Fiscal Year

2003

Work Plan

November 2002

Exxon Valdez Oil Spill Trustee Council
441 W. 5th Ave., Suite 500, Anchorage, AK 99501-2340
907-278-8012 800-478-7745 (in Alaska) 800-283-7745 (outside **Alaska)**
restoration@oilspill.state.ak.us www.oilspill.state.ak.us

This publication was released on the web (www.oilspill.state.ak.us) by the *Exxon Valdez* Oil Spill Trustee Council.

Fiscal Year 2003

Work Plan

November 2002

Prepared by:
Exxon Valdez Oil Spill
Trustee Council

JAMES BALSIGER
Administrator, Alaska Region
National Marine Fisheries Service

MICHELE BROWN
Commissioner
Alaska Department of Environmental Conservation

DAVE GIBBONS
Forest Supervisor
Forest Service Alaska Region
U.S. Department of Agriculture

DRUE PEARCE
Senior Advisor to the Secretary for Alaskan Affairs
U.S. Department of the Interior

FRANK RUE
Commissioner
Alaska Department of Fish & Game

CRAIG TILLERY
Assistant Attorney General
State of Alaska

Fiscal Year 2003 Work Plan

November 2002

Table of Contents

List of Tables

Dear Reader,

Each year the *Exxon Valdez* Oil Spill Trustee Council funds activities to restore the resources and services injured by the 1989 *Exxon Valdez* oil spill. This Work Plan describes the projects funded by the Council for federal fiscal year 2003.

The suite of projects funded in the FY 03 Work Plan reflects the Trustee Council's two primary efforts in FY 03: (1) implementation of GEM (the Gulf of Alaska Ecosystem Monitoring and Research Program, the Council's effort to ensure the long-term health and conservation of the resources injured by the oil spill) and (2) continued monitoring and assessment of the effects of lingering oil.

In regard to GEM, projects are being funded in the four habitat types identified in the GEM Program Document as themes around which the monitoring and research activities are organized: watersheds (such as Project G-030684, which is exploring food-web dynamics in the Kenai River watershed), the intertidal and subtidal areas (for example, Project G-030647, which is evaluating the roles of natural factors and anthropogenic impacts in altering intertidal community structure), the Alaska Coastal Current (including Project G-030340, which is supporting hydrographic station GAK1), and the offshore areas (such as Project G-030614, which is testing use of ships-of-opportunities as data collection tools). The majority of work funded for FY 03 is in the intertidal/subtidal habitat type, where a general consensus on some research has been reached through a series of workshops in 2001-02 on approaches to studying long-term change in the intertidal/subtidal area.

Projects are also being funded in the "cross-habitat linkage" categories of synthesis and community involvement. Projects in these categories extend across GEM habitat types. For example, Project G-030607 is mapping existing water quality monitoring sites across the Gulf of Alaska and Project G-030575 is developing a community-based monitoring plan for GEM.

In regard to lingering oil injury, in FY 03 projects that integrate studies of two still-injured species--sea otters and harlequin ducks--with continued assessment of oil persistence will continue (Projects 030585 and 030620). Recovery monitoring of some species will also continue, notably killer whales (Project 030012) and Pacific herring (Project 030462). The effort underway by the Trustee Council's Oil Spill Chief Scientist and a team of EVOS researchers to produce a book synthesizing the significant scientific results from the EVOS damage assessment and restoration programs will also continue (Project 030600).

Also included in the FY 03 Work Plan is funding for continued development of the GEM data system (Project 030455), proposal review by independent peer reviewers and programmatic scientific guidance from the Trustee Council's Scientific and Technical Advisory Committee (Project 030630), and the operations of the

Council itself including the Public Advisory Committee and other public information efforts (Project 030100).

A final comment concerns the Trustee Council's habitat protection effort, which is not funded through the Work Plan but is an important part of the Council's restoration effort. The Council's program to protect habitats important to the recovery of injured resources and services continues to achieve its goals, with purchase agreements and conservation easements now having been negotiated for 643,859 acres of land.

Public interest and input are essential to the Trustee Council process. Please contact me if you have comments or suggestions on the Council's restoration effort.

Sincerely,

Molly McCammon
Executive Director

The Work Plan Process

Table 1 describes milestones in development of the FY 03 Work Plan. Because the schedule for external review of the GEM Program Document, which describes the Trustee Council's long-term research and monitoring program, was delayed somewhat, the FY 03 invitation was issued in two phases. The Council made its funding decisions on Phase I in August so that projects could begin on October 1, 2003, the first day of federal fiscal year 2003. Phase II projects got underway in December 2002, following Council funding action in November 2002.

Table 1. Milestones for FY 03 Work Plan

Feb. 15, 2002	*Invitation to Submit Restoration Proposals for Federal Fiscal Year 2003 Phase I* was issued.
April 15, 2002	Trustee Council Office received 33 proposals requesting $4.3 million for FY 03 Phase I.
May 11-12, 2002	Chief Scientist and core reviewers met to discuss the scientific and technical merits of proposals.
June 15, 2002	*FY 03 Phase I Draft Work Plan* was distributed for public comment.
June 20, 2002	Public Advisory Group met to advise Trustee Council on *FY 03 Phase I Draft Work Plan.*
July 15, 2002	*Invitation to Submit Restoration Proposals for Federal Fiscal Year 2003 Phase II* was issued.
Aug. 6, 2002	Following public comment, Trustee Council approved 29 projects totaling $3,725,200 for *FY 03 Phase I Work Plan.*
Sept. 4, 2002	Trustee Council Office received 44 proposals requesting $5.8 million for FY 03 Phase II.
Oct. 11-12, 2002	Scientific and Technical Advisory Committee met to develop recommendations on scientific and technical merits of proposals.
Oct. 28, 2002	*FY 03 Phase II Draft Work Plan* was distributed for public comment.
Nov. 25, 2002	Following public comment, Trustee Council approved 12 projects totaling $1,727,700 for *FY 03 Phase II Work Plan.* This action brought the FY 03 authorization total to $5,452,900.

Summary of Fiscal Year 2003 Projects

For FY 03, the Trustee Council received 77 proposals requesting a total of $10.1 million. In August and November 2002, the Council authorized 41 projects totaling $5,452,900. The table on the following page (Table 3) summarizes the Council's funding decisions by "cluster," as well as the expected cost of completing the projects authorized in FY 03. (Note: Regarding future year costs, a blank space means that the estimated funding level is not known or that the Trustee Council has not made a commitment to continue the project in future years because of uncertainty about its scope or its priority in terms of the overall restoration program.)

Many of the projects funded are the continuation of efforts funded in FY 02. As illustrated in Table 2, several new projects also were funded.

Table 2. New and Continuing Projects

	Number of Projects Funded	Total Cost of Projects Funded
New Projects	14	$1,349,800
Continuing Projects	27	$4,103,100

Included in the projects authorized by the Trustee Council is $1.1 million for Project 030100, which funds the operating costs of the restoration program (primarily public information and administration). In addition to the projects authorized in the FY 03 Work Plan, the Council approved $86,100 for habitat protection costs incurred by Trustee Agencies for activities such as appraisal review and on-site inspections. The Council's habitat protection program is described on page 23 of this document.

Table 3. Summary of Funding by Cluster

Cluster	FY 03 Approved	FY 04 Estimate	Total FY 03-04
Oil Spill: Lingering Injury	$671.5	$52.7	$724.2
Oil Spill: Recovery Monitoring	$427.8	$0.0	$427.8
Oil Spill: Ecosystem Recovery & Function	$216.6	$0.0	$216.6
GEM Cross-Habitat Linkage: Synthesis	$254.5	$184.8	$439.3
GEM Cross-Habitat Linkage: Community Involvement	$491.7	$0.0	$491.7
GEM: Watershed Habitat	$175.0	$26.6	$201.6
GEM: Intertidal/Subtidal Habitat	$694.0	$278.3	$972.3
GEM: Alaska Coastal Current Habitat	$89.1	$91.2	$180.3
GEM: Intertidal/Subtidal & Alaska Coastal Current Habitat	$17.0	$0.0	$17.0
GEM: Offshore Habitat	$106.1	$0.0	$106.1
GEM: Offshore & Alaska Coastal Current Habitat	$197.2	$0.0	$197.2
Data Management & Information Transfer	$308.0	$0.0	$308.0
Science Management	$690.1	$300.0	$990.1
Public Information/Administration	$1,114.3		$1,114.3
Habitat Protection Support			
Total FY 03 Work Plan:	$5,452.9	$918.1	$6,371.0
Habitat Protection/Acquisition Support	$86.1		$86.1
Total All Activities:	$5,539.0	$918.1	$6,457.1

Description of Fiscal Year 2003 Projects

CLUSTER SUMMARIES

The projects described on the following pages are organized in clusters of like projects. Cluster assignments are based on the underlying objective of each project or the type of activity the project would perform. Each cluster description includes the projects authorized by the Trustee Council for FY 03 and the expected cost of completing those projects. (Note: Regarding future year costs, "$0" means that no funding is expected. A blank space means that the estimated funding level is not known or that the Council has not made a commitment to continue the project in future years because of uncertainty about its scope or its priority in terms of the overall restoration program.)

The clusters are as follows:

Oil Spill: Lingering Injury projects study the effects of oiling on injured species and whether oil is continuing to affect species recovery.

Oil Spill: Recovery Monitoring projects monitor the status of injured populations.

Oil Spill: Ecosystem Recovery & Function projects take a broader view of recovery by considering oil effects as well as other possible influences (e.g., climate change, food supply, etc.).

GEM Cross-Habitat Linkage: Synthesis projects build on and update current understandings by bringing together existing data from any number of disciplines, times and regions.

GEM Cross-Habitat Linkage: Community Involvement projects involve communities and stakeholders in monitoring, data analysis and issue prioritization and communicate research results to the public through workshops and seminars.

GEM: Watershed Habitat projects focus on long-term monitoring of marine-related productivity in watersheds to evaluate the effects of human activities and natural forces.

GEM: Intertidal/Subtidal Habitat projects focus on identifying how human activities and natural events can change the community structure of the intertidal and subtidal areas.

GEM: Alaska Coastal Current Habitat projects focus on developing collaboration between physical and biological scientists to decide how best to detect changes in annual and seasonal production and transfer of energy to higher trophic levels.

GEM: Intertidal/Subtidal & ACC Habitat projects focus on the cross-habitat linkages between the intertidal/subtidal and Alaska Coastal Current.

GEM: Offshore Habitat projects focus on the effect of the Alaska gyre on the natural variability in seasonal and annual productivity along the continental shelf and the Alaska Coastal Current.

GEM: Offshore & ACC Habitat projects focus on the cross-habitat linkages between the Alaska Coastal Current and offshore habitats.

Data Management & Information Transfer projects improve the Trustee Council's data management system or increase access to data.

Science Management projects provide for independent scientific review of proposals and results and for project management functions of the Trustee agencies.

Public Information/Administration projects fund the administrative, public outreach and public involvement functions necessary to efficiently implement the restoration program.

APPENDIX A

Appendix A contains a numerical listing of all projects funded by the Trustee Council. It contains a summary of the scientific review (by either the Chief Scientist or the Scientific and Technical Advisory Committee) for each project and the Council's decision for each project. It also indicates who proposed each project, which Trustee agency is responsible for project management, and whether the project is continuing (i.e., also was funded by the Council in FY 02) or new.

COPIES OF COMPLETE PROPOSALS

The complete proposal for each project funded by the Trustee Council is available on the Council's web page (www.oilspill.state.ak.us).

Projects Approved for Fiscal Year 2003

- Complete genome linkage map project (030190), which is important for understanding the genetic traits of pink salmon that affect growth and survival.
- Continue hydrocarbon database (030290), which provides ongoing analysis and interpretation of hydrocarbon data for other Trustee Council studies.
- Complete oiled incubation project (030476), which is validating the effects of oil contamination on pink salmon.
- Complete oil bioavailability project (030585), which is examining whether the signs of continued oil exposure in sea otters and harlequin ducks are linked to the oil remaining in intertidal sediments.
- Begin exposure pathways project (030620), which will address objectives related to the potential effects of remaining intertidal oil deposits—specifically in regard to the food web—on sea otters and harlequin ducks.

Funding Approved for Fiscal Year 2003

Project Number and Title		FY 03 Approved	FY 04 Estimate	TOTAL 03-04
030190	Genome Linkage Map	$54.5	$0	$54.5
030290	Hydrocarbon Database	$22.5	$22.7	$45.2
030476	Effects of Oiled Incubation on Salmon Reproduction	$37.1	$0	$37.1
030585	Lingering Oil: Bioavailability and Effects	$121.6	$0	$121.6
030620	Exposure Pathways/ Population Status	$435.8	$30.0	$465.8
	TOTAL	$671.5	$52.7	$724.2

Oil Spill: Recovery Monitoring

Projects Approved for Fiscal Year 2003

- Continue killer whale investigation (030012), which supports monitoring of the resident AB pod of killer whales in conjunction with the Alaska SeaLife Center and various foundations.
- Complete herring disease project (030462), which is assessing whether disease is limiting recovery of the Prince William Sound herring population.
- Complete harbor seal technology project (030558), which is employing new technologies at the Alaska SeaLife Center to assess and monitor the health of harbor seals.
- Complete bivalve recovery project (030574), which is documenting the continuing effects of shoreline cleanup on populations of important bivalves.

Funding Approved for Fiscal Year 2003

Project Number and Title		FY 03 Approved	FY 04 Estimate	TOTAL 03-04
030012	Killer Whale Investigation	$18.1		$18.1
030462	Herring Disease	$87.0	$0	$87.0
030558	Harbor Seal Technologies	$286.7	$0	$286.7
030574	Bivalve Recovery	$36.0	$0	$36.0
	TOTAL	$427.8	$0	$427.8

Projects Approved for Fiscal Year 2003

- Complete nearshore vertebrate predator project (030423), which is investigating evidence of ongoing injury to sea otters and harlequin ducks.

Funding Approved for Fiscal Year 2003

Project Number and Title		FY 03 Approved	FY 04 Estimate	TOTAL 03-04
030423	Nearshore Vertebrate Predators	$216.6	$0	$216.6
	TOTAL	$216.6	$0	$216.6

GEM Cross-Habitat Linkage: Synthesis

Projects Approved for Fiscal Year 2003

- Continue EVOS synthesis project (G-030600), which is integrating what has been learned from more than a decade's worth of science following the oil spill.
- Conduct water quality mapping project (G-030607), which will create a GIS map of existing water quality monitoring sites across the Gulf of Alaska.
- Conduct isotope ecology synthesis project (G-030625), which will prepare a synthesis manuscript on the pelagic ecosystem of Prince William Sound using stable isotope ratio data.

Funding Approved for Fiscal Year 2003

Project Number and Title		FY 03 Approved	FY 04 Estimate	TOTAL 03-04
G-030600	EVOS Synthesis, 1989-2001	$215.9	$184.8	$400.7
G-030607	Water Quality Monitoring Sites	$13.1	$0	$13.1
G-030625	Isotope Ecology Synthesis	$25.5	$0	$25.5
	TOTAL	$254.5	$184.8	$439.3

Projects Approved for Fiscal Year 2003

- Continue tribal natural resource stewardship project (G-030052), which addresses one of the Trustee Council's goals—namely, community involvement and development of local stewardship capacity.
- Continue Prince William Sound/Lower Cook Inlet Youth Area Watch project (G-030210), which involves local youth in restoration projects.
- Conduct community monitoring plan project (G-030575), which will design and produce a draft community involvement and community-based monitoring plan to address the needs of diverse communities in the GEM region.
- Continue Kodiak Youth Area Watch project (G-030610), which involves local youth in restoration projects.
- Complete commercial fishing management applications project (G-030636), which is developing guidelines for making information gathered by GEM relevant for fisheries management and developing a plan for moving from basic science to management application.

Funding Approved for Fiscal Year 2003

Project Number and Title		FY 03 Approved	FY 04 Estimate	TOTAL 03-04
G-030052	Tribal Natural Resource Stewardship	$169.6		$169.6
G-030210	PWS/LCI Youth Area Watch	$98.6		$98.6
G-030575	Community Involvement/ Monitoring Plan	$109.6	$0	$109.6
G-030610	Kodiak Island Youth Area Watch	$63.0		$63.0
G-030636	Commercial Fishing Management Applications	$50.9	$0	$50.9
	TOTAL	$491.7	$0	$491.7

Projects Approved for Fiscal Year 2003

- Conduct flow data project (G-030596), which is providing interim funding for maintenance of the Ninilchik River stream-flow gauge while a permanent, long-term funding source is sought.
- Continue sockeye population reconstruction project (G-030649), which is conducting a retrospective study of sockeye abundance in several lakes in the spill region.
- Conduct Kenai River watershed project (G-030684), which is designed to increase understanding of food-web dynamics in the Kenai River watershed and the role of marine-derived nutrients in the ecosystem.

Funding Approved for Fiscal Year 2003

Project Number and Title		FY 03 Approved	FY 04 Estimate	TOTAL 03-04
G-030596	Flow Data: Kenai Peninsula Salmon Stream	$22.6	$0	$22.6
G-030649	Reconstructing Sockeye Populations	$92.5	$26.6	$119.1
G-030684	Sustainable Management in the Kenai River Watershed	$59.9	$0	$59.9
	TOTAL	$175.0	$26.6	$201.6

Projects Approved for Fiscal Year 2003

- Complete Kachemak Bay mapping project (G-030556), which is conducting high resolution mapping of the intertidal and shallow subtidal shores in Kachemak Bay.
- Complete airborne remote sensing project (G-030584), which is exploring airborne remote sensing instrumentation as a monitoring tool for GEM.
- Conduct PSWRCAC environmental monitoring program (G-030623), which will provide one year of funding support for the Prince William Sound Regional Citizens' Advisory Council's highly rated long-term monitoring project with community involvement.
- Conduct ShoreZone mapping project (G-030641), which will develop a protocol for coastal mapping under GEM.
- Conduct marine invertebrate macrofauna project (G-030642), which will make data collected on over 1,000 invertebrate species available in ARCTOS, the University of Alaska Museum's web-accessible database.
- Begin natural and shoreline harvest project (G-030647), which will evaluate the roles of natural factors and anthropogenic impacts in altering intertidal community structure.
- Conclude archaeology and isotopes project (G-030656), which is designed to improve understanding of long-term change in nearshore marine communities and investigate the relationship between productivity and climate.
- Begin Census of Marine Life project (G-030666), which will conduct nearshore biodiversity studies using protocols developed under the Census of Marine Life program and will assist GEM in identifying the variables that should be monitored in nearshore, soft benthic habitats.
- Begin nearshore decision process project (G-030687), which will develop alternatives for monitoring in the nearshore.

Funding Approved for Fiscal Year 2003

Project Number and Title		FY 03 Approved	FY 04 Estimate	TOTAL 03-04
G-030556	Kachemak Bay Mapping	$32.3	$0	$32.3
G-030584	Airborne Remote Sensing	$39.3	$0	$39.3
G-030623	PWSRCAC Environmental Monitoring Program	$70.9	$0	$70.9
G-030641	ShoreZone Mapping	$34.4		$34.4
G-030642	Marine Invertebrate Macrofauna	$19.2	$0	$19.2

Project Number and Title		FY 03 Approved	FY 04 Estimate	TOTAL 03-04
G-030647	Roles of Natural & Shoreline Harvest	$87.9	$66.9	$154.8
G-030656	Archaeology & Isotopes	$53.7	$0	$53.7
G-030666	Census of Marine Life	$266.3	$211.4	$477.7
G-030687	Nearshore Decision Process	$90.0	$0	$90.0
	TOTAL	$694.0	$278.3	$972.3

Projects Approved for Fiscal Year 2003

- Continue oceanographic monitoring project (G-030340), which provides support of hydrographic station GAK1 and the accompanying retrospective analyses of the station's data record.
- Begin surface nutrients project (G-030654), which seeks to understand the variability of nutrients and factors controlling nearshore communities and zooplankton and juvenile salmon distributions.

Funding Approved for Fiscal Year 2003

Project Number and Title		FY 03 Approved	FY 04 Estimate	TOTAL 03-04
G-030340	Oceanographic Monitoring: GAK1	$51.6	$32.1	$83.7
G-030654	Surface Nutrients	$37.5	$43.6	$81.1
	TOTAL	$89.1	$75.7	$164.8

Projects Approved for Fiscal Year 2003

- Complete forage fish sampling project (G-030561), which is visiting spill-area communities to explore involving local residents in long-term forage fish monitoring studies.

Funding Approved for Fiscal Year 2003

Project Number and Title		FY 03 Approved	FY 04 Estimate	TOTAL 03-04
G-030561	Community-Based Forage Fish Sampling	$17.0	$0	$17.0
	TOTAL	$17.0	$0	$17.0

Projects Approved for Fiscal Year 2003

- Complete ships-of-opportunity project (G-030614), which has installed a thermosalinograph and fluorometer on a crude oil tanker traveling between Valdez and Long Beach.
- Conduct visible remote sensing project (G-030685), which addresses a major need for improving the accessibility of remote sensing information to researchers and others.

Funding Approved for Fiscal Year 2003

Project Number and Title		FY 03 Approved	FY 04 Estimate	TOTAL 03-04
G-030614	Ships of Opportunity	$29.0	$0	$29.0
G-030685	Visible Remote Sensing	$77.1	$0	$77.1
	TOTAL	$106.1	$0	$106.1

Projects Approved for Fiscal Year 2003

- Continue CPR-based survey project (G-030624), which is using a Continuous Plankton Recorder (CPR) on ships-of-opportunity that travel from Prince William Sound to California and Vancouver to Japan and testing the CPR as an almost real-time indicator of ecosystem change.

Funding Approved for Fiscal Year 2003

Project Number and Title		FY 03 Approved	FY 04 Estimate	TOTAL 03-04
G-030624	CPR-Based Survey	$197.2	$0	$197.2
	TOTAL	$197.2	$0	$197.2

Projects Approved for Fiscal Year 2003

- Continue GEM data system project (G-030455), which funds the GEM Data Systems Manager and related data system costs such as quality control and documentation, archiving, transfer, delivery and presentation.
- Continue ARLIS project (G-030550), which funds one librarian at the Alaska Resources Library & Information Services (ARLIS); ARLIS houses the EVOS collection.

Funding Approved for Fiscal Year 2003

Project Number and Title		FY 03 Approved	FY 04 Estimate	TOTAL 03-04
G-030455	GEM Data System	$212.9		$212.9
G-030550	ARLIS	$95.1		$95.1
	TOTAL	$308.0		$308.0

Projects Approved for Fiscal Year 2003

- Continue project management funding (G-030250), which funds project managers in the Trustee agencies to track the progress of projects, monitor project expenditures, ensure that reports and other contract deliverables are properly performed, and so on.
- Continue science management funding (G-030630), which in FY 03 will include support for the STAC (the Trustee Council's Scientific and Technical Advisory Committee), two GEM subcommittees (habitat and data management), and four workshops (mapping, remote sensing, modeling, and sampling design) as well as annual peer review of proposals and results and contributions to various reports on North Pacific resources.

Funding Approved for Fiscal Year 2003

Project Number and Title		FY 03 Approved	FY 04 Estimate	TOTAL 03-04
G-030250	Project Management	$137.6		$137.6
G-030630	Science Management	$552.5	$300.0	$852.5
	TOTAL	$690.1	$300.0	$990.1

Public Information / Administration

Projects Approved for Fiscal Year 2003

- Continue public information and administration project (G-030100), which provides overall support for administration and implementation of the Trustee Council's programs, including the active participation of the Public Advisory Committee and other public involvement efforts, an annual financial audit, and oversight of the EVOS Investment Fund.

Funding Approved for Fiscal Year 2003

Project Number and Title		FY 03 Approved	FY 04 Estimate	TOTAL 03-04
G-030100	Public Info. & Administration	$1,114.3		$1,114.3
	TOTAL	$1,114.3		$1,114.3

Habitat Protection and Acquisition

In addition to funding the Work Plan each year, the Trustee Council funds the acquisition and protection of land in order to protect the habitat of injured resources. Project 030126 covers the costs that Trustee agencies incur in these land acquisitions, such as appraisal review and on-site inspections.

Funding Approved for Fiscal Year 2003

Project Number and Title		FY 03 Approved	FY 04 Estimate	TOTAL 03-04
030126	Habitat Protection Support	$86.1		$86.1

To date, the Trustee Council has committed $343.3 million to protect 635,770 acres of land in large parcels (generally over 1,000 acres each), as follows. Interests in the lands protected by the Council range from acquisition of fee simple title to various forms of conservation easements. In total, over 1,400 miles of coastline and more than 300 anadromous rivers, streams, and spawning areas have been protected through the Council's large parcel program.

- 23,800 acres within Kachemak Bay State Park, including a highly productive estuary and several miles of anadromous fish streams and intertidal shoreline, from Seldovia Native Association;
- 32,537 acres within the Kenai Fjords National Park and on adjacent islands within the Alaska Maritime National Wildlife Refuge, including valuable coastal habitat, from English Bay Corporation;
- 26,665 acres of prime habitat on Shuyak Island, at the northern tip of the Kodiak archipelago, from the Kodiak Island Borough;
- 41,549 acres of mature spruce forest and highly productive coastal habitat in the Kodiak archipelago, in what has now become Afognak Island State Park, from the Seal Bay Timber Company;
- 41,750 acres of land and conservation easements on northern Afognak Island, including buffers around Paul's and Laura lakes and some of the most highly ranked habitat in terms of restoration value in the spill region, from Afognak Joint Venture;
- 59,674 acres of prime habitat for salmon, bald eagles, bears, and other species in the Kodiak National Wildlife Refuge from Koniag, Inc.;
- 55,402 acres of conservation easements along the Karluk and Sturgeon rivers, from Koniag, Inc.;
- 115,973 acres within Kodiak National Wildlife Refuge from Akhiok-Kaguyak, Inc.;
- 31,609 acres of land and conservation easements within the Kodiak National Wildlife Refuge from Old Harbor Native Corporation;
- 59,520 acres of land and conservation easements in Prince William Sound, including parcels at Eshamy Bay and Jackpot Bay, which have some of the highest

restoration values in the spill area, from Chenega Corporation;

- 77,477 acres of land, conservation easements, and timber easements, including Port Gravina, Sheep Bay, and Windy Bay, which are considered among the most valuable parcels in Prince William Sound for recovery of species injured by the spill, from Eyak Corporation; and
- 69,814 acres of land and conservation easements, including Bligh Island and Two Moon Bay, which were the third and fourth highest ranked parcels in terms of restoration value in Prince William Sound, from Tatitlek Corporation.

Two additional large parcel protection packages are currently under consideration. In March 2000, the Council funded appraisal of approximately 1,850 acres of land owned by the Karluk Village IRA Council; the landowner is now considering what type of protection package it could support. In November 2002, the Council agreed to contribute half of the $20.9 million cost of purchasing 17,000 acres, and timber rights on 2,300 acres, in the Perenosa Bay area on northern Afognak Island from a group of private landowners which includes Koniag, Inc. The landowners are in the process of trying to raise the other half of the parcel's cost.

In regard to the small parcel program, the Trustee Council has spent $20.9 million to acquire 8,089 acres of habitat in small parcels (generally under 1,000 acres each) and authorized $1.2 million to purchase an additional 977 acres in small parcels. These lands are typically located on coves, along important stretches of river, at the mouths of rivers, or adjacent to valuable tidelands, and are often close to spill area communities. These lands are acquired for their habitat qualities as well as their importance for subsistence and recreational use.

Beginning in October 2002, the Trustee Council has designated $25 million of Restoration Reserve funds for a long-term habitat protection program. It is expected that the $25 million will serve as an endowment, with annual earnings (roughly $1 million annually) dedicated to habitat protection.

How to Read Appendix A – Description of Projects and Trustee Council Action

Proposer	The individual, organization, or Trustee agency that submitted the project proposal.
Lead Agency	The Trustee agency (DOI, NOAA, USFS, ADEC, ADFG, or ADNR) to which the project will be assigned for project management purposes.
New or Cont'd	Whether or not the project is the continuation of a project funded by the Trustee Council in FY 02. Also, the fiscal years for which funding has been provided or is being requested.
FY 03 Request	The amount of funding requested by the project proposer for fiscal year 2003 (October 1, 2002 - September 30, 2003).
FY 03 Approved	The amount of funding approved by the Trustee Council for fiscal year 2003.
FY 04 Request	For multi-year projects, the amount of funding requested by the project proposer for fiscal year 2004 (October 1, 2003 - September 30, 2004).
FY 04 Recom.	For multi-year projects, the estimated project cost for FY 04, based on the Trustee Council's action for FY 03.
Abstract	A brief summary of the project.
STAC Recommendation	A summary of the recommendation on the project's technical merit, prepared either by the Trustee Council's Scientific and Technical Advisory Committee (STAC) or Chief Scientist.
Trustee Council Action	The Trustee Council's decision on project funding for FY 03.

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Request	FY 03 Approved	FY 04 Request	FY 04 Recom.
030012	Photographic Monitoring of Resident Killer Whales	C. Matkin/North Gulf Oceanic Society	NOAA	Cont'd FY 93-	$18.1	$18.1	$18.2	

Project Abstract

This project will support monitoring of the resident AB pod of killer whales and other resident pods as part of a cooperative program with the Alaska SeaLife Center and various foundations. Monitoring has occurred on a yearly basis since 1984; this long-term data set was crucial in evaluating the oil spill effects on killer whales.

STAC Recommendation

This proposal was reviewed by the Chief Scientist and not by the STAC. This project will monitor an important killer whale pod. Killer whales are a top trophic-level, sentinel species that is dependent on the integrity of the marine ecosystem. Killer whales are also an increasingly important species for tourism, an industry that is worth many millions of dollars per year. The killer whale population in the Gulf of Alaska has been increasing and overall the population appears to be healthy. However, the AB pod declined precipitously at the time of the spill and, for a time after the spill, appeared to be in danger of complete disintegration. The AB pod has grown since about 1994 and pod disintegration now seems less likely. The continuation of this monitoring project will provide continuing data about the status of the AB pod. Fund, lower priority.

Trustee Council Action

Fund FY 03 only contingent on completion of manuscripts funded in prior years (mating systems and niche partitioning). A decision on funding in FY 04 and beyond has not yet been made. Funding in FY 03 is reduced from earlier years to reflect the additional sources of funds available to the principal investigator for continued monitoring of killer whales in Prince William Sound and Kenai Fjords. [Note: Funds were approved in August 2002.]

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Request	FY 03 Approved	FY 04 Request	FY 04 Recom.
G-030052	Tribal Natural Resource Stewardship and Meaningful Tribal Involvement in GEM	P. Brown-Schwalenberg/CRRC	ADFG	Cont'd FY 95-	$169.6	$169.6	$180.0	

Project Abstract

This project will continue community involvement and capacity building of tribal natural resource programs with a long-term goal of preparing communities to interact effectively with the GEM program. Specific tasks in FY 03 include: (a) communicating GEM goals and actions to tribes and coordinating tribal participation in GEM meetings and workshops as well as relevant training opportunities, (b) conducting a "Wisdomkeeper Series" to afford effective information exchanges among resource users, scientists, and managers, (c) in coordination with Project 030575/Designing a Community Involvement & Community-Based Monitoring Plan for GEM, preparing a GEM community involvement plan with meaningful involvement of tribes, and (d) begin developing a training curriculum for natural resource technicians in the oil spill communities. Communities involved in the project are Tatitlek, Chenega Bay, Port Graham, Nanwalek, Cordova/Eyak, Seward/Qutekcak, Seldovia, Valdez, Kodiak Island Region/Ouzinkie, and the Alaska Peninsula Region/Chignik Lake.

STAC Recommendation

This proposal was not reviewed by the STAC because the revised proposal was not received by the time the STAC met. The Tribal Natural Resource Plans scheduled for completion in FY 02 from this project recently were submitted but have not yet been reviewed by peer reviewers or the Trustee Council. No recommendation.

Trustee Council Action

Fund. Tribal Natural Resource Plans have only recently been received and not yet reviewed. Fund continued tribal participation in GEM planning, community Wisdomkeeper meetings, and tribal natural resource professional development and training. The overall goal of this project--community involvement and development of local stewardship capacity--is a priority of the Trustee Council and an essential component of GEM. [Note: $30,100 was approved in August 2002 and $139,500 was approved in November 2002.]

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Request	FY 03 Approved	FY 04 Request	FY 04 Recom.
030100	Public Information and Administration	All Trustee Council Agencies	ALL	Cont'd Ongoing	$1,114.3	$1,114.3		

Project Abstract

This project provides overall support for public involvement and administration of the restoration program, including GEM. It includes funding for the Trustee Council staff working at the direction of the Executive Director, public involvement efforts including the active participation of the Public Advisory Committee (PAC), and management of the EVOS Investment Fund.

STAC Recommendation

Proposal not reviewed.

Trustee Council Action

Fund. This project provides overall support for administration and implementation of the Trustee Council's programs. [Note: Funds were approved in August 2002.]

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Request	FY 03 Approved	FY 04 Request	FY 04 Recom.
030190	Construction of a Linkage Map for the Pink Salmon Genome	F. Allendorf/Univ. Montana	ADFG	Cont'd FY 96-03	$54.5	$54.5	$0.0	$0.0

Project Abstract

This is the final year of a project based upon experiments conducted at the Alaska SeaLife Center that use a linkage map that was constructed to test for effects of regions of the genome on traits that are important to the recovery of pink salmon (e.g., growth and survival). In summer 2001, 259 sexually mature adults were collected in Resurrection Bay from the 1999 cohort produced from wild pink salmon collected from Likes Creek. In FY 03, the analysis of the genotypes in the returning adults will be completed to test for genetic differences in marine survival and other life history traits (e.g., body, size, egg number, and egg size) and a final report/manuscript will be prepared.

STAC Recommendation

This proposal was reviewed by the Chief Scientist and not by the STAC. This is the final year of a long-term project that has done a good job overcoming unexpected technical challenges. The genome map will be a benefit to a variety of future studies of pink salmon, and will be useful for future pink salmon management in Southcentral Alaska. Based on the proposal, it appears that the data analysis is in the process of completion, and it seems appropriate to provide the principal investigator with funding to complete the identified data analysis and prepare manuscripts. Fund.

Trustee Council Action

Fund revised proposal, which reduces the cost of the remaining data analysis and manuscript/final report preparation. This project is important for understanding the genetic traits of pink salmon that affect growth and survival. In addition, the work being done under this project will contribute to answering questions important to fisheries management about hatchery/wild fish interactions. For example, are hatchery fish changing the gene pool in a way that makes wild fish maladapted to their environment? Are enough hatchery fish getting into streams to affect productivity of wild fish? How adapted are wild fish to particular streams? [Note: Funds were approved in August 2002.]

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Request	FY 03 Approved	FY 04 Request	FY 04 Recom.
G-030210	Youth Area Watch	R. DeLorenzo/Chugach Sch. Dist.	ADFG	Cont'd FY 96-	$98.6	$98.6	$85.6	

Project Abstract

This project links students in the oil spill impacted area with research and monitoring projects funded by the Trustee Council. The project involves students in the restoration process and provides these individuals the skills to participate in restoration now and in the future. Youth conduct research identified and delegated by principal investigators who have indicated interest in working with students. Youth Area Watch fosters long-term commitment to the goals set out in the restoration plan and is a positive community investment in that process. Participating communities in FY 03 will be Tatitlek, Chenega Bay, Cordova, Nanwalek, Port Graham, Seldovia, Seward, Valdez, and Whittier.

STAC Recommendation

This proposal was reviewed by the Chief Scientist and not by the STAC. This project is a success story for community involvement in EVOS research, through the participation of young people in the public school system. The proposers recognize EVOS projects will be changing with implementation of GEM and are willing to adapt. The proposers also have done an excellent job of obtaining supplemental funding and reducing reliance on EVOS funding. However, the proposal provides insufficient information to judge progress. It could be strengthened with greater attention to the results of prior efforts, such as Youth Area Watch students choosing to pursue higher education in science. In addition, the annual reports are not a useful gauge of program accomplishments and progress, so accountability is lacking. By contrast, the Kodiak Youth Area Watch annual reports (Project /610) provide specific information on accomplishments, problems encountered and solutions. Fund contingent on receipt of a revised annual report (01210) that indicates that satisfactory progress is being made.

Trustee Council Action

Fund. Youth Area Watch involves local youth in restoration projects. In FY 03, youth in Chenega Bay, Cordova, Nanwalek, Port Graham, Seldovia, Seward, Tatitlek, Valdez, and Whittier will participate. [Note: Funds were approved in August 2002.]

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Request	FY 03 Approved	FY 04 Request	FY 04 Recom.
G-030250	Project Management	All Trustee Council Agencies	ALL	Cont'd Ongoing	$137.6	$137.6		

Project Abstract

Project management supports those Trustee agencies that administer and/or implement EVOS projects on behalf of the Trustee Council. Tasks performed by project managers include coordinating activities between principal investigators and the Trustee Council Office, reviewing project expenditure activity, assisting in the development of project proposals, and tracking project reports.

STAC Recommendation

Proposal not reviewed.

Trustee Council Action

Fund. Project management helps provide accountability for the work plan process. [Note: Funds were approved in August 2002.]

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Request	FY 03 Approved	FY 04 Request	FY 04 Recom.
030290	Hydrocarbon Database and Interpretation Service	J. Short/NOAA B. Nelson/NOAA	NOAA	Cont'd FY 92-	$22.5	$22.5	$22.7	$22.7

Project Abstract

This ongoing project provides data and sample archiving services for all samples collected for hydrocarbon analysis in support of Trustee Council projects. These data represent samples collected since the oil spill in 1989 to the present and include environmental and laboratory National Resource Damage Assessment and restoration data. Additionally, this project provides interpretive services for hydrocarbon analysis, public releases of the hydrocarbon and pristane databases, and storage and maintenance of the hydrocarbon sample archives.

STAC Recommendation

This proposal was reviewed by the Chief Scientist and not by the STAC. This is a small project, but critical to tracking remaining oil and its fate. Studies that will focus on whether the remaining intertidal subsurface oil in Prince William Sound is contaminating the food web require the support of this service project. As the amount of oil from the spill subsides, the identity of the hydrocarbon sources is a question that assumes greater importance. This project makes source identification determinations based on the chemical analyses that are stored in the database. The technical approach is sound, as has been demonstrated by more than ten years of successes. The approach and products from this study have appeared in many peer reviewed publications. Fund.

Trustee Council Action

Fund contingent on submittal of overdue report (01599) and manuscript (00598). This project provides the ongoing analysis and interpretation of hydrocarbon data for other Trustee Council funded studies. [Note: Funds were approved in August 2002.]

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Request	FY 03 Approved	FY 04 Request	FY 04 Recom.
G-030340	Toward Long-Term Oceanographic Monitoring of the Gulf of Alaska Ecosystem	T. Weingartner/ UAF	ADFG	Cont'd FY 98-	$51.6	$51.6	$32.1	$32.1

Project Abstract

Interannual variations in temperature and salinity on the northern Gulf of Alaska shelf reflect environmental changes that affect this marine ecosystem. Quantifying and understanding this variability require long time series such as the 32-year record at hydrographic station GAK1 near Seward. This project continues this time series, quantifies the synoptic, seasonal, and interannual variability, and seeks to understand the reasons for this variability. It will also begin to examine interannual variations in near-surface stratification and the timing of the spring bloom on the inner Gulf of Alaska shelf. The data will be used to predict the baroclinic component of the mass and freshwater transport variability in the Alaska Coastal Current in the northern gulf.

STAC Recommendation

This proposal was reviewed by the Chief Scientist and not by the STAC. This excellent project provides new insights into physical forcing/control of primary production and mass transport. The synthesis efforts are allowing new insights into proxy measures that might be applied to the 35-year historical record to understand long-term ecosystem variability. This is an excellent investment in a long-term data set that will pay future dividends in fish and wildlife management. Fund.

Trustee Council Action

Fund, including proposed upgrade of mooring (addition of another temperature/conductivity recorder with fluorometer and transmissometer) contingent on (a) receipt of a description of the deployment procedure intended to insure against loss of data and (b) submittal of the manuscript promised in FY 02 analyzing the relationship between atmospheric pressure, precipitation, and density structure of the Alaska Coastal Current. This project provides for continued Trustee Council support of hydrographic station GAK1 and the accompanying retrospective analyses of the station's data record. GAK1 provides a long-term data set that allows characterization of the Alaska Coastal Current, which is essential to understanding climatological forcing of productivity and will be important for GEM. [Note: Funds were approved in August 2002.]

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Request	FY 03 Approved	FY 04 Request	FY 04 Recom.
030423	Patterns and Processes of Population Change in Selected Nearshore Vertebrate Predators	J. Bodkin, B. Ballachey/USGS D. Esler/Simon Fraser Univ.	DOI	Cont'd FY 99-	$216.6	$216.6	$0.0	$0.0

Project Abstract

Sea otters and harlequin ducks have not fully recovered from the oil spill, based on population-level demographic differences between oiled and unoiled areas. Further, in oiled areas, both species show elevated cytochrome P4501A, almost certainly reflecting continued exposure to oil. This project is exploring links between oil exposure and the lack of population recovery, with the intent of understanding constraints to full recovery of these species and the nearshore environment generally. The results also serve to monitor the progress of recovery of the species and the system. To date, the work has consisted of field components for both species, and a captive component for harlequin ducks. Proposed activities for FY 03 include (a) the third and final year of harlequin duck field studies quantifying oil exposure and survival of females during winter and (b) closeout of all project components and preparation of the final rep

STAC Recommendation

This proposal was reviewed by the Chief Scientist and not by the STAC. This is a high quality project that has made outstanding contributions to the EVOS Nearshore Vertebrate Predator (NVP) program (Project 99025). Sea otters and harlequin ducks have shown ongoing injury. The experimental work with harlequins to derive dose-response results is especially valuable (although procedurally challenging). Fund closeout of sea otter component as proposed; fund an additional year of harlequin field work/data collection in order to determine if there is a link between P4501A exposure and survival of individual female harlequin ducks.

Trustee Council Action

Fund revised proposal, which reduces the cost of the sea otter component slightly. The questions raised by the reviewers in regard to the harlequin duck component have been addressed through a review of the project's FY 02 preliminary results--it is now apparent that a third year of field study is necessary to meet project objectives. This project is an important extension of the Nearshore Vertebrate Predator project (Project 99025) work on two still-injured species, sea otters and harlequin ducks. The FY 03 funding request includes closeout activities (final data analysis and report writing) for both the sea otter and harlequin duck components. [Note: Funds were approved in August 2002.]

Proj.No	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Request	FY 03 Approved	FY 04 Request	FY 04 Recom.
3-030455	GEM Data System	Trustee Council Office	ALL	Cont'd FY 02-	$212.9	$212.9		

Project Abstract

This project supports the data management and information transfer system for GEM. Data collection, quality control and documentation, archiving, transfer, delivery, and presentation are critical components of GEM. Project funding will allow the GEM Data Systems Manager to provide the leadership and expertise necessary for this essential part of the GEM program, and hire support staff to make initial aspects of the program operational.

STAC Recommendation

This proposal was reviewed by the Chief Scientist and not by the STAC. Data management will be a critical component of GEM.

Trustee Council Action

Fund. This project provides funding for the GEM Data Systems Manager and related data system costs. Data collection, quality control and documentation, archiving, transfer, delivery, and presentation are critical components of GEM. [Note: Funds were approved in August 2002.]

Proj.No	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Request	FY 03 Approved	FY 04 Request	FY 04 Recom.
030462	Effect of Disease on Pacific Herring Population Recovery in Prince William Sound	G. Marty/Univ. of California, Davis	ADFG	Cont'd FY 99-03	$87.0	$87.0	$0.0	$0.0

Project Abstract

In spring 2001, prevalence of *Ichthyophonus hoferi* (38 percent) in the Pacific herring population of Prince William Sound was more than 50 percent greater than in any year studied (1989-2000). *I. hoferi* causes severe, disseminated, chronic disease in Pacific herring that is best diagnosed using histopathology. Before 2001, *I. hoferi* was not associated with unexpected declines in population biomass, but during the last century increases in *I. hoferi* prevalence in Atlantic herring have been associated with several disease outbreaks. To understand the significance of the 2001 *I. hoferi* outbreak, this project will analyze samples already collected in fall 2001 and spring 2002 as part of Project 02462.

STAC Recommendation

This proposal was reviewed by the Chief Scientist and not by the STAC. Herring remain one of the key non-recovered species and are of substantial commercial importance, in addition to being a key component of the pelagic ecosystem. This project has contributed much to our understanding of disease expression in herring. In the opinion of the reviewers, most of the value of this project has been obtained through the contributions already made to the literature and to the management of the herring fishery by work on the VHS (viral hemorrhagic septicemia) virus. The reviewers feel there is insufficient justification for substantial investment of further research money in sample processing for determining the presence of a second pathogen (*Ichthyophonus hoferi*). However, a modest contribution of matching funds to a larger effort would be in order. Fund at level of $25,000 if matching funds are obtained.

Trustee Council Action

Fund full request ($87,000) in two phases contingent on submittal and approval of budget for this amount: First Phase I is $25,000 to be released to principal investigator now; Phase II is up to $62,000 to be released in January 2003, with actual amount to be determined based on amount of funds obtained from non-EVOS sources by the principal investigator by that time. This project, which has made an important contribution to management of the herring fishery, will complete its work on viral hemorrhagic septicemia in FY 02 (Project 02462). FY 03 funds are to conduct new work on *Icthyophonus hoferi*. The reviewers consider the organ-by-organ pathobiological study proposed to be of lower priority at this stage of the restoration program, but a modest contribution to the project is worthwhile. The project objective is to determine whether disease continues to limit recovery of the Prince William Sound herring population. [Note: Funds were approved in November 2002.]

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Request	FY 03 Approved	FY 04 Request	FY 04 Recom.
030476	Effects of Oiled Incubation Substrate on Pink Salmon Reproduction	R. Heintz/NOAA	NOAA	Cont'd FY 99-	$37.1	$37.1	$0.0	$0.0

Project Abstract

Populations are maintained through successful reproduction; this study is designed to determine if exposure to oil impairs pink salmon reproduction. This experiment began in the fall of 1998 when pink salmon eggs were incubated in oil contaminated water. Fish that survived exposure were marked and released in the spring of 1999. They reached maturity at sea and returned to spawn in the fall of 2000. Return rates confirmed previous observations of reduced marine survival among exposed fish, but evaluations of offspring (F1) survival rates did not indicate any reproductive impact. The F1 were incubated in clean water until spring 2001 when they were marked and released. They will mature and return to the hatchery in the fall of 2002 and their reproductive ability will be evaluated by generating an F2 generation. A diminished ability to produce the F2 generation represents a genetic effect of oil transmitted to unexposed generations. Such an effect was demonstrated for similarly treated pink salmon in 1997, but corroborating data do not exist. This project is designed to retest that experiment; if diminished reproductive ability is corroborated, it would demonstrate a significant and unanticipated effect of oil pollution.

STAC Recommendation

This proposal was reviewed by the Chief Scientist and not by the STAC. This is an important project because it rigorously tests the hypothesis that pink salmon have herritable damage expressed as reduced survival. The Trustee Council should complete this project, as it has been fundamental for understanding the damage to pink salmon from the oil spill. The FY 03 work will complete a two-generation experiment started in 1998 with exposure of salmon eggs to oil. Fund.

Trustee Council Action

Fund closeout of this project contingent on submittal of overdue report (01476). This project is validating the effects of oil contamination on pink salmon, thus contributing to our understanding of the injury and recovery status of this injured species. [Note: Funds were approved in August 2002.]

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Request	FY 03 Approved	FY 04 Request	FY 04 Recom.
3-030550	Alaska Resources Library and Information Services (ARLIS)	All Trustee Council Agencies	ALL	Cont'd Ongoing	$95.1	$95.1		

Project Abstract

This project represents the Trustee Council's contribution to the Alaska Resources Library and Information Services (ARLIS). ARLIS serves as a central access point for information generated through the Trustee Council restoration process and the GEM program. In addition, ARLIS acts as the public repository for reports and other materials generated from and related to the cleanup, damage assessment and restoration efforts following the oil spill. ARLIS supports the research efforts and information needs of the Restoration Office, principal investigators, natural resources professionals, and the general public.

STAC Recommendation

This proposal was reviewed by the Chief Scientist and not by the STAC. The oil spill collection at ARLIS (Alaska Resources Library and Information Services) is a legacy of the spill and an important means of providing the public with oil spill information. Defining how ARLIS might support GEM needs to be better addressed. GEM's library needs will likely be oriented more toward electronic formats and processes and away from paper documents, with an emphasis on web-based services. The funds currently going toward Project 03550 might be more effectively spent in the future on a service or services more tailored to the specific research and data needs of GEM. Fund for FY 03 only.

Trustee Council Action

Fund continuation of one librarian at the Alaska Resources Library and Information Services (ARLIS). Trustee Council contributions in FY 04 and beyond may be reduced as the transition to GEM is completed. ARLIS provides an important service for documents and other materials produced through the damage assessment and restoration processes. The Council's original funding commitment to ARLIS was through FY 01 only; how ARLIS might relate to the GEM program in FY 04 and beyond is not clear at this time. [Note: Funds were approved in August 2002.]

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Request	FY 03 Approved	FY 04 Request	FY 04 Recom.
3-030556	High Resolution Mapping of the Intertidal and Shallow Subtidal Shores in Kachemak Bay	C. Schoch/Kachemak Bay	ADFG	Cont'd FY 03	$32.3	$32.3	$0.0	$0.0

Project Abstract

This is a continuation of the field mapping project started in FY 02 (Project 02556). Funds in FY 04 will complete the field mapping and begin building a database of the geomorphology and physical attributes of shallow subtidal and intertidal habitats for the greater Kachemak Bay/Lower Cook Inlet area. We regard this as the foundation for developing a monitoring program to detect changes in nearshore communities resulting from shifts in watershed and marine processes. Other map tools, such as the NOAA Environmental Sensitivity Index (ESI) and the Shore-zone Classification, were developed for oil spill response planning and do not contain the data necessary for resolving small spatial scale features of the shoreline needed in ecological studies where biophysical linkages often occur at scales of less than one meter.

STAC Recommendation

This proposal would complete mapping started in FY02. The need for this project was identified in the recommendations from the GEM April 2002 nearshore mapping workshop. Recommend funding to complete the project. Fund.

Trustee Council Action

Fund. This proposal will complete mapping begun under Project 02556, create a GIS database, and prepare a final report. The principal investigator should participate in an additional mapping workshop to be held in Spring 2003. [Note: Funds were approved in November 2002.]

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Request	FY 03 Approved	FY 04 Request	FY 04 Recom.
030558	Harbor Seal Recovery: Application of New Technologies for Monitoring Health	S. Atkinson/UAF	ADFG	Cont'd FY 01-03	$286.7	$286.7	$0.0	$0.0

Project Abstract

This study is a continuation of the study to assess the potential for new technologies to monitor the endocrine and immune systems for the health of harbor seals. During year one, baseline samples were collected from both permanently captive and rehabilitation seals at the Alaska SeaLife Center. Analysis of thyroxine (T4), triiodothyronine (T3), and cortisol (metabolic and gluconeogenic hormones), and measurement of immunoglobulins (IgG, IgM, and IgA) and organochlorine contaminants are currently being assessed. Cell lines to quantify immunoglobulins have been initiated, and baseline hormones have been established. FY 03 will compare the profiles of free-ranging seals and those failing to thrive in their environment in an effort to restore this species.

STAC Recommendation

This proposal was reviewed by the Chief Scientist and not by the STAC. This is an excellent proposal investigating contaminant effects on reproductive biology of harbor seals. Previous concerns about the pace of assay development have been addressed and the project is on track to complete its objectives. Fund.

Trustee Council Action

Fund; previous concerns about the pace of assay development have been addressed and budget questions have been resolved. FY 03 was to be this project's closeout year (data analysis and final report writing only) but additional sample collection--and the corresponding bench fees for housing the research animals at the Alaska SeaLife Center--has also been proposed and is recommended for funding along with closeout activities. This project is employing new technologies at the Alaska SeaLife Center to assess and monitor the health of harbor seals. [Note: The approved amount includes $167,600 for Alaska SeaLife Center bench fees. Funds were approved in August 2002.]

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Request	FY 03 Approved	FY 04 Request	FY 04 Recom.
3-030561	Evaluating the Feasibility of Developing a Community-Based Forage Fish Sampling Project for GEM	D. Roseneau/USFWS	DOI	Cont'd FY 02-03	$17.0	$17.0	$0.0	$0.0

Project Abstract

This project will close out Project 02561, which is evaluating the feasibility of developing a community-based forage fish sampling project for GEM. The work in FY 03 will consist of compiling and analyzing information collected during FY 02, and writing a final report. [Note: A proposal submitted under the Phase II invitation to field-test the hypothesis that residents of oil spill communities can successfully participate in and contribute to forage fish sampling projects by collecting and labeling stomachs from a variety of locally caught predatory fish, was not funded. The STAC recommended that the project be closed out and the results evaluated before a decision on the Phase II proposal is made, and also had the following comments: "There appears to be little integration between community natural resource management datasets and other aspects of this proposal that estimate forage fish relative abundance. Recommend that in future proposals community research questions, to the extent that they are within the scope of GEM, be the focus of the project. Need more data to determine the efficacy of using predatory fish as samplers of forage fish."]

STAC Recommendation

This proposal was reviewed by the Chief Scientist, not the STAC. The concept of this project--community-based sampling of predator fish to monitor their prey (forage fish)--is scientifically sound and economically viable. It addresses GEM's objective of community involvement with potential to contribute to several aspects of long-term monitoring. This project will produce a useful plan for the Kachemak Bay-lower Cook Inlet region and Prince William Sound.

Trustee Council Action

Fund closeout of this project, which is visiting spill-area communities to explore involving local residents in long-term forage fish monitoring studies. This effort builds on work successfully begun under APEX (Alaska Predator Ecosystem Experiment, Project 99163). It will contribute to understanding the feasibility of community-based sampling programs in general, and therefore is an important part of GEM transition. It should be noted that the Council's interest in this project is not in the particular data that might be gathered relevant to forage fish, but in the techniques and strategies that might be developed in regard to designing a community involvement component for GEM. [Note: Funds were approved in August 2002.]

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Request	FY 03 Approved	FY 04 Request	FY 04 Recom.
030574	Assessment of Bivalve Recovery on Treated Mixed-Soft Beaches in Prince William Sound	Dennis Lees/Littoral Eco & Environ	NOAA	Cont'd FY 02-03	$36.0	$36.0	$0.0	$0.0

Project Abstract

Studies from 1989 through 1997 suggest that bivalve assemblages on beaches in Prince William Sound with high-pressure hot-water washing remain severely damaged in terms of species composition and function. This project will assess the generality of this apparent injury to these assemblages. A finding that our conclusions are accurate will indicate that a considerable proportion of mixed-soft beaches in treated areas of the sound remains extremely disturbed and that these beaches are functionally impaired in terms of their ability to support foraging by damaged nearshore vertebrate predators such as sea otters and harlequin ducks.

STAC Recommendation

This proposal was reviewed by the Chief Scientist and not by the STAC. This is the second and final year of funding for this intertidal project. The need for this work has long been recognized in the Restoration Plan, but not until last year did an affordable project appear. Fund.

Trustee Council Action

Fund closeout of this project, which will extend sampling initiated under the National Oceanic and Atmospheric Administration's HAZMAT program to document continuing effects of shoreline cleanup on populations of important bivalves, thus allowing the results to be generalized over a larger geographic range. [Note: Funds were approved in August 2002.]

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Request	FY 03 Approved	FY 04 Request	FY 04 Recom.
G-030575	Designing a Community Involvement/Community-Based Monitoring Plan for GEM	M. Sigman/Coastal Studies	NOAA	New FY 03	$109.6	$109.6	$0.0	$0.0

Project Abstract

This project will design and produce a draft GEM community involvement and community-based monitoring plan to address the needs of diverse communities in the region. This initiative will be informed by (a) a case history review of working models of community-based monitoring efforts relevant to the GEM conceptual foundation, (b) a regional capacity assessment to identify potential partnerships, (c) issues and indicators as identified by Chugach Regional Resource Commission's Tribal Natural Resource Planning Process and other community planning processes. Recommendations will include identifying new approaches to melding Western science and local and traditional knowledge and pilot community-based monitoring projects.

STAC Recommendation

This proposal was reviewed by the Chief Scientist and not by the STAC. This project promises to produce a case-study review of other similar programs, undertake a regional capacity assessment, identify issues and indicators from Chugach Regional Resource Commission's Tribal Natural Resource Plans, and identify new approaches to link western science and local ecological knowledge. These deliverables will address a very important aspect of the GEM program. Despite some problems (lack of detail and clarity in portions of the proposal), this is a good proposal. Fund.

Trustee Council Action

Fund, with authorization of funds for Phase II (development of framework document and development of possible pilot projects; $57,800) contingent on satisfactory completion of Phase I (community monitoring capacity assessment, literature review, and planning; $51,800). This project addresses the Trustee Council's interest in a strong and meaningful role for community involvement/community monitoring in GEM. It will build on some of the efforts funded in earlier years under Project /052 (Community Involvement/Traditional Knowledge/Tribal Stewardship) but with (a) a different emphasis--development of a regionwide community monitoring plan as opposed to development of specific tribes' stewardship capacity and (b) a broader focus --Project /052 has been limited to tribes only; this project will include non-tribal community groups and add Homer and Cordova to the list of participating communities. [Note: Funds were approved in August 2002.]

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Request	FY 03 Approved	FY 04 Request	FY 04 Recom.
G-030584	Evaluation of Airborne Remote Sensing Tools for GEM Monitoring	E. Brown/UAF J. Churnside/NOAA	ADFG	Cont'd FY 02-03	$39.3	$39.3	$0.0	$0.0

Project Abstract

This is the year-two completion of a project initiated in FY 02. The main objective is an evaluation of airborne remote sensing tools for GEM ecological interpretation of the data collected. The instrument package consists of (a) a pulsed lidar to map subsurface features to a maximum of 50 m, (b) an infrared radiometer to map Sea Surface Temperature (SST) day, (c) two three-chip digital video systems to map ocean color (chlorophyll), birds, mammals, surface fish schools, and ocean frontal structure, and (d) an infrared digital video to map birds and mammals at night. Shipboard and buoy data will be used for validation and interpretation of remotely sensed data.

STAC Recommendation

This proposal was reviewed by the Chief Scientist and not by the STAC. Monitoring forage fish abundance is a challenge for the GEM program. This is a highly innovative project to do such monitoring, and is therefore more risky than others. However, it deserves support through the proposed development phase, as the pay-off of success would be great. Fund.

Trustee Council Action

Fund closeout of this project, which is exploring airborne remote sensing instrumentation as a monitoring tool for GEM. This highly innovative project is working on a challenging question, which is how to effectively and efficiently monitor forage fish abundance under the GEM program. If the project is successful, the pay-off will be great. [Note: Funds were approved in August 2002.]

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Request	FY 03 Approved	FY 04 Request	FY 04 Recom.
030585	Lingering Oil: Bioavailability and Effects to Prey and Predators	J. Rice, J. Short/NOAA J. Bodkin, B. Ballachey/USGS	NOAA & DOI	Cont'd FY 02-03	$121.6	$121.6	$0.0	$0.0

Project Abstract

About 20 acres of contaminated beach were found in 2001 surveys of western Prince William Sound conducted under Project 01543. In these areas, sea otters and harlequin ducks have not recovered, raising concerns that continued oil exposure may be affecting their survival. Biochemical assays and mortality patterns are consistent with continuing oil exposures, but prior to this study, linkages between oil persistence and impacts at higher trophic levels had not been attempted. In this study, shoreline contamination, exposure and effects were examined simultaneously by choosing a common set of sites at which to assess oil persistence and biological impacts on sea otters and harlequin ducks. Fieldwork was conducted in FY 02, and closeout activities, including data analyses and writing of reports and publications, will be done in FY 03. The National Oceanic and Atmospheric Administration's Auke Bay Lab has been leading the studies of oil bioavailability and impacts to prey species; Department of Interior-U.S. Geological Survey has been directing the studies on sea otters and harlequin ducks.

STAC Recommendation

This proposal was reviewed by the Chief Scientist and not by the STAC. This is a very good to excellent proposal that addresses the potential effects of remaining intertidal oil deposits (mainly subsurface) on the food web, including clams and intertidal fish, sea ducks (harlequin ducks) and sea otters, which are apparently still exposed to lingering oil. This is a closeout of the two-year project to document oil remaining in the intertidal and how it may be available to higher trophic levels. The request for funds to analyze oil-exposed bivalves is warranted, as this may establish an exposure pathway to higher trophic levels. The project is related to Project 03620, but the latter project focuses more closely on relating foraging area to exposure. Fund, including funds for additional chemical analyses and analysis of interstitial water samples.

Trustee Council Action

Fund closeout of this project, including funds for additional chemical analyses and analysis of interstitial water samples, contingent on submittal of overdue reports (00454, 01599) and manuscript (00598). This project, which integrates studies of sea otters and harlequin ducks with continued assessment of oil persistence, is the product of a workshop convened in 2001 to review results from Project 01543/Evaluation of Oil Remaining in the Intertidal and to identify information gaps. The project's objective is to determine if the signs of continued oil exposure in sea otters and harlequin ducks are linked to the oil remaining in intertidal sediments. [Note: Funds were approved in August 2002.]

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Request	FY 03 Approved	FY 04 Request	FY 04 Recom.
G-030596	Securing Flow Data for a Lower Kenai Peninsula Salmon Stream	J. Cooper/Cook Inlet Keeper	ADFG	New FY 03	$22.6	$22.6	$0.0	$0.0

Project Abstract

Since August 1998, Cook Inlet Keeper and the Homer Soil and Water Conservation District have been collecting discharge and water quality data from four important salmon streams on the lower Kenai Peninsula: Ninilchik River, Anchor River, Deep Creek, and Stariski Creek. With the loss of funding, the U.S. Geological Survey (USGS) no longer can maintain the Ninilchik River gauge. Keeper, Homer Soil and Water Conservation District, Ninilchik Traditional Council and others depend on this gauge for the flow data needed to achieve a complete picture of water quality in these watersheds. This project will provide funds for Keeper to contract with USGS to maintain the gauge for one year, during which time long-term funding will be secured.

STAC Recommendation

This proposal was reviewed by the Chief Scientist and not by the STAC. This is a very cost-effective proposal for "bridge funding." Funding in FY 03 will prevent loss of a year in a time-series of physical data--freshwater runoff in the Ninilchik River--that is expected to be useful in understanding differences in natural forcing. Fund, lower priority.

Trustee Council Action

Fund revised proposal, which clarifies the matching funds available for the gauge's FY 03 (October 2002-September 2003) operation. The revised proposal also includes a small amount of funding to cover the costs of retrieving and processing gauge data for the period May-September 2002 and clarifies that the cost of operating the gauge during this period will be covered by the U.S. Geological Survey. This project will provide interim funding (FY 03 only) for maintenance of the Ninilchik River stream-flow gauge while a permanent, long-term funding source is sought. Cook Inlet Keeper relies on this gauge in monitoring the water quality of the Ninilchik River, which the Alaska Department of Environmental Conservation has rated as at high risk from nonpoint source pollution and as having a high need for data collection. Water quality is a key element in understanding the watershed and nearshore environments of the spill-impacted region and the overall health and productivity of such resources as salmon, herring, and sea otters which were seriously impacted by the oil spill. [Note: Funds were approved in August 2002.]

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Request	FY 03 Approved	FY 04 Request	FY 04 Recom.
3-030600	Synthesis of the Ecological Findings from the EVOS Damage Assessment and Restoration Programs, 1989-2001	R. Spies/AMS	ADNR	Cont'd FY 02-04	$215.9	$215.9	$184.8	$184.8

Project Abstract

This project is synthesizing the results from 12 years of post-spill study in the EVOS damage assessment and restoration programs in the context of anthropogenic and natural factors causing change in the northern Gulf of Alaska ecosystem. The result of the work will be an integrated synthesis book. The book will consist of three major sections: (a) the basic structure and function of the ecosystem, (b) how it changes over time and how it responds in disturbances, and (c) the effect of the spill: how our understanding of the ecosystem has matured and what future path will help us better understand this valuable marine ecosystem. The book will be a major product of the EVOS restoration program and help set the foundation for GEM.

STAC Recommendation

Proposal was not reviewed by Chief Scientist or STAC. Two independent reviews were conducted.

Trustee Council Action

Fund. This project will integrate what has been learned from more than a decade's worth of science following the oil spill. Such a synthesis will fulfill at least two purposes: (a) inform the public about the EVOS legacy in a scientifically rigorous yet readable volume and (b) provide a foundation for GEM. A detailed outline for the synthesis will be completed shortly and will be supplied to the Trustee Council for comment. In addition, the principal investigator should work closely with the Trustee Council Office in designing the multimedia presentation to ensure that it will be a useful tool for Council staff in communicating the results of the restoration program to the public and others. [Note: Funds were approved in August 2002.]

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Request	FY 03 Approved	FY 04 Request	FY 04 Recom.
3-030607	Geographic Information Systems (GIS) Map of Water Quality Monitoring Sites Across the Gulf of Alaska	J. Cooper/Cook Inlet Keeper	NOAA	New FY 03	$13.1	$13.1	$0.0	$0.0

Project Abstract

This project will synthesize existing data to create a comprehensive Geographic Information Systems (GIS) map and database of monitoring sites across the Gulf of Alaska. This map will be published in hardcopy and will be linked to CIIMMS (Cook Inlet Information Management and Monitoring System, Project 01391) and STORET, through which the map and data can be easily updated and made available to monitoring entities as well as policy makers, scientists, and the general public. This map and the accompanying data will serve as a lasting tool for the restoration and protection of the Gulf of Alaska's resources by coordinating diverse monitoring efforts and establishing a framework into which information about current and future monitoring programs can be entered.

STAC Recommendation

This proposal was reviewed by the Chief Scientist and not by the STAC. This proposal will create a database and map of water quality sites in the Gulf of Alaska. Such a database will be useful in meeting GEM objectives. The database should include the entire geographic area encompassed by the GEM program. Fund.

Trustee Council Action

Fund. This project will create a GIS map of water quality monitoring sites (including physical, chemical, and biological parameters) by identifying existing sites across the Gulf of Alaska and incorporating this information into CIIMMS (the Cook Inlet Information Management and Monitoring System created under Project 01391). This information will be useful for GEM planning. [Note: Funds were approved in August 2002.]

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Request	FY 03 Approved	FY 04 Request	FY 04 Recom.
3-030610	Kodiak Archipelago Youth Area Watch	T. Schneider/Kodiak Sch. Dist.	ADFG	Cont'd FY 00-	$63.0	$63.0	$61.8	

Project Abstract

This project will engage students in projects with goals aligned with the general restoration efforts of the Trustee Council. Students and site coordinators will conduct interviews with local experts and document traditional ecological knowledge, publishing it in a Kodiak School District oral history magazine. Participation of Youth Area Watch adults and students in the annual Academy of Elders/Science Camp will be strongly encouraged. Such participation will serve as another avenue for more tribal members to learn about restoration efforts, scientific monitoring techniques, and occupations related to such work. The value and implications of traditional ecological knowledge will be strongly emphasized throughout the implementation of the project.

STAC Recommendation

This proposal was reviewed by the Chief Scientist and not by the STAC. This ongoing project has shown solid evidence of success, including influencing the curriculum of the Kodiak School District, and has attracted additional funding from other sources. This popular and successful program is achieving its objectives. Fund.

Trustee Council Action

Fund. This project, which involves local youth in restoration projects, addresses the Trustee Council's commitment to community involvement in GEM. In FY 03, students in Akhiok, Old Harbor, Port Lions, Ouzinkie, Chiniak, and Kodiak City will participate. [Note: Funds were approved in August 2002.]

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Request	FY 03 Approved	FY 04 Request	FY 04 Recom.
3-030614	Monitoring Program for Near-Surface Temperature, Salinity, and Fluorescence in the Northern Pacific Ocean	S. Okkonen/UAF	ADFG	Cont'd FY 02-03	$29.0	$29.0	$0.0	$0.0

Project Abstract

This project will use a thermosalinograph and fluorometer, to be installed on a crude oil tanker, to acquire continuous, long-term measurements of the near-surface temperature, salinity, and fluorescence fields along the tanker route between Valdez, Alaska and Long Beach, California. The additional funds provided in Phase II will complete installation of the fluorometer (the thermosalinograph has been installed on the tanker *Polar Alaska*) and allow for several adjustments to the project objectives.

STAC Recommendation

This project is developing a body of sustained observations that are relevant to understanding and detecting changes in ecosystem components and ecosystem processes over decades. Fund.

Trustee Council Action

Fund closeout of this project (data analysis and preparation of final report/manuscript). In FY 02, this project installed a thermosalinograph and fluorometer on a crude oil tanker traveling between Valdez and Long Beach. Vessels of opportunity such as this are a cost-effective method that may be useful to GEM, and the data collected by this project on ocean conditions in Alaskan waters will be extremely useful to GEM. [NOTE: $18,100 was approved in August 2002 and $10,900 was approved in November 2002. The second phase of funding was to accommodate problems with equipment and logistics.]

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Request	FY 03 Approved	FY 04 Request	FY 04 Recom.
030620	Lingering Oil and Predators: Pathways of Exposure and Population Status	S. Rice, J. Short/NOAA J. Bodkin, B. Ballachey/USGS	NOAA & DOI	New FY 03-04	$435.8	$435.8	$30.0	$30.0

Project Abstract

Lingering oil and continued effects to sea otters and sea ducks are the most surprising and best documented long term impacts of the oil spill. Strong evidence is accumulating which implicates lingering oil as a factor constraining recovery of the nearshore ecosystem in western Prince William Sound. Acute and chronic contamination of sediments and prey species were well documented during the years following the spill. Twelve years later, elevated biomarker levels in sea otters and sea ducks have indicated continued exposures to hydrocarbons. Evidence implicating a route of exposure to date has been largely circumstantial. However, in 2001 and 2002, extensive sampling was undertaken to document the distribution, abundance, and bioavailability of lingering oil along those shorelines most heavily impacted by the spill. This has paved the way for identifying specific areas where sea otters and sea ducks could be currently foraging and exposed to lingering oil. This project is an outgrowth of the earlier studies and will focus on the direct pathways of lingering oil to sea otter and sea duck populations in two heavily impacted bays in the western sound.

STAC Recommendation

This proposal was reviewed by the Lingering Oil Subcommittee and not by the full STAC. This is an important project for understanding the lingering effects of the oil spill in some of the most heavily oiled localities from 1989. It addresses the potential effects of remaining intertidal oil deposits (mainly subsurface) on the food web, including sea ducks (harlequins) and sea otters, which have not recovered from the effects of the spill and are apparently still exposed to lingering oil. Peer reviewers expressed concerns about the proposal's original experimental design, and a review during a workshop in October 2002 led to some recommended changes. The proposal should be revised to focus on radio-tagged sea otters and harlequin ducks by tracking their positions relative to the remaining oil in a couple of areas around Knight Island. This should be accomplished through aerial flights and observers positioned onshore. Samples of sea otters should be taken both before and after next season with regard to markers of exposure. Fund following final review of revised proposal.

Trustee Council Action

Fund contingent on submittal and approval of revised proposal. National Oceanic and Atmospheric Administration component is also contingent on submittal of principal investigators' overdue reports (00454, 01599) and manuscript (00598) from prior years. This project follows on Project 02585, which is integrating studies of sea otters and harlequin ducks with findings of the lingering oil survey conducted Summer 2001 (Project 01543). The project is designed to address additional objectives related to the potential effects of remaining intertidal oil deposits--specifically in regard to the food web--on sea otters and harlequin ducks, both of which have not recovered from the oil spill and are apparently still exposed to lingering oil. [Note: $192,300 was approved in August 2002 and $243,500 was approved in November 2002.]

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Request	FY 03 Approved	FY 04 Request	FY 04 Recom.
3-030623	PWSRCAC-EVOS Long-Term Environmental Monitoring Program	J. Devens/PWSRCAC	NOAA	New FY 03	$70.9	$70.9	$0.0	$0.0

Project Abstract

This project will provide essential long-term baseline measurements of hydrocarbon levels and sources at program sites within areas of the Prince William Sound, Kenai Peninsula, Kodiak, and Gulf of Alaska. The objective is to provide a program for the collection of baseline data in mussel tissue and subtidal sediments that can be used to determine impacts of oil sources on the ecosystem. This program will provide an improved link to recovery status and greater efficiency in hydrocarbon sampling and analysis that has been ongoing since 1993 under the auspices of the Prince William Sound Regional Citizens' Advisory Council (PWSRCAC).

STAC Recommendation

This proposal is a highly rated long-term monitoring project with community involvement. The principal investigators have modified the proposal in response to past peer review comments. Funding is requested for only one year. There is good potential for this project to be a long-term monitoring component of GEM if data analysis supports this. Fund.

Trustee Council Action

Fund for FY 03 only. This project could provide important long-term measurements of hydrocarbon levels and sources throughout the Gulf of Alaska. Any future funding will be contingent on further evaluation of the number and location of monitoring sites and the utility of the data collected. [Note: Funds were approved in November 2002.]

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Request	FY 03 Approved	FY 04 Request	FY 04 Recom.
G-030624	A CPR-Based Survey to Monitor the Gulf of Alaska and Detect Ecosystem Change	S. Batten/SAHFOS D. Welch/DFOC	NOAA	Cont'd FY 03	$197.2	$197.2	$196.2	$0.0

Project Abstract

Plankton are a critical link in the marine food chain that respond rapidly to climate change and form the link between the atmosphere and upper trophic levels. Many important marine resources in the Gulf of Alaska are strongly influenced by changes in ocean climate. We present evidence from recent Continuous Plankton Recorder (CPR) work showing that significant changes occurred in all plankton communities in the gulf, associated with the recent climate shift, and that the CPR is an appropriate tool for detecting such changes. This project will test the CPR as an almost real-time indicator of ecosystem change across the gulf (the Alaska Coastal Current and offshore). Ships of Opportunity are a cost-effective platform for large scale monitoring. This project builds on collaborative efforts measuring physical parameters and marine bird/mammal populations. Simultaneous data collection and synthesis will assist in determining the underlying mechanisms and aid the GEM program in devising its long-term monitoring strategy.

STAC Recommendation

This proposal addresses GEM's goals for monitoring in the Alaska Coastal Current and offshore habitat areas. It has community involvement with the Valdez Community College. The data from this effort would be highly valuable to GEM both for better understanding these habitat areas and for identifying the key variables that need to be monitored over time to detect and evaluate changes in these habitats. Fund.

Trustee Council Action

Fund FY 03 only. This project will continue to develop the Continuous Plankton Recorder surveys from Ships of Opportunity begun in FY 02 (Project 02624), which have significant potential as part of a long-term monitoring effort in the Alaska Coastal Current and offshore habitats for GEM. [Note: Funds were approved in November 2002.]

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Request	FY 03 Approved	FY 04 Request	FY 04 Recom.
G-030625	Prince William Sound Isotope Ecology Synthesis	T. Kline/PWSSC	NOAA	New FY 03	$25.5	$25.5	$0.0	$0.0

Project Abstract

This project will provide a 'big picture' synthesis of the present structure of the pelagic ecosystem of Prince William Sound through preparation of a scientific paper with tentative title: "A stable isotope based trophic structure of the pelagic community of Prince William Sound, Alaska". The documentation of a 'before picture' will be useful because the recently documented regional change in species composition is likely to alter pelagic trophic structure during GEM.

STAC Recommendation

This proposal was reviewed by the Chief Scientist and not by the STAC. The proposed synthesis could be a worthwhile product, and the principal investigator is certainly the most knowledgeable individual to prepare this synthesis. Fund revised proposal, which reduces the cost of the project to a more appropriate level.

Trustee Council Action

Fund revised proposal, which reduces the project's scope and budget as directed by the Chief Scientist. This project will prepare a synthesis manuscript on the pelagic ecosystem of Prince William Sound, using stable isotope ratio data from biota samples collected and analyzed by the principal investigator under previous EVOS projects (Project 98320/Sound Ecosystem Assessment; Project 01393/Prince William Sound Food Webs: Structure and Change). [Note: Funds were approved in August 2002.]

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Request	FY 03 Approved	FY 04 Request	FY 04 Recom.
3-030630	Scientific Management under GEM	Trustee Council Office	ALL	Cont'd Ongoing	$552.5	$552.5	$300.0	$300.0

Project Abstract

This project will provide scientific oversight of the GEM program and of lingering effects of oil on injured resources. Implementation will be based on the GEM Program Document (GPD), which describes how a network of monitoring and supporting activities will be implemented over a five-year period starting in FY 03. In FY 03, the project will support the Science and Technical Advisory Committee (STAC), two GEM subcommittees (habitat and data management), and four workshops for developing GEM, and will develop the *FY 04 Invitation to Submit Proposals*, provide peer review recommendations and scientific support for the FY 04 Work Plan, continue developing a "State of the Gulf Report", provide regional input to a status report on North Pacific resources now being developed by PICES (North Pacific Marine Science Organization), and support the Lingering Oil Effects Subcommittee and peer review process.

STAC Recommendation

All of the elements in this project are strongly supported by the STAC for funding. The budget was developed by Trustee Council staff.

Trustee Council Action

Fund. Funds are included for STAC travel and stipends, STAC Subcommittee travel, and four workshops. Funds are also provided as a contribution to a statewide effort to develop a comprehensive ocean observing system. This project is designed to ensure that the GEM program is implemented with a high degree of scientific integrity through establishment of an advisory committee of independent experts (the STAC), whose work is supported by subcommittees composed of scientists, resource managers, and community members. The project will also support continued independent peer review of project proposals and reports, as well as the dissemination of research results at an annual meeting at which Council-funded scientists will present their findings to their peers and the public. [Note: $278,400 was approved in August 2002 and $274,100 was approved in November 2002.]

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Request	FY 03 Approved	FY 04 Request	FY 04 Recom.
G-030636	Management Applications: Commercial Fishing	Ken Adams Ross Mullins	NOAA	Cont'd FY 02-03	$50.9	$50.9	$0.0	$0.0

Project Abstract

This project is intended to build a bridge between the scientific community, which is describing and attempting to predict variation in biological production, and the commercial fishing community, which is attempting to find management applications for this new information. In addition, the project seeks to provide community presence to participate in development of GEM.

STAC Recommendation

This proposal was reviewed by the Chief Scientist and not by the STAC. he need for a "bridge project" between science and users, related to EVOS, is quite clear. If the project can identify useful applications from EVOS-based science it will be money well spent. One important criterion of success will be the ability to formulate credible and scientifically well supported proposals to the Alaska Board of Fisheries. The project is off to a strong start in FY 02 with two successful meetings with well-documented outcomes and setting up an office in Cordova. Prospects for serving the needs of those who depend on resources damaged by the oil spill are very good. Prospects for success are improved with the proposed creation in FY 03 of an advisory science panel, for which commitments have already been obtained from four persons knowledgeable in the academic and professional side of natural resource management and/or oceanography. Fund.

Trustee Council Action

Fund FY 03 only; the proposers have obtained the participation of scientific advisors, as recommended by the Chief Scientist. In FY 02 this project formed a Prince William Sound Fisheries Research Applications and Planning Group (Cordova District Fishermen United, Alaska Department of Fish and Game, Prince William Sound Aquaculture Corporation, Valdez Fisheries Development Association, commercial fishers, and others) to provide a forum for developing fisheries management applications. The group's FY 03 objectives are to (a) identify a fisheries- relevant subset of EVOS projects, (b) develop criteria and guidelines for making information gathered by GEM relevant for fisheries management and shore-based communities, and (c) develop a plan for moving from basic science to management application. The project will be evaluated at the end of FY 03 and a decision made on continuation. One measure of success will be the project's ability to formulate credible and scientifically well supported proposals to the Alaska Board of Fisheries. The EVOS program can benefit from the commercial fishing community's perspective on restoration results and interaction with fishers on how to incorporate the results into fisheries management practices. The project could form a foundation for working with Prince William Sound fishers. [Note: Funds were approved in August 2002.]

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Request	FY 03 Approved	FY 04 Request	FY 04 Recom.
3-030641	ShoreZone Mapping for GEM	J. Harper/ COR, Inc.	NOAA	New FY 03	$218.2	$34.4	$390.0	

Project Abstract

This project will conduct reconnaissance coastal mapping of all GEM regions. All of the shoreline within GEM will be imaged and mapped. The first phase of the initiative will be to develop an Alaska ShoreZone Mapping Protocol, based on the BC-Washington protocol but incorporating special components for Alaska; a user workshop is included as part of the protocol development. Aerial Video Imagery (AVI) will be collected during the lowest tides of the year and will be used as the primary data source for intertidal and shallow subtidal mapping. Eight six-day AVI surveys (est. 12,800 km of shoreline) are proposed for GEM funding; supplemental funding may be available from other sources (NPS, SERVS, PWSRCAC). ShoreZone mapping will follow the Alaska ShoreZone Mapping Protocol, which is included as part of this project. The mapping data will provide a consistent, regional characterization of the physical and biological shore-zone features throughout the GEM area. This mapping data is used by state and federal agencies for regional planning and development of derivative models. Non-governmental organizations have routinely used the ShoreZone data for public awareness campaigns and Marine Protected Area planning.

STAC Recommendation

It is not clear at this point whether mapping the entire coastline of the GEM area is the best use of GEM resources. Additional information is needed to determine how this proposal fits into mapping activities by other agencies and programs and the potential for partnering. Recommend that funding be provided to develop the protocol and present it at a workshop to evaluate the utility of the ShoreZone mapping and other mapping options as a long-term monitoring activity.

Trustee Council Action

Fund at reduced level of $34,400, which reduces project scope as recommended by the STAC, contingent on overdue report from Project 02619/Kodiak Shoreline Mapping. The principal investigator should help organize and participate in a coastal mapping workshop to be held in Spring 2003 to evaluate the utility of ShoreZone mapping and other mapping options as a proposed long-term monitoring activity. [Note: Funds were approved in November 2002.]

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Request	FY 03 Approved	FY 04 Request	FY 04 Recom.
3-030642	Database on the Marine Invertebrate Macrofauna of Prince William Sound: An Addition to the University of Alaska Museum's ARCTOS Network	N. Foster/UAF Museum	ADFG	New FY 03	$19.2	$19.2	$0.0	$0.0

Project Abstract

Data sets that present basic taxonomic and biogeographic information at the species level for 1,876 plant and animal species from Prince William Sound were compiled as part of research on potential introductions of nonindigenous species. This project will edit the data on the 1,343 invertebrate species, and make the literature and specimen records of their occurrences available on the University of Alaska Museum's ARCTOS web-accessible database.

STAC Recommendation

This proposal would make an important EVOS dataset more readily available to the public and researchers. Fund.

Trustee Council Action

Fund based on STAC recommendation. [Note: Funds were approved in November 2002.]

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Request	FY 03 Approved	FY 04 Request	FY 04 Recom.
G-030647	Investigating the Relative Roles of Natural and Shoreline Harvest in Altering the Kenai Peninsula's Rocky Intertidal	J. Ruesink/UW	NOAA	New FY 03-04	$87.9	$87.9	$66.9	$66.9

Project Abstract

The rocky shores of the outer Kenai Peninsula are the home of three Sugpiaq native villages where the black chiton, *Katharina tunicata*, remains an important traditional subsistence food source. This benthic invertebrate is also a competitively dominant herbivore known to have dramatic impacts on the structure, dynamics and diversity of the rocky intertidal. In collaboration with tribal members, this project will evaluate the relative roles of natural factors (predation, grazing and natural variability) and anthropogenic impacts (*Katharina* harvest) in altering intertidal community structure. The project addresses the core GEM hypothesis of human versus natural impacts on the structure and productivity of coastal ecosystems. It will also provide two field seasons (2003 and 2004) of valuable baseline monitoring in the intertidal zone that could be continued in the future. Local tribes will be involved in both developing and carrying out research which will match the GEM commitment to community based science.

STAC Recommendation

Proposal is focused on involvement by local communities in obtaining quantifiable research results. Results are expected to contribute to development of GEM in the nearshore habitat type. Project would provide information on how to study the effects of subsistence harvest in the nearshore environments. In the process, the project would also provide comparative data between human and natural influences on species distribution. Fund.

Trustee Council Action

Fund based on STAC recommendation. This proposal will investigate changes in rocky intertidal areas by focusing on the black chiton, an important subsistence resource. Products will also aid GEM planning by providing information on measuring human impacts in the nearshore. [Note: Funds were approved in November 2002.]

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Request	FY 03 Approved	FY 04 Request	FY 04 Recom.
G-030649	Reconstructing Sockeye Populations in the Gulf of Alaska over the Last Several Thousand Years	B. Finney/UAF	ADFG	Cont'd FY 02-04	$92.5	$92.5	$26.6	$26.6

Project Abstract

This project is reconstructing changes in sockeye salmon abundance over the last 5,000 years using the ^{15}N record left by salmon carcasses in the sediments of spawning lakes in Prince William Sound, the Kenai Fjords, the Kenai River watershed, and on Kodiak Island. The research question is: What is the normal variability in sockeye salmon populations in the Gulf of Alaska and how does it relate to climatic changes in the Gulf of Alaska region? The results will provide a valuable background for future monitoring studies within GEM and for fisheries managers working to preserve and restore natural salmon runs.

STAC Recommendation

This proposal was reviewed by the Chief Scientist and not by the STAC. This outstanding project is revealing a 3,500 year record of sockeye salmon abundances in the northern Gulf of Alaska. Previous work with other investigators has established the correlation of salmon abundance with PDO (Pacific decadal oscillation) variations on the decadal scale. The importance of this work is that it describes a much longer record of PDO variation than the European historical record compiled during the 20th century. The project is being executed with the highest scientific standards. Fund, including the proposed addition of three other Kenai Peninsula lakes.

Trustee Council Action

Fund, including new objectives related to core collection from Hidden Lake, Skilak Lake, and a control lake on the Kenai Peninsula. This project is conducting a retrospective study of sockeye abundance in certain lakes in the spill region and developing hypotheses about how changes in the atmosphere/ ocean system affect salmon populations. [Note: Funds were approved in August 2002.]

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Request	FY 03 Approved	FY 04 Request	FY 04 Recom.
3-030654	Surface Nutrients over the Shelf and Basin in Summer: Bottom-up Control of Ecosystem Diversity	P. Stabeno/NOAA-PMEL C. Mordy/NOAA-PMEL	NOAA	New FY 03-04	$37.5	$37.5	$43.6	$43.6

Project Abstract

The goal of this project is to better understand the extraordinary variability of nutrients (spatial, interannual and decadal) and factors controlling nearshore communities and zooplankton and juvenile salmon distributions in the northern Gulf of Alaska. The project will monitor nitrate over the shelf and basin. Underway samples will be collected as part of the NMFS-OCC/GLOBEC salmon survey in July/August of 2003 and 2004. This survey includes a transit across the central gulf and ten cross-shelf oceanographic and juvenile salmon transects from Yakutat to Kodiak Island. This will be the broadest nutrient survey of the northern gulf. Nutrient maps will be used to support NPZ (nutrient/phytoplankton/zooplankton) models and satellite-derived models of nitrate and new production, to examine mechanisms of nutrient supply such as mixing over banks and transport up submarine canyons, and to assist resource management of salmon and other commercially important species. GEM funding in 2003 is crucial as this is GLOBEC's final intensive field season.

STAC Recommendation

Information on the role of surface nutrients in productivity in the Gulf of Alaska would be valuable information for GEM planning. Results are expected to be relevant to understanding how to address GEM in the Alaska Coastal Current habitat type. This proposal takes advantage of an opportunity to partner with an existing data collection effort for a relatively modest cost. Fund.

Trustee Council Action

Fund based on STAC recommendation. [Note: Funds were approved in November 2002.]

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Request	FY 03 Approved	FY 04 Request	FY 04 Recom.
3-030656	Retrospective Analysis of Nearshore Marine Communities Based on Analysis of Archaeological Material and Isotopes	G. Irvine/USGS J. Schaaf/NPS	DOI	Cont'd FY 02-03	$53.7	$53.7	$0.0	$0.0

Project Abstract

This project will investigate long-term (6,300 year) patterns of productivity and relative species abundances in nearshore, intertidal communities via retrospective analyses. These analyses will focus on excavated midden remains of very rich, well-dated archaeological sites along the Katmai National Park and Preserve coast. Changes in nearshore marine communities will be assessed through examination of relative species abundances, size-frequency analysis, and other indicators of habitat changes. Isotopic analysis of shells will provide an assessment of long-term productivity patterns in the nearshore marine environment as related to major periods of climate change.

STAC Recommendation

This proposal was reviewed by the Chief Scientist and not by the STAC. This pilot project has the potential to produce innovative data of great interest and relevance to understanding natural variation in ocean systems and the human use of resources over long time frames. The originality of this work is very high, although there is a risk that the coarse temporal resolution of the method will prevent precise conclusions. The addition of funds for a paleoceanographer is justified in order to add needed expertise to the project team. Fund.

Trustee Council Action

Fund closeout of this project. A portion of the increase ($15,900) in funding over the expected amount is due to a delay in the stable isotope analyses scheduled for FY 02; an equivalent amount of funds will be lapsed back to the Trustee Council at the end of FY 02. This project is designed to improve understanding of long-term change in nearshore marine communities and investigate the relationship between productivity and climate. [Note: Funds were approved in August 2002.]

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Request	FY 03 Approved	FY 04 Request	FY 04 Recom.
G-030666	Alaska Natural Geography in Shore Areas: An Initial Field Project for the Census of Marine Life	B. Konar/SFOS-UAF K. Iken/SFOS-UAF	ADFG	New FY 03-04	$266.3	$266.3	$211.4	$211.4

Project Abstract

This project will initiate nearshore biodiversity studies along a pole-to-pole latitudinal gradient by applying protocols developed under the Census of Marine Life program. After initial sampling in Southcentral Alaska, the gradient will develop further throughout Alaska, along the Pacific Coast of North and South America into the Antarctic. Under GEM funding during the years 2003 and 2004, this project will sample four study sites in each of three core areas in the Gulf of Alaska: Kodiak Island, Prince William Sound and Kachemak Bay. Study sites are macroalgal hard bottom or seagrass communities, and are characterized by a high level of pristineness. The project is heavily based on local community involvement for sampling. Expected outcomes are biodiversity baseline data for future long-term monitoring programs, initiation of long-term involvement of local communities in monitoring efforts in coastal areas, capacity building, and a broad outreach to the public.

STAC Recommendation

Proposal is responsive to the FY 03 Phase II Invitation and has good coordination with community programs, including Youth Area Watch (projects 030210 and 030610). The results of this project are expected to assist GEM in identifying the variables that should be monitored in certain nearshore, soft benthic habitats. In addition, the project provides a pilot effort for involving local communities and science organizations in nearshore planning and site selection, and thus building local capacity and outreach. Fund.

Trustee Council Action

Fund based on STAC recommendation. This project provides key elements for the nearshore GEM program in community involvement, local coordination, capacity building, and public outreach. This proposal is part of an international biodiversity study. [Note: Funds were approved in November 2002.]

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Request	FY 03 Approved	FY 04 Request	FY 04 Recom.
3-030684	Toward Sustainable Management in the Kenai River Watershed: Linking Human & Resource Development with Nutrient & Energy Pathways	A. Mazumder/Univ. Victoria J. Edmundson/ADF&G W. Hauser/ADF&G	ADFG	New FY 03	$59.9	$59.9	$0.0	$0.0

Project Abstract

This project will take the larger Kenai River watershed research plan (being prepared under Project 02612/Detecting and Understanding Marine-Terrestrial Linkages in the Kenai River Watershed) and focus it through ongoing community and stakeholder involvement and agency participation into a directed and implemented research program. Project 02612 has produced communication bulletins and a draft document, and organized workshops to foster an understanding of watershed issues and stakeholder interest and input. From this exercise we recognize the need to maintain and build this dialogue, but gain further involvement. The consensus expressed by participants in Project 02612 is that: (a) a research plan should be implemented that captures the continued involvement of local, state and federal perspectives, (b) a white paper should be developed that presents scientific issues and interests in a plan with broad political, agency and stakeholder distribution, (c) the time to maintain dialogue and interests should be extended beyond the initial research planning process, and (d) a detailed research program with management structure, specific project outlines, funding, and deliverables should be developed.

STAC Recommendation

The proposal is not responsive to the FY 03 Phase II Invitation, which invited synthesis proposals that cut across habitat types, including the watersheds. While there is support for the objectives of this proposal, funding for this aspect might be more appropriate for alternative funding sources. A final report from Project 02612 would need to be evaluated before additional GEM funding can be assessed. Do not fund.

Trustee Council Action

Fund contingent on acceptable review of final report from Project 02612/Marine-Terrestrial Linkages in the Kenai Watershed, and subsequent revision/review of this proposal if necessary. The overall goal of this project is to increase understanding of food-web dynamics in the Kenai River watershed and the role of marine-derived nutrients in the ecosystem. [Note: Funds were approved in November 2002.]

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Request	FY 03 Approved	FY 04 Request	FY 04 Recom.
G-030685	Visible Remote Sensing of the Gulf of Alaska	S. Pegau/Kachemak Bay RR	ADFG	New FY 03	$77.1	$77.1	$0.0	$0.0

Project Abstract

A number of visible remote sensing satellites have been observing the Gulf of Alaska and its watersheds for the past five years and will continue to make observations into the future. Much of the data is available through NASA; however, the data is not easily accessible, fully quality controlled, or necessarily the variables of interest. This synthesis proposal aims to: (a) determine which products would be useful to resource managers and scientists, (b) develop a system to process and provide the existing and future satellite data in a format useful to most users, and (c) provide quality control. The satellite imagery covers all zones described in the GEM Program Document, but this proposal focuses on the oceanic components. The work is a collaborative effort led by the Kachemak Bay Research Reserve with the University of Alaska Fairbanks providing processing facilities.

STAC Recommendation

The proposal addresses regional needs for oceanographic information which should be useful for GEM planning. The principal investigator is well qualified to conduct this work and the proposal was highly rated by the reviewers. Remote sensing is likely to be an important element of the long-term GEM monitoring strategy. The principal investigator should attend the Trustee Council's remote sensing workshop. Fund.

Trustee Council Action

Fund. This proposal addresses a major need for making remote sensing information more accessible. Funding for a remote sensing workshop is included in Project 030630/Scientific Management. [Note: Funds were approved in November 2002.]

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Request	FY 03 Approved	FY 04 Request	FY 04 Recom.
3-030687	Monitoring in the Nearshore: A Process for Making Reasoned Decisions	J. Bodkin/DOI-USGS T. Dean/CRA, Inc.	DOI	New FY 03	$90.0	$90.0	$0.0	$0.0

Project Abstract

Over the past several years, a conceptual framework for the GEM nearshore monitoring program has been developed through a series of workshops. However, details of the proposed monitoring program, e.g. what to sample, where to sample, when to sample and at how many sites, have yet to be determined. This project outlines a process whereby specific alternatives to monitoring are developed and presented to the Trustee Council for consideration. As part of this process, two key elements are required before reasoned decisions can be made: (a) a comprehensive historical perspective of locations and types of past studies conducted in the nearshore marine communities within the Gulf of Alaska, and (b) estimates of costs for each element of a proposed monitoring program. The project will develop a GIS database that details available information from past studies of selected nearshore habitats and species in the Gulf of Alaska and provide a visual means of selecting sites based (in part) on the locations for which historical data of interest are available. In addition, the project will identify what other data, if any, are required to select specific sampling locations. It will also provide cost estimates for specific monitoring plan alternatives and outline several alternative plans.

STAC Recommendation

This proposal addresses the FY 03 Phase II Invitation's request for synthesis. Developing work in the nearshore habitat type requires access to the historical perspectives to be provided by this proposal. Site selection and key variables can be guided by extensive experience from the EVOS restoration program. The formatting of past information in the GIS product would be especially beneficial to GEM program planning. Coordination with Project 030666/Census of Marine Life is recommended. Fund.

Trustee Council Action

Fund. This proposal builds on the two nearshore monitoring workshops held in FY 02 and takes the next step of identifying monitoring alternatives. [Note: Funds were approved in November 2002.]