

***The Exxon Valdez Oil Spill: Guidance for Future Research Activities  
“Submitted Under the BAA #52ABNF900033”***

Project Number: BAA 00360  
Restoration Category: Ecosystem Synthesis  
Proposer: Chris Elfring, Polar Research Board, National Research Council  
Lead Trustee Agency: NOAA  
Cooperating Agencies: N/A  
Alaska SeaLife Center: No  
Duration: 3rd year of three-year project  
Cost FY 00: \$196,450  
Cost FY 01: \$315,980  
Cost FY 02: \$84,236  
Geographic Area:  
Injured Resource/Service: potentially all

***ABSTRACT***

The Exxon Valdez Oil Spill Trustee Council is developing plans for a long-term environmental research and monitoring program in the northern Gulf of Alaska. The Trustee Council expects the research and monitoring to make it increasingly possible to detect and understand the origins and consequences of long-term biological change in the region, and to communicate this knowledge to all concerned. Funds from the trust are expected to be disbursed starting in late 2003. The National Research Council's Polar Research Board (PRB) and Board on Environmental Studies and Toxicology (BEST) propose to continue the committee appointed (list of members attached) to provide outside guidance to the development of the program and review the scope, content, and structure of the draft Research and Monitoring Plan. To date, the committee has provided guidance in two documents: a November 2001 letter report commenting on the schedule and process by which the draft science plan would be developed and a February Interim Report providing detailed comments on underlying foundation of the program, including mission, goals, administration, scale, data management, and community involvement elements.

The committee's next and final task will be to prepare a final report analyzing whether the Research and Monitoring Plan is complete, scientifically sound, and meets the expectations of the Trustee Council. This task will be conducted when the Draft Research and Monitoring Plan is available for review. As currently scheduled, we will receive the draft document in June and hold a meeting to begin our review June 14-15, 2001. The committee will spend the summer and early fall preparing its final report. The report is expected to go to outside review in November 2001 and be delivered to the Trustee Council in January 2002.

## ***INTRODUCTION***

The National Research Council (NRC) proposes to continue the committee appointed to provide outside guidance to the development of the program and review the scope, content, and structure of the Gulf of Alaska Ecosystem Monitoring Program. To date, the committee has provided guidance in two documents: a November 15, 2000, letter report commenting on the schedule and process by which the draft science plan would be developed and a February Interim Report providing detailed comments on underlying foundation of the program, including mission, goals, administration, scale, data management, and community involvement elements. The committee's next and final task will be to prepare a final report analyzing whether the Research and Monitoring Plan is complete, scientifically sound, and meets the expectations of the Trustee Council. This task will be conducted as soon as the draft science plan is available for review.

This study is being conducted by a committee of 12 volunteer experts, supported by NRC staff. The committee has met 3 times to date, for the purposes of gathering information and preparing the letter report and interim report. The committee is expected to meet 2-3 more times to understand, discuss, and review the draft science plan. This proposal seeks support for this activity in the amount of \$84,236 for year three of its activities.

## ***NEED FOR THE PROJECT***

### ***A. Statement of the Problem***

The Exxon Valdez Oil Spill Trustee Council is progressing in its process of developing, reviewing, and adopting a Science Program and a Research and Monitoring Plan and the National Research Council's Committee to Review the Gulf of Alaska Ecosystem Monitoring Program stands ready to continue to provide outside scientific guidance to this process. The Trustee Council's vision for the future is to implement long-term monitoring and related research that permit improved understanding of the origins and consequences of biological changes in the northern Gulf of Alaska. The vision includes effectively communicating those understandings to all parties concerned with the management and use of birds, fish, shellfish, mammals, and other organisms.

As background, in 1989 the T/V Exxon Valdez spilled 11 million gallons of crude oil into Prince William Sound in Alaska. In 1991, the U.S. District Court approved a civil settlement that required Exxon Corporation to pay the United States and the State of Alaska \$900 million over 10 years to restore the resources injured by the spill and compensate for the reduced or lost services (human uses) the resources provide. Under the court-approved terms of the settlement, a Trustee Council of three federal and three state members was formed to administer the funds. The mission of the Council has been to return the environment to a "healthy, productive, world-renowned ecosystem" by restoring, replacing, enhancing, or acquiring the equivalent of natural resources injured by the spill and the services provided by those resources.

Funds from the Exxon Valdez Oil Spill Trustee Council (EVOS) have been disbursed for

almost 10 years, at first for damage assessment activities (approximately 1989-1991) and then in relation to identified important "resource clusters," or communities/resources affected by the oil spill (1992 to present). During the course of its existence, the Trustee Council has pursued independent, non-government agency peer review of its projects, encouraged and funded publication in peer reviewed scientific journals, and fostered interdisciplinary collaboration essential to ecosystem oriented studies. Many other scientific studies conducted by entities not associated with the Trustee Council are relevant to the NRC committee's efforts.

As the Trustee Council plans a strategy for continued research and monitoring in perpetuity in the region, it must consider options for building on the now-large base of scientific knowledge made possible in part by Trustee Council studies. The final payment from the Exxon Corporation will arrive in 2002, after which activities will be funded solely out of the Restoration Reserve, which was created from portions of the Exxon Corporation payments saved over the previous 10 years. The trust will fund a scientific program and research and monitoring plan to guide future resource management activities, and independent peer review of scientific content is considered essential.

### ***B. Rationale/Link to Restoration***

An independent assessment of the proposed Science Program and Research and Monitoring Plan is important to help the Trustee Council plan for the wise and sustainable use of funds contained in the Restoration Reserve trust fund and to ensure that decision-makers plan the best possible strategy for continued, long-term research and monitoring.

### ***C. Location***

This project is a review of the draft Science Program and Research and Monitoring Plan the Exxon Valdez Oil Spill Trustee Council is preparing to guide long-term research and monitoring in the northern Gulf of Alaska, and thus deals with many locales.

## ***COMMUNITY INVOLVEMENT AND TRADITIONAL KNOWLEDGE***

The committee has done outreach to communities as we have collected information, holding both our main meetings in Alaska and including many guest speakers and opportunities for anyone to speak. We have counted on the Trustee Council staff to be sure that the Public Advisory Group and the community liaisons have been kept informed of our activities and received copies of our reports. The study itself will have no direct impacts on the communities. When the final report is available, a summary will be made widely available, copies will be available through the National Academy Press, and the report will be posted in full on the National Academy of Sciences website. Current project information, including committee appointments and announcements of meetings, is also always available on the website.

## ***PROJECT DESIGN***

### ***A. Objectives***

This activity is designed to provide independent scientific guidance to the Trustee Council, research community, and public as the Trustee Council develops a comprehensive plan for a long-term, interdisciplinary research and monitoring program in the northern Gulf of Alaska. Specifically, the committee's overall charge is to:

- Gain, through briefings and literature review, familiarity with the relevant body of scientific knowledge, including but not limited to that developed by the research and monitoring activities sponsored by the Trustee Council in the past.
- Convene one or more information-gathering meetings in Alaska where researchers, the public, and other interested people can convey their perspectives on what the research and monitoring plan should accomplish.
- Review the general strategy proposed in the draft Science Program (which includes information on the social and political context, mission, approach, and scientific background) and make suggestions for improvement.
- Review -- once it is available -- the draft Research and Monitoring Plan, including the scope, structure, and quality of the approach proposed for a long-term research and monitoring program in the northern Gulf of Alaska. This will include whether the conceptual foundation provides an adequate basis for long-term research and monitoring, and whether the research and monitoring plan adequately addresses gaps in the knowledge base and existing uncertainties. The committee will also address broader issues related to overall effectiveness of the Trustee Council's program and plan for guiding continued efforts to understand biological change in the Gulf of Alaska.

The committee conveys its guidance in the form of reports. It has produced two reports so far, a letter report in November 2000 and a short interim report in February 2001. Once the draft Research and Monitoring Plan is available, the committee will provide a final report containing more comprehensive comments and recommendations to guide the Trustee Council and the public in decision-making about the design and implementation of a long-term research and monitoring strategy for Prince William Sound and the northern Gulf of Alaska.

## ***B. Methods***

This study is being conducted by a multidisciplinary committee of 12 members, who are experts in a variety of relevant fields such as ecology, biological oceanography, fisheries biology, intertidal communities, marine mammal biology, ornithology, population dynamics, environmental assessment, cold water oil spill chemistry and impacts, environmental restoration, and long-term research and monitoring. Committee members serve as volunteers, receiving only reimbursement for travel and direct expenses. The committee was selected by the Academy to bring disciplinary expertise and a diversity of experience and perspectives; no members will have ties to parties involved in related litigation. All members will be subject to standard NRC procedures regarding bias and conflict of interest. The committee conducts its work at meetings and via email and conference calls.

## ***C. Cooperating Agencies, Contracts, and Other Agency Assistance***

Not applicable.

## ***SCHEDULE***

### ***A. Measurable Project Tasks***

#### FY 2000 (October 1, 1999 – September 30, 2000)

November 1999:	Funds awarded. Informed that availability of GEM plan would be delayed until spring 2000.
January – March 2000:	Committee selection process (nominations, investigate suitability, interviews).
April 2000:	Committee slate announced and posted for public comment period. Draft Science Program conveyed to committee.
June 15-17 2000:	First meeting: orientation and introductory briefings. Public sessions. Plan study strategy. Anchorage, AK
October 5-7 2000:	Second meeting: continued information-gathering activities, deliberations. Anchorage, AK
November 2000:	Delivered letter report

#### FY 2001(October 1, 2000 – September 31, 2001)

December 7-8, 2000:	Third meeting: deliberations, conclusions & recommendations; finalized interim report. Washington DC
Dec - Feb 2000/01:	Interim report to outside review; response to review; Academy approval process.
February 2001:	Interim report delivered
April 2001:	Committee chair and one member to Trustee Council meeting to discuss Interim Report.
June 14-15, 2001:	Expect delivery of draft Science Plan: June 1 If on

	schedule, committee will hold its fourth meeting to begin deliberations.
Sept - Oct 2001:	Fifth Meeting: report-writing workshop; finalize conclusions and recommendations.
<u>FY 2002 (October 1, 2001 – January 31, 2002)</u>	
Fall 2001	Sixth meeting: editorial subgroup to work on final report, either before or after outside review as needed.
Oct - Nov 2001:	Report prepared for Academy outside review process. Review occurs.
December 2001:	Response to review
January 2002:	Final revisions; Academy approval process
January 2002:	Report delivery (prepublication copies) with dissemination activities as needed.
March 2002:	Published volume available.

***B. Project Milestones and Endpoints***

See schedule, above.

***C. Completion Date***

The committee's final report will be delivered to the Trustee Council and released to the public in late 2001 (if possible) or January 2002 (more likely), based on the committee receiving the draft Science Plan on June 1, 2001. Delays may result if the draft is provided off-schedule. It was agreed that the delivery of the interim report in February 2001 was in lieu of the required April 15, 2001 annual report. The delivery of the final published report will be in lieu of the required April 15, 2002 annual report.

***PUBLICATIONS AND REPORTS***

According to standard Academy operating procedures, no drafts or portions of the report will be conveyed; the final report will be submitted after it has completed the full Academy review process. Reports resulting from this effort shall be prepared in sufficient quantity to ensure their distribution to the sponsor and to other relevant parties in accordance with Academy policy. Reports will be made available to the public without restrictions.

***PROFESSIONAL CONFERENCES***

This proposal contains a request for travel funds for the committee chair (or a delegated committee member) and study director to attend the annual Restoration Workshops.

## ***COORDINATION AND INTEGRATION OF RESTORATION EFFORT***

This project will help the Trustee Council in its efforts to synthesize the lessons learned from the extensive research efforts conducted to date, and apply those lessons to the draft science plan.

## ***PROPOSED PRINCIPAL INVESTIGATOR***

This study is being conducted by a volunteer committee composed of scientists with expertise in ecology, biological oceanography, fisheries biology, intertidal communities, marine mammal biology, ornithology, population dynamics, environmental assessment, cold water oil spill chemistry and impacts, environmental restoration, and long-term research and monitoring. The committee will be put together using standard NRC procedures to identify and select candidates. Final selection of members remains the responsibility of the Executive Office of the National Research Council.

The staff officer responsible for the activity will be:

Chris Elfring, Director  
Polar Research Board (HA 454)  
National Research Council  
National Academy of Sciences, National Academy of Engineering  
2101 Constitution Avenue NW  
Washington, DC 20418  
202-334-3426  
202-334-1477  
celfring@nas.edu

Additional staffing will be provided by:

David Policansky, Associate Director  
Board on Environmental Science & Toxicology  
National Research Council  
National Academy of Sciences, National Academy of Engineering  
2101 Constitution Avenue NW  
Washington, DC 20418

## ***OTHER KEY PERSONNEL***

This activity will be conducted by a committee of experts appointed specifically for the described tasks, following normal Academy procedures. These committee members are responsible for the substantive content of their advice. Oversight for the study will be provided by the Polar Research Board and all other regular levels of Academy oversight.

## ***OTHER RELEVANT INFORMATION***

### **FEDERAL ADVISORY COMMITTEE ACT (FACA)**

The Academy has developed interim policies and procedures to implement Section 15 of the Federal Advisory Committee Act, 5 U.S.C. App. § 15. Section 15 includes certain requirements regarding public access and conflicts of interest that are applicable to agreements under which the Academy, using a committee, provides advice or recommendations to a Federal agency. In accordance with Section 15 of FACA, the Academy shall submit to the government sponsor(s) following delivery of each applicable report a certification that the policies and procedures of the Academy that implement Section 15 of FACA have been substantially complied with in the performance of the contract/grant/cooperative agreement with respect to the applicable report.

#### **Public Information About the Project:**

In order to afford the public greater knowledge of Academy activities and an opportunity to provide comments on those activities, the Academy may post on its website (<http://www.national-academies.org>) the following information as appropriate under its procedures: (1) notices of meetings open to the public; (2) brief descriptions of projects; (3) committee appointments, if any (including biographies of committee members); (4) report information; and (5) any other pertinent information.

The NRC will maintain a public access file containing copies of materials and data made available to the committee, so these are available to the public. Limited, selected materials such as drafts of their report and personal financial disclosure forms are not made public.

**2000 EXXON VALDEZ TRUSTEE COUNCIL PROJECT BUDGET**

October 1, 2001 - September 30, 2002

<b>Budget Category:</b>	Authorized FY 2001	Proposed FY 2002						
Personnel	\$89,621.0	\$30,543						
Travel	\$102,586.0	\$7,948						
Contractual	\$16,744.0	\$16,086						
Commodities	\$1,200.0	\$100						
Equipment	\$0.0	\$0	LONG RANGE FUNDING REQUIREMENTS					
Subtotal	\$210,151.0	\$54,677				Estimated FY 2003		
Indirect	\$105,829.0	\$29,559						
Project Total	\$315,980.0	\$84,236				\$0		
Full-time Equivalent (FTE)	0.9	0.6						
Dollar amounts are shown in thousands of dollars.								
Other Resources								
<p>Comments:</p> <p>Under contractual please note that we have included copying, technology, postage, phone charges, and meeting expenses. These are NOT necessarily contracted out.</p> <p>Office supplies have been included under commodities.</p> <p>Dissemination costs are included for the interim report which includes an editor, copies and postage.</p> <p>NOTE: Due to change in project timeline, there will be a carryover of from FY01 to FY02.</p>								

**FY02**

Prepared:

4/2/2001

Project Number: 00360  
 Project Title: Exxon Valdez Oil Spill Study  
 Name: The National Academies/Polar Research Board

**2000 EXXON VALDEZ TRUSTEE COUNCIL PROJECT BUDGET**

October 1, 2001 - September 30, 2002

<b>Personnel Costs:</b>				Months Budgeted	Monthly Costs	Overtime	
Name	Position Description						
Chris Elfring	Director, PRB			5.0	1983.4		
David Policansky	Sr. Staff Officer, BEST			5.0	906.6		
Robert Greenway	Project Assistant			5.0	1076.2		
Toni Greenleaf	Administrative Associate			5.0	174.6		
	Salary Adjustments for above						
	Fringe Benefits for above @ 26.50%						
Editor/TBD	Editor (10 days)			0.0			
<b>Subtotal</b>				20.0	4140.8	0.0	
			<b>Personnel Total</b>				
<b>Travel Costs:</b>			Ticket Price	Round Trips	Total Days	Daily Per Diem	
Description							
Anchorage	Workshop in Winter 2001 (2 committee/2staff)		1000.0	4	20	140.0	
			0.0	0	0	0.0	
TBD	Chair and Staff to discuss strategy for the committee report (Domestic rates negotiated with ONR/combine air and per diem)		1148.0	1			
			<b>Travel Total</b>				

**FY02**

Project Number: 00360  
 Project Title: Exxon Valdez Oil Spill Study  
 Name: The National Academies/Polar Research Board

Prepared: 4/2/2001

**2000 EXXON VALDEZ TRUSTEE COUNCIL PROJECT BUDGET**

October 1, 2001 - September 30, 2002

<b>Contractual Costs:</b>		
Description		
Photocopies Postage/Delivery Technology/Communications Report (Final)		
		<b>Contractual Total</b>
<b>Commodities Costs:</b>		
Description		
Office Supplies		
		<b>Commodities Total</b>

**FY02**

Prepared:

4/2/2001

Project Number: 00360  
 Project Title: Exxon Valdez Oil Spill Study  
 Name: The National Academies/Polar Research Board

**2000 EXXON VALDEZ TRUSTEE COUNCIL PROJECT BUDGET**

October 1, 2001 - September 30, 2002

<b>New Equipment Purchases:</b>		Number of Units	Unit Price	
Description				
Those purchases associated with replacement equipment should be indicated by placement of an R.			<b>New Equipment Total</b>	
<b>Existing Equipment Usage:</b>		Number of Units		
Description				

**FY02**

Project Number: 00360  
 Project Title: Exxon Valdez Oil Spill Study  
 Name: The National Academies/Polar Research Board

Prepared: 4/2/2001