



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
SEATTLE DISTRICT, CORPS OF ENGINEERS
P.O. BOX 3755
SEATTLE, WASHINGTON 98124-3755

Planning Branch

Mr. Steven W. Landino
Washington State Habitat Branch Chief
National Marine Fisheries Service
Habitat Program/Olympia Field Office
510 Desmond Drive SE/Suite 103
Lacey, Washington 98503

Dear Mr. Landino

Thank you for your letter, of 10 October 2001, with Subject, Skagit County Flood Reduction Study. For this project to proceed to construction, we need to closely coordinate on issues affecting fish and their respective habitat. I will briefly highlight your concerns here and maintain your letter as input to the design process.

We are committed to properly analyzing the direct and indirect impacts of all the alternatives, and assessing means to mitigate for those impacts. The two-year construction schedule will have some adverse impacts, but these will be minimized by scheduling work around critical fish windows, minimal in-water work with safeguards and by planning most of the construction in the dry. Every effort will be made to avoid, eliminate or minimize impacts to the environment before considering other mitigation measures.

In addressing potential indirect effects, there would still be restoration opportunities along the existing levees. Development would be restricted by state guidelines for growth management and the Seattle District would follow the guidelines established in EO 11988 when selecting a project to move forward to construction. While much of the flood plain would be removed from the 100-year flood event by this project's protection, the county would maintain present zoning. To lessen the sediment impact on Padilla Bay and the maintenance costs of Swinomish Channel, the saltwater marsh would be developed as a sediment trap, where flows would be substantially reduced upon leaving the diversion and the sediment would fall out in the estuary.

As the design proceeds, we encourage continued suggestions for implementation to reduce impacts on habitat. The features mentioned in your letter will be considered for addition as basic project features. The following comments are in response to your bullets.

- Where levees are setback, the riprap will be removed from the riverbank. Riprap will still be required on the new levee section to protect it from flood velocities and debris impact for the life of the project. Maintenance

of the setback levee prism is required to insure the project lasts and is capable of performing its function. Since the levee will be setback and a riparian buffer established (see below) the need for establishing woody vegetation on the setback levee face will be reduced.

- While maintenance is a required part of maintaining the levee, opportunities remain for developing riparian buffers outside of the structural footprint of the levee and providing some vegetation on existing levees that are not set back from the river.
- For levees that are impacted by each alternative, the Corps will inventory existing drainage structures and assess the potential for retrofitting each structure for fish passage. There are numerous historic sloughs that have been relegated to drainage ditches that the project will intersect. There are some opportunities for partial restoration of their original natural function. We are performing a study at this time that both identifies and prioritizes opportunities for side channels and cut off sloughs. We expect the report to be complete in January of next year.
- We are presently designing a low flow channel with a riparian buffer in the diversion. We are also designing a structure that would allow access between the Swinomish Slough and the Skagit River for both adult and juvenal salmon. Please note however, that an analysis of the benefits of the low flow channel might indicate that there are other more cost effective alternatives for compensating for the possible loss of fish due to construction and operation of the bypass, such as habitat restoration on the main-stem or retrofitting existing levees with bioengineering and other habitat structures.

Thank you for your input and concerns. We look forward to continuing to work with your office to obtain desirable results to improve the critical habitat for the Puget Sound Chinook. If you wish to discuss these issues further, please call me at (206) 764-3690 or Mr. Stephen Pierce, the project manager, at (206) 764-3456.

Ralph H. Graves
Colonel, Corps of Engineers
District Engineer

Pierce PM-PL

Scuderi PM-PL-ER

Brunner PM-PL-ER

Ziminske PM-PL-ER

Sexauer PM-PL

Exec Off

Col. Graves/s/

CC:

Mr. Dan Tonnes
Washington State Habitat Branch Office
National Marine Fisheries Service
Habitat Program/Olympia Field Office
510 Desmond Drive SE/Suite 103
Lacey, Washington 98503

CENWS-PM-PL Pierce
CENWS-PM-PL-ER Scuderi
CENWS-PM-PL Sexauer
EN-PL File