EVOSTC ANNUAL PROJECT REPORT

Recipients of funds from the *Exxon Valdez* Oil Spill Trustee Council must submit an annual project report in the following format by Sept. 1 of each fiscal year for which project funding is received (with the exception of the final funding year in which a final report must be submitted). Please help ensure that continued support for your project will not be delayed by submitting your report by Sept. 1. Timely receipt of your report allows more time for court notice and transfer, report review and timely release of the following year's funds.

Satisfactory review of the annual report is necessary for continuation of multi-year projects. Failure to submit an annual report by Sept. 1 of each year, or unsatisfactory review of an annual report, will result in withholding of additional project funds and may result in cancellation of the project or denial of funding for future projects. PLEASE NOTE: Significant changes in a project's objectives, methods, schedule, or budget require submittal of a new proposal that will be subject to the standard process of proposal submittal, technical review, and Trustee Council approval.

Project Number: 10100750 and 10100750-Amendment

Project Title: (1) Evaluation of Recovery and Restoration of Injured Nearshore Resources, and (2) Nearshore Synthesis - Knight Island Sampling Amendment

PI Name: Jim Bodkin and Tom Dean

Time period covered: Oct. 1, 2010 - Sept. 1, 2011

Date of Report: Sept. 1, 2011

Report prepared by: James Bodkin, Thomas Dean

Work Performed: Summarize work performed during the reporting period, including any results available to date and their relationship to the original project objectives. Explain deviations from the original project objectives, procedural or statistical methods, study area or schedule. Also describe any known problems or unusual developments, and whether and how they have been or can be overcome. Include any other significant information pertinent to the project.

Field work in western Prince William Sound (WPWS) was completed between April and July 2011. Tasks completed included:

Collection of sea otter carcasses for estimation of mortality rates - A total of 43 sea otter carcasses were recovered from WPWS in April 2011. Teeth from these animals are being processed and sent out for estimation of age at death.

Sea otter foraging observations - A total of 101 sea otter forage bouts were observed and recorded in WPWS, 27 bouts (278 dives) in April during the carcass surveys and 74 (724 dives) in June during intertidal sampling.

Black oystercatcher nest density and productivity - A total of 10 active black oystercatcher nest sites were observed along 5 transects (each 20 km long) in WPWS in June 2010. These sites were visited to determine productivity and composition of prey provisioned to chicks.

Sampling of intertidal invertebrates and algae - Five sheltered rocky intertidal sites previously established in WPWS were sampled in June 2011. A list of algal species present, percent cover of sessile intertidal invertebrates and algae, estimation of limpet density and size distribution, and the density of selected larger invertebrates (Nucella snails and sea stars), were estimated at each

site. In addition, temperature recording devices installed in 2010 were recovered with new instruments deployed at each site.

Sampling of mussels in mussel beds - Five mussel bed study sites previously established in WPWS were sampled in June 2011. Size distribution and density of mussels were estimated.

Sampling of infaunal bivalves- Five soft sediment study sites previously established in WPWS were sampled in June 2011. Species composition, size distribution and density of clams were estimated.

Estimation of eelgrass abundance - The percent cover of eelgrass was estimated at five selected eelgrass beds in WPWS.

Results from these surveys are under analysis.

Aerial surveys of sea otter abundance were conducted in June 2011 with support from the Department of Interior Aviation Management Division. Completed surveys will allow estimation of the abundance of sea otters in WPWS and intensive study areas at northern Knight Island and Montague Island. Aerial survey data are currently under analysis.

Future Work: Summarize work to be performed during the upcoming year, if different from the original proposal. Describe any proposed changes in objectives, procedural or statistical methods, study area or schedule. **NOTE:** Significant changes in a project's objectives, methods, schedule or budget require submittal of a new proposal subject to the standard process of proposal submittal, technical review and Trustee Council approval.

Work in the upcoming year is to be carried out as described in our DPD.

Coordination/Collaboration: Describe efforts undertaken during the reporting period to achieve the coordination and collaboration provisions of the proposal, if applicable.

Coordination with other nearshore, long-term monitoring efforts in the Gulf of Alaska continue. Monitoring similar to that conducted in PWS was completed at Kenai Fjords National Park in 2011 under support from the US National Park Service and the US Geological Survey. The US Fish and Wildlife Service conducted marine bird and mammal surveys in Prince William Sound (D. Irons, PI) and those data will be provided to this project. Coordination with Cook Inlet RCAC and NOAA (shorezone mapping and lingering oil projects) continues. Our project also coordinated with a USGS study investigating processes structuring nearshore marine communities from California to the Gulf of Alaska. Complementary data collection under the USGS study includes sea otter foraging and the capture of sea otters in WPWS. Coordination and data sharing with this study provided additional sites and increased sample sizes of sea otter diet for both projects. Health, condition and gene expression data resulting from sea otter capture will be made available to this project and should be useful in evaluating sea otter recovery from the EVOS. The methods and protocols tested and developed under this and prior projects have been incorporated into a comprehensive, multi-habitat long term monitoring proposal submitted to the EVOS Trustee Council, K. Holdreid, chief scientist.

Community Involvement/TEK & Resource Management Applications: Describe efforts undertaken during the reporting period to achieve the community involvement/TEK and resource management application provisions of the proposal, if applicable.

Information Transfer: List (a) publications produced during the reporting period, (b) conference and workshop presentations and attendance during the reporting period, and (c) data and/or information

products developed during the reporting period. *NOTE: Lack of compliance with the Trustee Council's data policy and/or the project's data management plan will result in withholding of additional project funds, cancellation of the project, or denial of funding for future projects.*No publications or presentations have resulted from the work to date.

Budget: Explain any differences and/or problems between actual and budgeted expenditures, including any substantial changes in the allocation of funds among line items on the budget form. Also provide any new information regarding matching funds or funds from non-EVOS sources for the project. **NOTE:** Any request for an increased or supplemental budget must be submitted as a new proposal that will be subject to the standard process of proposal submittal, technical review, and Trustee Council approval.

Due to an accident involving the US Fish and Wildlife Service aircraft scheduled for our use in June 2010, we were unable to complete the sea otter survey as planned. We reserved the funds provided to support the 2010 survey and applied them to completing the survey in 2011.

We can accept your annual report as a digital file (Microsoft Word or WordPerfect), with all figures and tables embedded. Acrobat Portable Document Format (PDF) files (version 4.x or later) are also acceptable; please do not lock PDF files or include digital signatures.

Please submit reports electronically in <u>ProjectView</u> or by email to <u>catherine.boerner@alaska.gov</u>. Also, please be sure to post your annual report on your own website, if you have one.



We appreciate your prompt submission of your annual report and thank you for your participation.