This would be an important element of future studies of this nature."

In the discussion we had already discussed this limitation and no changes were made: "Additionally, the meaning of "passes" and "limited" passage status for each crossing is neither a precise nor quantified term and may vary among land owners. These limitations introduce uncertainty into our results. In aggregate, the limitations are likely to have little effect on our estimates of fish passage status and habitat access for coho streams. The error in our estimates is likely to increase as we move up the channel network, where potential missing data and imprecision in crossing locations is compounded.

NMFS: Add citations:

- ✓ ODF: Lorensen et al. was added. Clarke et al. and Burnett et al. are not prepared to cite. We changed these to personal communication.

NMFS: What impact does lumping partial and complete barriers have on the conclusions?

- ✓ ODF: We added the following language to clarify this.
This "lumping" exercise provides a conservative estimate of fish passage. Undoubtedly, some barriers treated as total barriers provide some passage thus potentially overestimating our estimate of inaccessible stream miles."

NMFS: Don't need Figure 2 and Table 6, Figure 3 and Table 7.

- ✓ ODF: Dropped Tables 6 and 7.

NMFS: Need more monitoring at the population scales.

- ✓ This may be true in the context of influence on coho. However, we don't feel it is appropriate for us to establish the scale at which monitoring should be undertaken. That will depend on the questions and priorities of on the part of those investigating the issues. For example, is the population unit the most appropriate scale for evaluating effectiveness of various culvert designs or tide gate approaches? Likely not. However, we did add the following discussion on scale.

“As the state develops its effectiveness monitoring program it will be important to evaluate and prioritize the scale of interest. For example, for this study, we could only answer questions at the ESU scale. In the future it may be important to evaluate habitat access at the population unit.”

Comments Not Incorporated

NMFS: Well written and impressive effort so far.

- ODF: We are pleased the NMFS recognized the magnitude and relevance of the data and analyses.

NMFS: Need to fill the data gaps.

- ODF: This is the most complete data set of its kind in the region. We listed the missing data we are aware of, why it was not incorporated, and recommended that it be used in future iterations. NMFS comments are re-stating our own description of missing data. No changes were made.

NMFS commented that we should use existing barrier and culvert inventories. We did. No changes were made

NMFS: What fraction of passage improvement projects are actually reported to OWEB?

- ODF: This would be good to calculate in the future. We did not have time to do this analysis.

NMFS: Please explain agreement of agencies using “these criteria”

- ODF: Not sure how to further clarify the nature of the agreement. We would be happy to discuss with NMFS to expedite the communication and understanding of the program. No changes were made to the document.

NMFS: Explain why these questions are being asked.

- ODF: No changes were made. The authors think the existing lead-in sentence succinctly describes why the questions are being asked:
“The goal of this analysis is to begin to frame fish passage improvement projects in the context of coho habitat and stream miles opened to fish as a result of those projects at a broad spatial scale (ESU).”

NMFS: A series of questions are posed regarding inaccuracies of locating barriers. The questions seem to be asking ODF to provide some sort of qualitative judgment in this regard.

- ODF: We made no changes to the document. The document currently includes a quantitative analysis of accuracy and data completeness which the authors believe is superior to a qualitative discussion which only serves to put the paper in the realm of opinions.

NMFS: Need to do the sensitivity analysis in terms of stream miles, not percentages.

- This is a good idea, and ODF could pursue that analysis at a later date. No changes were made for this document.

NMFS: There is no evidence that volunteer efforts are likely to continue.

- ODF: The State disagrees. Biennial Oregon Plan reports demonstrate continued participation in Oregon Plan activities 8 years after the establishment of the Oregon Plan. We believe that NMFS is wrong with the assertion that for some reason volunteer activities will simply evaporate and have seen no evidence to support the assertion. It is possible that NMFS comments reflect a cultural paradigm that the only way to get landowners to do the right thing is with a regulatory approach. The continual dismissal of contributions from volunteer efforts is not only counter productive but conflicts with information on compliance and implementation put forth in the states report.

NMFS: It is premature to conclude that fish passage can be eliminated as a risk to coho.

- ODF: Nowhere in this paper do the authors conclude that fish passage is no longer a risk to coho. In fact a direct quote from the paper provides the opposite conclusion: *"With unknown access to approximately 1/3 of the habitat, fish passage cannot be eliminated as a risk to coho at this point in time."* No changes were made.

The authors do suggest that increased regulation likely will not improve implementation of fish passage improvement projects nor the effectiveness of approaches. We called for a need for systematic, scientifically valid monitoring of fish passage improvement projects, and to improve our understanding of the extent of the problem, given that 28-31% of the crossings had an unknown passage status. No changes were made.