## **EVOS ANNUAL PROJECT REPORT**

All recipients of funds from the *Exxon Valdez* Oil Spill Trustee Council must submit an annual project report in the following format by September 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. Satisfactory review of the annual report is necessary for continuation of multi-year projects. Failure to submit an annual report by September 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: 040774

**Project Title: Oil exposure biomarkers and population trends of Prince William Sound marine vertebrates** 

PI Names: Brenda Ballachey, Jim Bodkin and David Irons

Time Period Covered by Report: May – August 2004

Date of Report: 4 August, 2004

1. Work Performed: In June and July we collected liver and/or blood tissue samples from one species of fish, the masked greenling, two species of bird, the black oystercatcher and the pigeon guillemot, and one mammal, the sea otter. Samples were concurrently collected for a second fish species, the crescent gunnel, by NOAA Auke Bay Laboratory personnel as part of Project 040740. Samples have been appropriately preserved and biomarker analyses have begun. The bird tissues have been shipped to Woods Hole Oceanographic Institute, and the fish and sea otter samples are being shipped to UC Davis and Purdue University, respectively. Targeted sample sizes were achieved or exceeded for all species.

2. Collection of sea duck samples (harlequin and goldeneye) will be initiated during winter of 2005. Analysis of samples collected to date (as described above) has commenced and will continue through spring of 2005. Surveys of the marine birds will be conducted in FY 05 contingent on additional funding from the project titled "<u>Surveys to Monitor Marine</u> <u>Bird Abundance in Prince William Sound during Winter and Summer 2005</u>".

3. Coordination/Collaboration: Collection of fish, bird, and mammal tissues has been closely coordinated with the NOAA-Auke Bay Laboratory study of the presence and prevalence of lingering oil deposits. When possible, collections were made close to known locations of persistent *Exxon Valdez* oil. We are continuing to work with the same scientists and laboratories that conducted prior analyses. Collaborations with Drs. Esler, Stegeman,

Snyder and Marty and their respective institutions have been formalized and work is underway.

4. Community Involvement/TEK & Resource Management Applications: Contractual relations have been established with members and businesses within the communities of Cordova, Whittier, Valdez and Homer to achieve stated objectives.

5. Information Transfer: Efforts to date include sample acquisition and management. Data management will include compliance with the Trustee Council's data management policies.

6. Budget: Work completed to date has been within the projected budget. However, we had difficulties due to deterioration of equipment needed for capture of marine birds. As a result, we were forced to make unanticipated purchases and repairs to some equipment. Because of these increased costs for equipment maintenance and repair, we were not able to charter the vessels as planned and instead set up field camps as a base for capture operations. This change in our fieldwork resulted in more expenditure of funds on personnel and less on contracts for vessels than planned.

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SUBMIT ANNUAL REPORTS ELECTRONICALLY TO <u>brenda hall@evostc.state.ak.us</u>. THE REPORTS WILL BE POSTED ON THE TRUSTEE COUNCIL'S WEB SITE AND SHOULD ALSO BE POSTED ON THE PI'S WEB SITE. The subject line of the e-mail transmitting the report must include the project number and the words "annual report" (e.g., "035620 Annual Report"). Electronic reports must be submitted either as an Acrobat Portable Document Format (PDF) file or word processing document (Microsoft Word 2000 for Windows or lower or WordPerfect 9.0 or lower) with any figures and tables imbedded. Acrobat PDF 4.0 or above file format must be used, preferably in 'formatted text with graphics' (called "PDF normal" under Acrobat PDF 4.0) format. Minimally, "PDF searchable image" (called "PDF original image with hidden text" under Acrobat PDF 4.0) may be used if pre-approved by the Trustee Council Office. In either case, the PDF file must not be secured or locked from future editing, or contain a digital signature from the principal investigator.