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**OTHER FINAL REPORT**

RECREATION AND CONSERVATION OFFICE

**Sponsor Name: Isl. County Planning & Comm. Dev.**

**IAC Project Number: 05-1491 N**

**Project Name: Ala Spit Feasibility**

**IAC Invoice Voucher Number: 4**

1. Reporting period: 10/1/08 - 11/01/08 Contract Start: 01/01/06 Project Completion: 11/01/08

2. For Trail Maintenance Projects: provide one map identifying all the trails that were maintained in this project [no larger than 11" x 17" size]. Please date the map.

For Planning Projects: Copies of final design documents or plans (if not previously submitted.)

3. Briefly describe the work completed with this project:

**Sponsor Comments:**

Ala Spit is an Island County Park (acquired in 1995) on northern Whidbey Island along the Skagit Bay, in WRIA 6. The sand and gravel spit comprises about 8 acres, and protects a pocket estuary that is frequented by juvenile salmonids -- ESA listed Chinook and other species -- from the Skagit River system (5 miles distant). An estuary at the Spit supports forage fish and habitat important to salmon life cycles. However, the neck at Ala appears to be eroding; a breach could endanger the estuary's marine habitat and functions. To determine the cause of erosion and means to protect the estuary for salmon recovery, Island County applied for SRFB assistance in 2005. In December, SRFB awarded Island County \$151,846 (total project cost \$187,641); contract with SRFB was formalized in March 2006, to be administered by Island County Planning & Community Development, as successor to the initial applicant, County Public Works. Cooperative partners were County Parks and WSU-Island County (Beachwatchers). Herrera Environmental Consultants (HEC) was selected from 4 other applicants as lead contractor for the scientific study and a

Contract with HEC was let on Nov. 20 '06, and work commenced, as follows: Task 1 - Existing information review; Task 2 - Historic and recent aerial photography and maps research; Task 3 - Geomorphic shoreline changes analysis; Task 4 - Ala Spit drift cell beach substrate characterization and assessment; Task 5 - Sediment Effects Development; Task 6 - Aquatic Habitat Characterization; Task 7 - Fish Habitat Use; Task 8 - Role of the Ala Spit dune plant community, driftwood and riparian vegetation; implications for the pocket estuary and in stabilizing the spit and barrier beach area; Task 9 - Watershed characterization: implications for the Ala Spit pocket estuary; Task 10 Restoration assessment and recommendations.

To assist with Task 7 (Fish Habitat Use), HEC and Island County engaged the assistance of tribal fisheries biologists from Skagit River System Cooperative (SRSC), who worked with a crew of volunteer seiners, from WSU-Island County Beachwatchers alongside staff from Island County Planning, from January through May 2007. SRSC drafted the report and analysis -- Juvenile Salmon and Nearshore Fish Use in Shoreline and Lagoon Habitat Associated with Ala Spit, 2007, by Eric Beamer, SRSC Research Program, LaConner WA, December, 2007. (See: [http://www.skagitcoop.org/documents/AlaSpitFishReport\\_Final2007.pdf](http://www.skagitcoop.org/documents/AlaSpitFishReport_Final2007.pdf)) This study was subsequently incorporated into the comprehensive project assessment. SRSC scientists also served as peer reviewers of same.

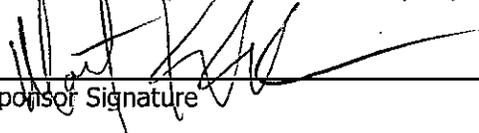
To complete Task 9 (Watershed Characterization), Island County's surface water quality monitoring scientists (a part of County Planning's Resource Enhancement Program) sampled runoff in the two watersheds that drain into Ala Spit estuary, and incorporated analysis of that data along with information from baseline site monitoring (Oct. '06 - June '07), historical land use, soil types, geographic characteristics, land features, development records, aerial and windshield surveys. (See: Ala Spit Watershed Characterization, by Island County Planning and Community Development, Coupeville, WA, August 2007). The project assessment incorporated this report.

Nearly 18 months were spent gathering and analyzing data about the ecologic, geomorphic and physiographic environment in the vicinity of Ala Spit, including both historic and existing conditions, and evaluating alternative strategies to restore and preserve the Spit. The extensive study involved collaboration among geologists, engineers and fisheries ecologists to characterize coastal geomorphology, substrate and wood, bathymetry, oceanographic conditions, sediment budget, morphodynamics, watershed conditions, human modifications, vegetation present in the dune and salt marsh habitats, and of course fish habitat use. Scientists and laypersons began review and comment on the draft report in April 2008; the final report was published that fall (Feasibility Study for Restoration of Ala Spit; Ala Spit County Park by Herrera Environmental Consultants, Inc., Seattle, WA, September 2008). Local residents and visitors of Ala Spit subsequently received copies of the Study.

Local information and community involvement in the two-year Ala Spit project included public presentations at Sound Waters, Feb. 2007; Island County Water Resources Advisory Committee (WRAC), summer 2006, and spring 2007 and 2008; Island County Planning Commission, summer 2007 and 2008; Board of Island County Commissioners, same; and two articles in a local newspaper, Whidbey News Times. A local professional photographer and Beachwatcher, Celia Bartram, was engaged to document sites at the Spit, estuary and uplands, and created informational displays for parks visitors; this assistance was funded through WRIA 6 Lead Entity with support from WA DFW.

The Feasibility Study concludes that the primary cause of Ala Spit's continued erosion and potential loss of salmonid habitat is from a riprap revetment placed on the Spit in the 1960s. This revetment has deflected the natural deposition of sediments, making a thinner and overly steep beach profile that reduces sediment input to Ala's estuary and resultant loss of nearshore habitat. Removal of the riprap will expand forage fish spawning habitat and improve the complex marine environment essential to the WRIA6 Salmon Recovery Plan (See: Multi-Species Salmon Recovery Plan, adopted by Island County ...May 9, 2005, Coupeville, WA). It is expected that a long-term improvement in large woody debris recruitment will also occur when the riprap is gone, of further benefit to salmon recovery. To help fund this restoration effort, Island County applied for SRFB funding assistance; in December, 2008 the Ala Spit Restoration project was awarded \$267,535.00 through WA Recreation and Conservation Office (RCO); total project cost \$314,737.00.

I hereby certify that this project has been completed in accordance with the Project Agreement. Further, I certify the completed project is consistent with both the scope of the project approved (as amended) by the Interagency Committee for Outdoor Recreation (IAC) or Salmon Recovery Funding Board (SRFB) and with the project application.

	6-26-09	Resource Enhancement Manager	360-678-7816
Sponsor Signature	Date	Title	Telephone