

**Project Title: FY10 amendment to EVOS project 10100750: Monitoring for evaluation of recovery and restoration of injured nearshore resources.**

**Project Period for the Amendment: June 1, 2010 – Sept. 30, 2010**

**Primary Investigators:**

**James L Bodkin, US Geological Survey  
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**Study Location: Western Prince William Sound**

**Abstract:**

**Under EVOS project 10100750 we will be providing an estimate of the abundance of sea otters in Western Prince William Sound that will be used to track the process of sea otter recovery. In this amendment, we are proposing to add funding to support replicate surveys of sea otters at Northern Knight Island, where recovery of sea otters has been delayed. The estimate of abundance at Knight Island will be used to track the process of recovery where spill-related effects and delayed recovery of sea otters was most evident.**

**FY10 EVOS funds requested, including GA: \$20,700**

Lead agency: U.S. Geological Survey

Note: no project management funds are being requested for this amendment.

**Procedural and Scientific Methods**

**Objective 1. Sea otter aerial Surveys**

We will continue to use previously developed aerial survey techniques that have been used in multiple EVOS projects to provide unbiased estimates of population size and density. These techniques employ standardized strip transect counts along survey lines, and intensive search units (ISU's) to estimate a correction factor for each survey (Bodkin and Udevitz 1999). We will conduct a single survey of the entire western Sound in 2010 under project 10100808. We are requesting, under this amendment, to also conduct replicate surveys (3-5 replications) of the heavily oiled northern Knight Island study site (previously sampled in the Nearshore Vertebrate Predator project (//025) and projects //423, //620, and //808). Because densities at the northern

Knight Island study area are low, replicate surveys are required to obtain precise and unbiased estimates of abundance that are comparable to prior estimates. Proportional standard errors of past surveys in PWS range from 0.09-0.18.

Estimated budget:

OAS aircraft charter 40 hours @ \$200/hr	\$8,000
Pilot salary 5d	\$3,000
Travel costs (5 d per diem)	\$1,500
Field work and analysis time 1 pp @ \$5000	\$5,000
Travel to Seattle 1 R/T air and per diem	\$1,500
Sub total	\$19,000
 GA @ 9%	 \$,1,700
<u>FY10 Total</u>	<u>\$20,700</u>

Measurable Project Tasks

FY 2010, 2<sup>nd</sup> quarter (January 1, 2010 – March 31, 2010)  
Project funding approved by the Trustee Council  
Field preparations underway

FY 2010, 3rd quarter (April 1, 2010 – June 30, 2010)

FY 2010, 4<sup>th</sup> quarter (July 1, 2010 – Sept. 30, 2010)  
Sea otter surveys performed  
Data analyses underway

Results will be included in the Final Report for project 10100750

Reference Cited:

Bodkin, J. L. and M.S. Udevitz. 1999. An aerial survey method to estimate sea otter abundance. *in*: Garner, G.W., S.C. Amstrup, J.L. Laake, B.F.J. Manly, L.L. McDonald, and D.G. Robertson, (eds.) Marine mammal survey and assessment methods. Balkema Press, Netherlands pg. 13-26