

SKAGIT SYSTEM COOPERATIVE

Swinomish • Upper Skagit • Sauk-Suiattle



MEMORANDUM

TO: Karen Mettling, Environmental Coordinator
FROM: Steve Fransen
DATE: January 31, 1979
SUBJECT: LEVEE IMPACTS ON THE FISHERY RESOURCE

The interest of the Skagit System Cooperative is to maintain natural production of salmonids in the Skagit basin at least at the present levels. In fact, some populations are gradually increasing.

The planning coordination of the Corps with this organization has been very good, and I believe it has served to substantially reduce adverse impacts to the fishery resource. Continued coordination, and monitoring through the construction phase, should alleviate many of the problems that may arise during implementation of the project.

I have some comments on specific impacts and proposed mitigation. These comments are mainly the result of the January 25 interagency workshop.

1. The agreed upon levee realignment on Tom Moore Slough (St. 1052-1120) will better serve the fishery resource by reducing streamside habitat alteration.
2. Relocating the mouth of Fisher Slough imposes a temporary impact during construction; no permanent adverse conditions are expected. Although design specs aren't finalized, a slide gate flood control structure is preferable to a flap gate for purposes of fish passage. Deleting the remainder of Fisher Slough from the project area eliminates any additional impacts in this area.
3. The four miles of instream riprap is properly considered an adverse impact in terms of eliminating fish habitat or reducing its quality. Proposed mitigation for 7450' in five "critical" reaches (1) includes an 18" thick blanket of riprap with about four vertical feet above mean high water to be revegetated with selected shrubs. Based on the discussion at the workshop, I have doubts that this will provide adequate fish habitat to replace the expected losses. However, it may be the best onsite mitigative alternative that is consistent with the project purpose.

The remaining instream riprap, approximating 2½ miles total, will receive sod and grass cover on the top and upper sideslope. In all probability this would not benefit fish habitat.

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Memorandum to:
Karen Mettling, Environmental Coordinator

If habitat losses cannot be further reduced in the instream riprap reaches, then habitat improvement or restoration in other lower Skagit locations should be considered. First among these is the addition of culverts to the upstream end of the Deep Slough extension, (called Center Slough by John Garrett of Washington State Department of Game). Opening this channel so that it receives and flushes freshwater will provide habitat for nearly 2,000 coho smolts annually. Chinook, pink, and chum salmon that utilize estuarine and lower river rearing areas will also benefit from this type of habitat restoration.

I would recommend at this point that a survey be initiated to locate additional fish habitat restoration and improvement opportunities, and that they be incorporated as a part of the final mitigation plan.

4. "Edge" habitat, the line dividing forested and unforested areas is critical to wildlife, particularly along streams. Removal of overstory vegetation for levee improvements eliminates some critical habitat. Proposed mitigation is offsite planting on the Skagit Wildlife Recreation Area. Where possible, this planting should be done along streambanks presently void of overstory. Mitigation plantings of overstory on areas not adjacent to the stream will offer little benefit to the fishery resource. I believe the final environmental report should address the role of overstory vegetation in the aquatic environment. Trees provide shade to the stream and temporary habitat for terrestrial and adult aquatic insects that are important food sources to fish.
5. The proposed concrete wall along the Mount Vernon waterfront (St. 618-647) will probably completely eliminate fish utilization of this area.

(1) Riprap to be revegetated:

North Fork, LB, St. 421-227
North Fork, LB, St. 140-125
North Fork, RB, St. 829-818
South Fork, RB, St. 142-147
Main Stem, RB, St. 600-570

SF:db

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