## 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: 050763

**Project Title:** Monitoring of Anthropogenic Hydrocarbons

PI Name: Jeffrey Short and Lisa Ka'aihue

*Time period covered:* FY05 – FY07

Date of Report: August 31, 2007

Report prepared by: Jeffrey Short

*Project website (if applicable):* (N/A)

Work Performed: The third and final field sampling campaign was successfully completed July, 2007. The remaining half of the human impact sites selected for sampling were visited and sampling was completed during a chartered cruise on the M/V Auklet. Also, the remaining 101 of the 200 random beach selections were examined for the presence of surface oil. All of human impact sites were in the southern half of the study area, whereas all of the 101 random beach sites were in the northern half. Results collected indicate that the statistical assumptions made to design the sampling program were adequate, so that statistically meaningful confidence intervals are now certain to be associated with our estimates of oiled beach areas resulting from prior industrial activity in the spill region and from refined oil products originating from the Monterey Formation in California that were release from storage tanks damaged by the 1964 earthquake.

Sample collection and analysis for 2006 round of the Prince William Sound Regional Citizens' Advisory Committee's Long-Term Environmental Monitoring Program were completed and the results presented in an annual report to that organization (see below). Samples for the 2007 round have been collected and await chemical analysis.

This project remains on schedule, and the results collected during the 2006 and 2007 field seasons devoted to estimating oiled beach areas from human impacts and the 1964 earthquake will be statistically analyzed in the coming months to support preparation of a publication for the peer-reviewed scientific literature and the final report for this project.

**Future Work**: The remaining second half of the sampling sites will be sampled during the 2007 field season, which will complete the data acquisition phase of this project. Also, samples of mussels collected from all three years of the project will be chemically analyzed. The mussel samples collected to date will be analyzed during 2007.

Another round of the on-going LTEMP sampling will be continued, the collected samples analyzed, and another report prepared for PWSRCAC.

Coordination/Collaboration: We collaborated with researchers at USGS (Dr. Gail Irvine) and at the University of Alaska (Dr. Dan Mann) to produce our first research paper stemming from this project (see below). We also collaborated with Dr. James Payne and Mr. William Driskell on the PWSRCAC LTEMP sample collection and report preparation.

Community Involvement/TEK & Resource Management Applications: The Describe efforts undertaken during the reporting period to achieve the community involvement/TEK and resource management application provisions of the proposal, if applicable. The annual report to PWSRCAC was submitted to that organization.

## Information Transfer: Publications:

Short, J.W.; Irvine, G.V.; Mann, D.H.; Maselko, J.M.; Pella, J.J.; Lindeberg, M.R.; Payne, J.R.; Driskell, W.B.; Rice, S.D. Slightly Weathered *Exxon Valdez* Oil Persists in Gulf of Alaska Beach Sediments after 16 Years. Submitted to Environmental Science & Technology, August, 2006.

Payne, J.R.; Driskell, W.B.; Short, J.W.; Larsen, M.L. Prince William Sound RCAC Long Term Enviornmental Monitoring 2004-2005 LTEMP Monitoring Report. Submitted to Prince William Sound Regional Citizens' Advisory Council, May, 2006.

Budget: No budget changes occurred

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 to science\_director@evostc.state.ak.us. 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.