

**Date:** August 14, 2002  
**Project Name:** Deep Water Slough, Skagit River Basin  
**Non-Federal Sponsor:** Washington Department of Fish and Wildlife  
**Location:** Skagit River  
**Congressional District:** 2  
**Project Completion:** October 2000  
**Project Cost:** \$2,000,000  
**Authority:** Section 1135 of WRDA 1986, PL 99-662  
**Project Manager:** Corey Loveland, 206 764-3488

**Project Location:**

Deepwater slough may be the largest estuarine restoration project completed to date in the Puget Sound Basin. The project took place in the State of Washington's 1,400-acre Skagit Wildlife Area, which includes parts of Fir and Milltown islands. Deepwater Slough, also called Freshwater and Steamboat sloughs, is just south of Conway.

**Project Description:**

The project removed 14,000 lineal feet of existing levee to restore approximately 230 acres (US Fish and Wildlife Service estimate) of intertidal estuary. The project constructed 8300 lineal feet of new levees and augmented 10,000 lineal feet of existing levee to better protect duck habitat. The project placed two 24-inch ADS culverts through the new levee alignments for future water control structure placements. Additionally, 10 culverts were placed through ramps and crossings to aid drainage and 10 access ramps were constructed for field access from the new levees. A new boat ramp was constructed on the eastern island for use by the Department of Fish and Wildlife to land farm equipment until a bridge can be constructed across Deepwater Slough.

The Milltown Island dike was breached to reintroduce the river and tidal influence to other wetland habitat and remnant channels. The combination of removing, reinforcing and constructing dikes allows for greater environmental diversity while still allowing protection of existing critical waterfowl habitat.

**Project Results/Monitoring Status:**

This project will continue to evolve over the next 5-25 years as new vegetation replaces pioneer species and the previously impounded areas become flooded and new channels develop. However, the initial success of this project appears to be so good, the Skagit Cooperative Fisheries Unit (Skagit Indian Tribes) is undertaking assessment of a companion restoration project in the next slough to the north, Wylie Slough, a similar sized restoration area of approximately 200-250 acres.

The Skagit Cooperative Fisheries Unit in cooperation with the U.S. Fish and Wildlife Service and Corps of Engineers has conducted baseline (pre-project) and post-project construction monitoring of Deepwater Slough. Monitoring is also occurring in areas just downstream of the project area to compare development of the post project area with natural functioning estuarine habitat areas (reference sites). Pre-project work included monitoring of fish use, vegetation and channel conditions. Post-project monitoring funded by the Corps of Engineers began in 2001 and will continue through 2005. Corps funding provides for

\$25,000 every other year beginning in 2001. The Skagit Coop will provide a draft report with results of the first two years of monitoring in December 2002. Beginning in October 2002, the Corps will work with the Coop and USFWS to develop a 3 year work plan (2003-2005) for federally funded monitoring activities.

For additional information and photo slideshows of the project please visit the Seattle District website: <http://www.nws.usace.army.mil/em/const/deepwater.cfm>