



# **FINAL WORK PLAN**

Revised March 22, 2007



Exxon Valdez Oil Spill Trustee Council 441 West 5th Avenue, Suite 500 Anchorage, AK 99501-2340 tel 907 278 8012 / fax 907 276 7178 www.evostc.state.ak.us

## FISCAL YEAR 2003

## FINAL WORK PLAN

### Revised March 22, 2007

Prepared by: *Exxon Valdez* Oil Spill Trustee Council

DENBY LLOYD Commissioner Alaska Dept. of Fish and Game

LARRY HARTIG Commissioner Alaska Dept. of Environmental Conservation

JOE MEADE Supervisor Chugach National Forest US Department of Agriculture TALIS COLBERG Attorney General Alaska Department of Law

JIM BALSIGER Director, Alaska Region National Marine Fisheries Service

HANS NEIDIG Special Assistant to the Secretary for Alaskan Affairs US Department of the Interior

Note – The persons listed above are the current members of the *Exxon Valdez* Oil Spill Trustee Council, and not necessarily those present at the time the FY 2003 Workplan was adopted.

### Notice

The abstract of each proposal submitted in response to the FY03 Invitation for Proposals was written by the authors of the proposals to describe their projects. To the extent that the abstracts express opinions about the status of injured resources they do not represent the views of the Executive Director, the Science Director, or other staff of the *Exxon Valdez* Oil Spill Trustee Council, nor do they reflect policies or positions of the Trustee Council.

The Alaska Department of Fish and Game (ADF&G) administers all programs and activities free from discrimination based on race, color, national origin, age, sex, religion, marital status, pregnancy, parenthood, or disability. The department administers all programs and activities in compliance with Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, Title II of the Americans with Disabilities Act of 1990, the Age Discrimination Act of 1975, and Title IX of the Education Amendments of 1972.

If you believe you have been discriminated against in any program, activity, or facility please write:

- ADF&G ADA Coordinator, P.O. Box 115526, Juneau, AK 99811-5526.
- The department's ADA Coordinator can be reached via phone at the following numbers: (VOICE) 907-465-6077, (Statewide Telecommunication Device for the Deaf) 1-800-478-3648, (Juneau TDD) 907-465-3646, or (FAX) 907-465-6078.
- U.S. Fish and Wildlife Service, 4040 N. Fairfax Drive, Suite 300 Webb, Arlington, VA 22203
- Office of Equal Opportunity, U.S. Department of the Interior, Washington DC 20240.

Publication produced by staff at no additional cost. Release authorized by the Exxon Valdez Oil Spill Trustee Council.

Dear Reviewer,

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. These funding activities are recorded and published annually in a Work Plan document.

A Final Work Plan was previously published for FY03. However, it did not include all of the projects funded by the Trustee Council in FY03. Trustee Council staff consulted transcripts, meeting minutes, court notices, and project files and compiled this FY03 Workplan for publication in FY07.

Annual and final reports, data, and other project information may be accessed via our website at http://www.evostc.state.ak.us.

Sincerely,

Uncher Barging

Michael Baffrey Executive Director

### **Table of Contents**

Acknowledgements	<u>.</u> 1
Overview of the FY03 Work Plan	<u>.</u> 2
Projects Funded in Previous Years Continuing in FY03	3
New Projects Receiving Funding in FY03	4
FY03 Proposal Funding Recommendations and Decisions	7
Descriptions of All New and Continuing FY03 Projects	11

## Acknowledgements

We are pleased to acknowledge Trustee Council staff members Carrie Holba, Michael Schlei, Shane St. Clair, Cherri Womac, Barbara Hannah, and Catherine Boerner whose hard work and dedication made the publication of this Work Plan possible. Special thanks to the anonymous scientists who peer reviewed the proposals received and thanks also to the principal investigators and their collaborators for their hard work and dedication to the restoration program.

Michael Baffrey, Executive Director

Kimberly A. Trust, Science Director

## **Overview of the FY03 Work Plan**

This Work Plan comprises multi-year projects submitted in previous years that have received continuous funding by the Trustee Council and new projects funded in FY03 by the Trustee Council. The Work Plan also contains basic information about each proposal submitted and its record of funding recommendations during the review process.. This is the final Work Plan publication for FY03.

The Trustee Council received 71 proposals for FY03, of which 44 were funded. Funding recommendations and decisions for all proposals and descriptions of funded proposals are contained in this document.

The total requested funding for all proposals in FY03 is \$9,817,700.00 and the total approved funding is \$5,719,900.00. \$18,808.05 was spent on projects that began in previous years, but continued in FY03. There were no multi-year projects approved in FY03.

The Trustee Council has an open, competitive contracting process that is designed to allow proposals from any source to be considered for funding as an external project. The system works well for this purpose as demonstrated by the fairly even distribution of funding across the home institutions of the principal investigators of external projects.

# **Continuing Projects in FY03**

Project #	Principal Investigator	Project Title (abbr.)	FY03 Funding	First Year Funded
97197	Seeb	Alaska SeaLife Center Fish Pass	\$8.05	FY97
02126	Fries	Habitat Protection and Acquisition Support	\$18,800.00	FY02
FY03 Continuing	g Project Funding Tota	l	\$18,808.05	

# **New Projects in FY03**

Project	Principal	Project Title (abbr.)	FY03	FY04	FY05	FY06	FY07	FY08
Number	Investigator		Funding	Funding	Funding	Funding	Funding	Funding
030636	Adams	Management Applications: Commercial Fishing	\$50,900.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
030190	Allendorf	Linkage Map for the Pink Salmon Genome	\$54,500.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
030558	Atkinson	Harbor Seal Recovery: Application	\$286,700.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
030624	Batten	A CPR-Based Plankton Survey	\$197,200.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
030635	Bishop	Intertidal Soft-Sediment Communities	\$100,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
030423	Bodkin	Population Change in Vertebrate Predators	\$216,600.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
030687	Bodkin	Nearshore Monitoring Decision Process	\$90,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
030584	Brown	Evaluation of Airborne Remote Sensing Tools	\$39,300.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
030052	Brown- Schwalenberg	Tribal Natural Resource Stewardship	\$169,600.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
030596	Cooper	Kenai Peninsula Salmon Stream Flow Data	\$22,600.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
030210	Crumley	Youth Area Watch	\$98,600.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
030623	Devens	PWSRCAC-EVOS Long Term Program	\$70,900.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
030100	EVOS Administration	Public Information and Administration	\$1,114,300.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
030250	EVOS Administration	Project Management	\$137,600.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
030455	EVOS Administration	GEM Data System	\$212,900.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
030550	EVOS Administration	ARLIS	\$95,100.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
030630	EVOS Administration	Scientific Management Under GEM	\$552,500.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
030649	Finney	Reconstructing Sockeye Populations	\$92,500.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
030642	Foster	Database on the Marine Invertebrates	\$19,200.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
030126	Fries	Habitat Protection and Acquisition Support	\$86,100.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
030607	Gracz	GIS Map of Water Quality Monitoring Sites	\$13,100.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

Project	Principal	Project Title (abbr.)	FY03	FY04	FY05	FY06	FY07	FY08
Number	Investigator		Funding	Funding	Funding	Funding	Funding	Funding
030641	Harper	ShoreZone Mapping for GEM	\$34,400.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
030476	Heintz	Oiled Incubation Substrate on Salmon	\$37,100.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
030656	Irvine	Nearshore Marine Communities	\$53,700.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
030625	Kline	PWS Isotope Ecology Synthesis	\$25,500.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
030666	Konar	Natural Geography in Shore Areas	\$266,300.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
030574	Lees	Assessment of Bivalve Recovery	\$36,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
030462	Marty	Effect of Disease on Pacific Herring	\$87,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
030012	Matkin	Monitoring of Killer Whales	\$18,100.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
030684	Mazumder	Toward Sustainable Management in the Kenai	\$59,900.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
030614	Okkonen	Monitoring Program for Near-Surface	\$29,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
030685	Pegau	Visible Remote Sensing of the GOA	\$77,100.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
030585	Rice	Lingering Oil: Bioavailability and Effects	\$121,600.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
030620	Rice	Lingering Oil and Predators	\$435,800.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
030561	Roseneau	Community-Based Forage Fish Sampling	\$17,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
030647	Ruesink	Natural and Shoreline Harvest	\$87,900.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
030610	Schneider	Kodiak Archipelago Youth Area Watch	\$63,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
030556	Schoch	High Resolution Mapping of the Intertidal	\$32,300.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
030290	Short	Hydrocarbon Database and Interpretation	\$22,500.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
030575	Sigman	Community Involvement Monitoring Plan	\$109,600.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
030600	Spies	Ecological Findings from EVOS Damage	\$215,900.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
030654	Stabeno	Surface Nutrients Over the Shelf	\$37,500.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
030340	Weingartner	Oceanographic Monitoring of the GOA	\$51,600.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

Project Number	Principal Investigator	Project Title (abbr.)	FY03 Funding	FY04 Funding	FY05 Funding	FY06 Funding	FY07 Funding	FY08 Funding
030670	Willette	Dynamics of the Alaska Coastal Current	\$80,900.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
FY03 New Pro	New Project Funding Totals		\$5,719,900.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

Total Approved Funding for Continuing Projects in FY03: \$

\$18,808.05

Total Approved Funding for New Projects in FY03:\$5,719,900.00

Total Approved Funding in FY03: \$5,738,708.05

# **FY03 Proposal Funding Recommendations and Decisions**

Project	Principal	Project Title (abbr.)	Total	FY03	Total	STAC	Chief	PAC	Executive	Trustee
Number	Investigator		Requested	Approved	Approved		Scientist		Director	Council
030636	Adams	Management Applications: Commercial Fishing	\$50,900.00	\$50,900.00	\$50,900.00	Not Reviewed	Fund	Fund	Fund	Fund
030190	Allendorf	Linkage Map for the Pink Salmon Genome	\$54,500.00	\$54,500.00	\$54,500.00	Not Reviewed	Fund	Not Available	Fund	Fund
030558	Atkinson	Harbor Seal Recovery: Application	\$286,700.00	\$286,700.00	\$286,700.00	Not Reviewed	Fund	Not Available	Fund	Fund
030624	Batten	A CPR-Based Plankton Survey	\$197,200.00	\$197,200.00	\$197,200.00	Fund	Not Available	Not Available	Fund	Fund
030635	Bishop	Intertidal Soft-Sediment Communities	\$205,400.00	\$100,000.00	\$100,000.00	Defer	Not Available	Not Available	Defer	Fund
030423	Bodkin	Population Change in Vertebrate Predators	\$216,600.00	\$216,600.00	\$216,600.00	Not Reviewed	Fund	Not Available	Fund	Fund
030687	Bodkin	Nearshore Monitoring Decision Process	\$90,000.00	\$90,000.00	\$90,000.00	Fund	Not Available	Not Available	Fund Contingent	Fund
030632	Brooks	Decline of Razor Clams	\$214,200.00	\$0.00	\$0.00	Do Not Fund	Not Available	Not Available	Do Not Fund	Do Not Fund
030584	Brown	Evaluation of Airborne Remote Sensing Tools	\$39,300.00	\$39,300.00	\$39,300.00	Not Reviewed	Fund	Not Available	Fund	Fund
030653	Brown	Remote Sensing for GEM Watersheds	\$222,700.00	\$0.00	\$0.00	Do Not Fund	Not Available	Not Available	Do Not Fund	Do Not Fund
030052	Brown- Schwalenberg	Tribal Natural Resource Stewardship	\$169,600.00	\$169,600.00	\$169,600.00	Not Reviewed	Defer	Not Available	Fund	Fund
030691	Christensen	Roles of environment and fisheries	\$176,700.00	\$0.00	\$0.00	Do Not Fund	Not Available	Not Available	Do Not Fund	Do Not Fund
030580	Cooper	GIS Map of Impervious Cover	\$51,200.00	\$0.00	\$0.00	Do Not Fund	Not Available	Not Available	Do Not Fund	Do Not Fund
030596	Cooper	Kenai Peninsula Salmon Stream Flow Data	\$22,600.00	\$22,600.00	\$22,600.00	Not Reviewed	Fund	Not Available	Fund	Fund
030688	Cooper	Citizen Volunteer Monitoring Component	\$54,200.00	\$0.00	\$0.00	Do Not Fund	Not Available	Not Available	Do Not Fund	Do Not Fund
030210	Crumley	Youth Area Watch	\$184,200.00	\$98,600.00	\$98,600.00	Not Reviewed	Fund Contingent	Not Available	Fund Contingent	Fund
030638	Davis	Mapping Subtidal Habitats	\$114,900.00	\$0.00	\$0.00	Do Not Fund	Not Available	Not Available	Do Not Fund	Do Not Fund
030623	Devens	PWSRCAC-EVOS Long Term Program	\$70,900.00	\$70,900.00	\$70,900.00	Fund	Not Available	Not Available	Fund	Fund
030665	Dorsett	Toward Cost Effective Data Acquisition	\$53,500.00	\$0.00	\$0.00	Do Not Fund	Not Available	Not Available	Do Not Fund	Do Not Fund
030587	Downs	Recovery: Cellular Processes	\$186,400.00	\$0.00	\$0.00	Defer	Defer	Not Available	Defer	Do Not Fund
030100	EVOS Administration	Public Information and Administration	\$1,114,300.00	\$1,114,300.00	\$1,114,300.00	Not Reviewed	Not Reviewed	Not Reviewed	Fund	Fund

Project	Principal	Project Title (abbr.)	Total	FY03	Total	STAC	Chief	PAC	Executive	Trustee
Number	Investigator	_	Requested	Approved	Approved		Scientist		Director	Council
030250	EVOS Administration	Project Management	\$137,600.00	\$137,600.00	\$137,600.00	Not Reviewed	Not Reviewed	Not Reviewed	Fund	Fund
030455	EVOS Administration	GEM Data System	\$212,900.00	\$212,900.00	\$212,900.00	Not Reviewed	Fund	Not Reviewed	Fund	Fund
030550	EVOS Administration	ARLIS	\$95,100.00	\$95,100.00	\$95,100.00	Not Reviewed	Fund	Not Reviewed	Fund	Fund
030630	EVOS Administration	Scientific Management Under GEM	\$278,400.00	\$552,500.00	\$552,500.00	Fund	Not Reviewed	Not Reviewed	Fund	Fund
030649	Finney	Reconstructing Sockeye Populations	\$119,100.00	\$92,500.00	\$92,500.00	Not Reviewed	Fund	Not Available	Fund	Fund
030660	Finney	Reconstructing Marine Ecosystems	\$287,600.00	\$0.00	\$0.00	Do Not Fund	Not Available	Not Available	Do Not Fund	Do Not Fund
030642	Foster	Database on the Marine Invertebrates	\$19,200.00	\$19,200.00	\$19,200.00	Fund	Not Available	Not Available	Fund	Fund
030682	Foy	Nearshore Fisheries Habitat Assessment	\$342,900.00	\$0.00	\$0.00	Do Not Fund	Not Available	Not Available	Defer	Do Not Fund
030126	Fries	Habitat Protection and Acquisition Support	\$37,700.00	\$86,100.00	\$86,100.00	Not Reviewed	Not Reviewed	Not Reviewed	Fund	Fund
030676	Gharrett	Species Composition of Rockfish	\$88,000.00	\$0.00	\$0.00	Do Not Fund	Not Available	Not Available	Do Not Fund	Do Not Fund
030607	Gracz	GIS Map of Water Quality Monitoring Sites	\$13,100.00	\$13,100.00	\$13,100.00	Not Reviewed	Fund Contingent	Not Available	Fund Contingent	Fund
030683	Hansen	Seaweeds of Southcentral Alaska	\$33,500.00	\$0.00	\$0.00	Do Not Fund	Not Available	Not Available	Do Not Fund	Do Not Fund
030641	Harper	ShoreZone Mapping for GEM	\$218,200.00	\$34,400.00	\$34,400.00	Fund Reduced	Not Available	Not Available	Fund Reduced	Fund
030476	Heintz	Oiled Incubation Substrate on Salmon	\$37,100.00	\$37,100.00	\$37,100.00	Not Reviewed	Fund	Not Available	Fund Contingent	Fund
030689	Hoover-Miller	Harbor Seal Population Monitoring	\$412,300.00	\$0.00	\$0.00	Do Not Fund	Not Available	Not Available	Do Not Fund	Do Not Fund
030656	Irvine	Nearshore Marine Communities	\$53,700.00	\$53,700.00	\$53,700.00	Not Reviewed	Fund	Not Available	Fund	Fund
030690	Irvine	Developing a Probability-based Design	\$138,800.00	\$0.00	\$0.00	Do Not Fund	Not Available	Not Available	Do Not Fund	Do Not Fund
030661	Juday	Green Island Integrated Biodiversity	\$149,000.00	\$0.00	\$0.00	Do Not Fund	Not Available	Not Available	Do Not Fund	Do Not Fund
030679	Kiefer	A Prototype GIS	\$88,000.00	\$0.00	\$0.00	Do Not Fund	Not Available	Not Available	Do Not Fund	Do Not Fund
030625	Kline	PWS Isotope Ecology Synthesis	\$25,500.00	\$25,500.00	\$25,500.00	Not Reviewed	Fund	Not Available	Fund	Fund
030626	Kline	Monitoring Strategies for GEM	\$137,800.00	\$0.00	\$0.00	Do Not Fund	Not Available	Not Available	Do Not Fund	Do Not Fund
030631	Kline	Top-Down Process Synthesis	\$56,700.00	\$0.00	\$0.00	Not Reviewed	Do Not Fund	Not Available	Do Not Fund	Do Not Fund

Project	Principal	Project Title (abbr.)	Total	FY03	Total	STAC	Chief	PAC	Executive	Trustee
Number	Investigator		Requested	Approved	Approved		Scientist		Director	Council
030651	Kocan	Geographical and Host Distributions	\$110,100.00	\$0.00	\$0.00	Do Not Fund	Not Available	Not Available	Do Not Fund	Do Not Fund
030666	Konar	Natural Geography in Shore Areas	\$477,700.00	\$266,300.00	\$266,300.00	Fund	Not Available	Not Available	Fund	Fund
030574	Lees	Assessment of Bivalve Recovery	\$36,000.00	\$36,000.00	\$36,000.00	Not Reviewed	Fund	Not Available	Fund	Fund
030462	Marty	Effect of Disease on Pacific Herring	\$87,000.00	\$87,000.00	\$87,000.00	Not Reviewed	Fund Reduced	Not Available	Defer	Fund
030012	Matkin	Monitoring of Killer Whales	\$18,100.00	\$18,100.00	\$18,100.00	Not Reviewed	Fund	Not Available	Fund Contingent	Fund
030672	Mauger	Effects of Sedimentation on Lower Kenai	\$55,700.00	\$0.00	\$0.00	Do Not Fund	Not Available	Not Available	Do Not Fund	Do Not Fund
030684	Mazumder	Toward Sustainable Management in the Kenai	\$89,900.00	\$59,900.00	\$59,900.00	Do Not Fund	Not Available	Not Available	Do Not Fund	Fund
030614	Okkonen	Monitoring Program for Near-Surface	\$18,100.00	\$29,000.00	\$29,000.00	Fund	Fund	Not Available	Fund	Fund
030685	Pegau	Visible Remote Sensing of the GOA	\$77,100.00	\$77,100.00	\$77,100.00	Fund	Not Available	Not Available	Fund Contingent	Fund
030686	Pegau	Instrumenting Vessels of Opportunity	\$71,600.00	\$0.00	\$0.00	Do Not Fund	Not Available	Not Available	Do Not Fund	Do Not Fund
030594	Perkins	Development of an Alaska Standard Species	\$128,200.00	\$0.00	\$0.00	Not Reviewed	Do Not Fund	Not Available	Do Not Fund	Do Not Fund
030585	Rice	Lingering Oil: Bioavailability and Effects	\$121,600.00	\$121,600.00	\$121,600.00	Not Reviewed	Fund	Not Available	Fund Contingent	Fund
030620	Rice	Lingering Oil and Predators	\$343,600.00	\$435,800.00	\$435,800.00	Fund	Defer	Not Available	Fund	Fund
030561	Roseneau	Community-Based Forage Fish Sampling	\$17,000.00	\$17,000.00	\$17,000.00	Do Not Fund	Fund	Not Available	Fund	Fund
030647	Ruesink	Natural and Shoreline Harvest	\$87,900.00	\$87,900.00	\$87,900.00	Fund	Not Available	Not Available	Fund	Fund
030610	Schneider	Kodiak Archipelago Youth Area Watch	\$124,800.00	\$63,000.00	\$63,000.00	Not Reviewed	Fund	Not Available	Fund	Fund
030556	Schoch	High Resolution Mapping of the Intertidal	\$32,300.00	\$32,300.00	\$32,300.00	Fund	Not Available	Not Available	Fund Contingent	Fund
030290	Short	Hydrocarbon Database and Interpretation	\$22,500.00	\$22,500.00	\$22,500.00	Not Reviewed	Fund	Not Available	Fund Contingent	Fund
030575	Sigman	Community Involvement Monitoring Plan	\$109,600.00	\$109,600.00	\$109,600.00	Not Reviewed	Fund	Not Available	Fund	Fund
030600	Spies	Ecological Findings from EVOS Damage	\$215,900.00	\$215,900.00	\$215,900.00	Not Reviewed	Not Reviewed	Not Available	Fund	Fund
030654	Stabeno	Surface Nutrients Over the Shelf	\$37,500.00	\$37,500.00	\$37,500.00	Fund	Not Available	Not Available	Fund Contingent	Fund
030552	Vaughan	Exchange Between PWS and the GOA	\$106,500.00	\$0.00	\$0.00	Do Not Fund	Not Available	Not Available	Defer	Do Not Fund

Project	Principal	Project Title (abbr.)	Total	FY03	Total	STAC	Chief	PAC	Executive	Trustee
Number	Investigator		Requested	Approved	Approved		Scientist		Director	Council
030658	Vaughan	Processes Controlling Exchange	\$207,900.00	\$0.00	\$0.00	Do Not Fund	Not Available	Not Available	Do Not Fund	Do Not Fund
030603	Wang	Workshop on Integrating the GOA Ocean	\$79,800.00	\$0.00	\$0.00	Do Not Fund	Not Available	Not Available	Do Not Fund	Do Not Fund
030645	Wang	Offshore Transport of Nutrients	\$193,200.00	\$0.00	\$0.00	Do Not Fund	Not Available	Not Available	Do Not Fund	Do Not Fund
030340	Weingartner	Oceanographic Monitoring of the GOA	\$83,700.00	\$51,600.00	\$51,600.00	Not Reviewed	Fund	Not Available	Fund Contingent	Fund
030606	Welch	Development of a Voluntary Observing Ship "Ferry Box"	\$9,800.00	\$0.00	\$0.00	Do Not Fund	Not Available	Not Available	Do Not Fund	Do Not Fund
030670	Willette	Dynamics of the Alaska Coastal Current	\$96,400.00	\$80,900.00	\$80,900.00	Fund Contingent	Not Available	Not Available	Defer	Fund
Total Fund	s Requested and	I Approved	\$9,817,700.00	\$5,719,900.00	\$5,719,900.00					

### **Total Number of Proposals Received in FY03: 71**

Total Number of New Projects Funded in FY03: 44

# **Descriptions of New and Continuing Projects in FY03**

Project Number:	97197					
Project Title:	Alaska SeaLife Center Fish Pass					
Principal Investigator:	James Seeb					
Affiliation:	State Of Alaska					
Disbursing Agency:	ADFG					
Project Location:	Seward					
Project Type:	Continuing					
Funding Approved by I	Fiscal Year:					
<b>FY97:</b> \$545,600.00	<b>FY98:</b> \$0.00 <b>FY99:</b>					
<b>FY00:</b> \$0.00	<b>FY01:</b> \$0.00 <b>FY02:</b>					
FY03: \$8.05						

#### Total Funding Approved: \$545,608.05

#### Abstract:

This project will design, construct, and install a fish pass at the Alaska SeaLife Center in Seward. The fish pass will be used to propagate experimental runs of Pacific salmon for new and ongoing genetic studies to be conducted at the Center. A cooperative agreement, similar to the agreement for the SeaLife Center, will be written by ADFG with the City of Seward to implement this project.

#### Scientific and Technical Advisory Committee Comments:

Not Available

#### Scientific and Technical Advisory Committee Recommendation: Not Available

#### **Chief Scientist Comments:**

This is a technically excellent idea that will benefit basic research on genetics of salmon and provide an experimental run that is not available in this portion of the state. It also has significant positive benefits for public education. The Trustee Council should fund through non-work plan sources after engineering review.

#### Chief Scientist Recommendation: Fund

#### **Public Advisory Committee Comments:**

Not Available

#### Public Advisory Committee Recommendation: Not Available

#### **Executive Director Comments:**

A fish pass at the SeaLife Center will enhance EVOS research and improve the restoration of injured resources and services. It will allow the effects of variables experienced during early life history to be studied throughout the life cycle

\$0.00 \$0.00 of salmonids. Research on the long-term effects of oil, hatchery-wildstock interactions, ecology, disease, genetics, and conservation biology of salmonids requires experimental runs of fish. Without a fish pass, such studies cannot be done efficiently and effectively at the SeaLife Center. The Trustee Council contribution to this project is for the research components of the structure only. Visitor enhancements to the structure should be paid for with other funds.

#### Executive Director Recommendation: Fund

#### **Trustee Council Comments:**

A fish pass at the SeaLife Center will enhance EVOS research and improve the restoration of injured resources and services. It will allow the effects of variables experienced during early life history to be studied throughout the life cycle of salmonids. Research on the long-term effects of oil, hatchery-wildstock interactions, ecology, disease, genetics, and conservation biology of salmonids requires experimental runs of fish. Without a fish pass, such studies cannot be done efficiently and effectively at the SeaLife Center. The Trustee Council contribution to this project is for the research components of the structure only. Visitor enhancements to the structure should be paid for with other funds.

Project Number:	02126							
Project Title:	Habitat Protection and Acquisition Support							
Principal Investigator:	Carol Fries							
Affiliation:	State Of Alaska							
Disbursing Agency:	DNR							
Project Location:	Alaska Department of Natural Resources							
Project Type:	Continuing							
Funding Approved by I	Fiscal Year:							
FY02: \$180,600.00	<b>FY03:</b> \$18,800.00	FY04:	\$0.00					
<b>FY05:</b> \$0.00	<b>FY06:</b> \$0.00	FY07:	\$0.00					
<b>FY08:</b> \$0.00								

Total Funding Approved: \$199,400.00

#### Abstract:

This project will cover certain expenses incurred by Trustee agencies in receiving title to parcels acquired by the Trustee Council.

#### Scientific and Technical Advisory Committee Comments:

Not Applicable

#### Scientific and Technical Advisory Committee Recommendation: Not Reviewed

### Chief Scientist Comments:

Not Applicable

#### Chief Scientist Recommendation: Not Reviewed

#### **Public Advisory Committee Comments:**

Not Applicable

#### Public Advisory Committee Recommendation: Not Reviewed

#### **Executive Director Comments:**

This project will fund the Alaska Department of Natural Resources and the U.S. Fish and Wildlife Service to complete in FY 02 acquisitions that are in progress in FY 01. In FY 02, additional habitat protection activity will occur under a grant to The Nature Conservancy and The Conservation Fund approved by the Trustee Council in January 2001. The Council's resolution on the grant identified specific support activities that will continue to be conducted by the land managing agencies (e.g., appraisal review, title review, hazardous materials inspection, and NEPA compliance), and the costs of those activities will also be funded through this project. However, parcels to be purchased under the grant, and agency costs associated with those parcels, have not yet been identified. The Council may be asked to approve these additional costs later in FY 02.

### Executive Director Recommendation: Fund

Trustee Council Comments: Not Available

Project Number:	030636			
Project Title:	Management Applications:	Commercial Fishing		
Principal Investigator:	Kenneth Adams			
Affiliation:	Private Enterprise			
Disbursing Agency:	NOAA			
Project Location:	Prince William Sound			
Project Type:	New			
Funding Approved by	Fiscal Year:			
FY03: \$50,900.00	FY04:	\$0.00	FY05:	\$0.00
<b>FY06:</b> \$0.00	FY07:	\$0.00	FY08:	\$0.00
<b>FY09:</b> \$0.00				
Total Funding Approve	ed: \$50,900.00			

#### 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.

#### Scientific and Technical Advisory Committee Comments:

This proposal was reviewed by the Chief Scientist and not by the STAC.

#### Scientific and Technical Advisory Committee Recommendation: Not Reviewed

#### **Chief Scientist Comments:**

The 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.

#### Chief Scientist Recommendation: Fund

#### **Public Advisory Committee Comments:**

Not Available

#### Public Advisory Committee Recommendation: Fund

#### **Executive Director Comments:**

Fund FY 03 only; the proposers have obtained the participation of a panel 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 to provide a forum for developing fisheries management applications for all interested parties (Cordova District Fishermen United, Alaska Department of Fish and Game, Prince William Sound Aquaculture Corporation, Valdez Fisheries Development Association, commercial fishers, and others). The objectives of this group in FY 03 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 showing the cycle of movement from basic science to management application. At the end of FY 03, the success of the project will be evaluated and a decision made on whether to continue the project into future years. As recommended by the Chief Scientist, 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. In addition, the project could form a foundation for working with Prince William Sound fishers as GEM develops.

#### Executive Director Recommendation: Fund

#### **Trustee Council Comments:**

Fund FY 03 only; the proposers have obtained the participation of a panel 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 to provide a forum for developing fisheries management applications for all interested parties (Cordova District Fishermen United, Alaska Department of Fish and Game, Prince William Sound Aquaculture Corporation, Valdez Fisheries Development Association, commercial fishers, and others). The objectives of this group in FY 03 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 showing the cycle of movement from basic science to management application. At the end of FY 03, the success of the project will be evaluated and a decision made on whether to continue the project into future years. As recommended by the Chief Scientist, 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. In addition, the project could form a foundation for working with Prince William Sound fishers as GEM develops. [Note: Funds were approved in August 2002.]

Project Number:		030190				
Project Title:		Construction of a Linkage Map for the Pink Salmon Genome				
Principal Investigator:		Fred Allendorf				
Affiliati	on:	Non AK University				
Disburs	sing Agency:	ADFG				
Project Location:		Prince William Sound				
Project Type:		New				
Funding	g Approved by I	Fiscal Year:				
FY03:	\$54,500.00	FY04:	\$0.00	FY05:	\$0.00	
FY06:	\$0.00	FY07:	\$0.00	FY08:	\$0.00	
FY09:	\$0.00					

#### Total Funding Approved: \$54,500.00

#### 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.

#### Scientific and Technical Advisory Committee Comments:

This proposal was reviewed by the Chief Scientist and not by the STAC.

#### Scientific and Technical Advisory Committee Recommendation: Not Reviewed

#### **Chief Scientist Comments:**

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.

#### Chief Scientist Recommendation: Fund

#### Public Advisory Committee Comments:

Not Available

#### Public Advisory Committee Recommendation: Not Available

#### **Executive Director Comments:**

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?

#### Executive Director Recommendation: Fund

#### **Trustee Council Comments:**

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.]

Project Number:	030558				
Project Title:	Harbor Seal Recovery: Application of New Technologies for Monitoring Health				
Principal Investigator:	Shannon Atkinson				
Affiliation:	NGO				
Disbursing Agency:	ADFG				
Project Location:	Gulf of Alaska				
Project Type:	New				
Funding Approved by	Fiscal Year:				
<b>FY03:</b> \$286,700.00	FY04:	\$0.00	<b>FY05:</b> \$0.00		
FY06: \$0.00	FY07:	\$0.00	<b>FY08:</b> \$0.00		
<b>FY09:</b> \$0.00					
otal Funding Approved: \$286,700.00					

#### 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.

#### Scientific and Technical Advisory Committee Comments:

This proposal was reviewed by the Chief Scientist and not by the STAC.

#### Scientific and Technical Advisory Committee Recommendation: Not Reviewed

#### **Chief Scientist Comments:**

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.

#### Chief Scientist Recommendation: Fund

#### Public Advisory Committee Comments:

Not Available

#### Public Advisory Committee Recommendation: Not Available

#### **Executive Director Comments:**

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 funding amount includes \$167,600 for Alaska SeaLife Center bench fees.]

#### Executive Director Recommendation: Fund

#### **Trustee Council Comments:**

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.]

Project Number:	030624					
Project Title:	A CPR-Based Survey to Monitor the GOA and Detect Ecosystem Change					
Principal Investigator:	Sonia Batten					
Affiliation:	NGO					
Disbursing Agency:	NOAA					
Project Location:	North Pacific					
Project Type:	New					
Funding Approved by	Fiscal Year:					
<b>FY03:</b> \$197,200.00	<b>FY04:</b> \$0.00	<b>FY05:</b> \$0.00				
FY06: \$0.00	<b>FY07:</b> \$0.00	<b>FY08:</b> \$0.00				
<b>FY09:</b> \$0.00						
Total Funding Approve	ed: \$197,200.00					

#### 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 work showing that significant changes occurred in all plankton communities in the gulf, associated with the recent climate shift, and that the Continuous Plankton Recorder is an appropriate tool for detecting such changes. This project will test the Continuous Plankton Recorder 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.

#### Scientific and Technical Advisory Committee Comments:

This proposal addresses GEM's goals for monitoring in the ACC 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.

#### Scientific and Technical Advisory Committee Recommendation: Fund

#### **Chief Scientist Comments:**

Not Available

Chief Scientist Recommendation: Not Available

#### Public Advisory Committee Comments:

Not Available

#### Public Advisory Committee Recommendation: Not Available

#### **Executive Director Comments:**

Fund for one year only. This proposal will continue to develop the Continuous Plankton Recorder surveys from Ships of Opportunity begun in FY02 (Project 02624), which have significant potential as part of a long-term monitoring effort in the Alaska Coastal Current and offshore habitats for GEM.

#### Executive Director Recommendation: Fund

#### **Trustee Council Comments:**

Fund FY03 only. This project will continue to develop the Continuous Plankton Recorder surveys from Ships of Opportunity begun in FY02 (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.]

Project Number:	030635					
Project Title:	Trophic Dynamics of Intertidal Soft-Sediment Communities: Interaction Between Bottom-Up and Top-Down Processes					
Principal Investigator:	Mary Anne Bishop					
Affiliation:	Private Enterprise					
Disbursing Agency:	NOAA					
Project Location:	Copper River Delta and Orcca Inlet-Eastern Prince William Sound					
Project Type:	New					
Funding Approved by	Fiscal Year:					
FY03: \$100,000.00	FY04:	\$0.00	FY05:	\$0.00		
<b>FY06:</b> \$0.00	FY07:	\$0.00	FY08:	\$0.00		
<b>FY09:</b> \$0.00						
Total Funding Approved: \$100.000.00						

#### Abstract:

Vast expanses of intertidal sand/mudflats serve as a critical link in the food web of nearshore communities along the southcentral Alaska coastline. The rich abundance of benthic invertebrates residing within the sediments of intertidal flats and the large network of subtidal channels that bisect these flats provide a significant prey resource for numerous species of fish, crabs, birds, and marine mammals. One of the largest expanses of intertidal sand/mudflats occurs in the Copper River Delta and eastern Prince William Sound (Orca Inlet). This project will conduct a large-scale field study that examines the physical/chemical and biological factors that limit and/or regulate invertebrate community dynamics. The largely "bottom-up" approach proposed (physical/chemical parameters - phytoplantkon/epibenthic production - invertebrate production) is balanced by the largely "top-down" focus of a companion project funded by the Prince William Sound Oil Spill Recovery Institute that examines predator dynamics and assesses their role in invertebrate community dynamics.

#### Scientific and Technical Advisory Committee Comments:

The proposal is well written in good scientific form. The PI and team are well qualified to do this work. The Copper River Delta is an important area, and this work could lead to a long-term monitoring strategy for GEM. Peer reviewers raised concerns about the experimental design and logistics issues that need to be addressed. PIs are encouraged to resubmit a proposal that addresses the peer reviewer concerns.

#### Scientific and Technical Advisory Committee Recommendation: Defer

**Chief Scientist Comments:** 

Not Available

#### Chief Scientist Recommendation: Not Available

#### **Public Advisory Committee Comments:**

Not Available

Public Advisory Committee Recommendation: Not Available

#### **Executive Director Comments:**

Defer, pending submittal and review of substantially revised proposal that addresses peer review concerns about the experimental design and logistics issues and with reduced budget.

#### Executive Director Recommendation: Defer

#### **Trustee Council Comments:**

Fund revised proposal, which reduces the project's scope and cost. This is a scientifically sound proposal that could lead to a very good sampling scheme for long term monitoring of mudflat biota, but the cost of the proposal as originally conceived was high (total request 03-05 is \$498,200). This proposal has a strong partnering component with OSRI (Oil Spill Recovery Institute) and the University of Alabama. [Note: Funds were approved in November 2002.]

Project Number:	030423					
Project Title:	Patterns and Processes of Population Change in Selected Nearshore Vertebrate Predators					
Principal Investigator:	James Bodkin					
Affiliation:	DOI					
Disbursing Agency:	USGS					
Project Location:	Prince William Sound					
Project Type:	New					
Funding Approved by	Fiscal Year:					
FY03: \$216,600.00	FY04:	\$0.00	FY05: \$0.00			
FY06: \$0.00	FY07:	\$0.00	FY08: \$0.00			
<b>FY09:</b> \$0.00						
Total Funding Approve	Total Funding Approved: \$216,600.00					

#### 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 report.

#### Scientific and Technical Advisory Committee Comments:

This proposal was reviewed by the Chief Scientist and not by the STAC.

#### Scientific and Technical Advisory Committee Recommendation: Not Reviewed

#### **Chief Scientist Comments:**

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.

#### Chief Scientist Recommendation: Fund

#### **Public Advisory Committee Comments:**

Not Available

#### Public Advisory Committee Recommendation: Not Available

#### **Executive Director Comments:**

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.

#### Executive Director Recommendation: Fund

#### **Trustee Council Comments:**

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.]

Project Number:		030687					
Project Title:		Monitoring in the Nearshore: A Process for Making Reasoned Decisions					
Principal Investigator:		James Bodkin					
Affiliati	on:	DOI					
Disbur	sing Agency:	USGS					
Project Location:		Gulf of Alaska					
Project Type:		New					
Fundin	g Approved by I	Fiscal Year:					
FY03:	\$90,000.00	FY04:	\$0.00	FY05:	\$0.00		
FY06:	\$0.00	FY07:	\$0.00	FY08:	\$0.00		
FY09:	\$0.00						

Total Funding Approved: \$90,000.00

#### 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.

#### Scientific and Technical Advisory Committee Comments:

This proposal addresses the invitation's request for synthesis. Developing work in the nearshore habitat type requires access to the historical perspectives to be provided by the 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 products would be especially beneficial to GEM program planning. Coordination with 030666 is recommended.

#### Scientific and Technical Advisory Committee Recommendation: Fund

#### **Chief Scientist Comments:**

Not Available

#### Chief Scientist Recommendation: Not Available

#### Public Advisory Committee Comments:

Not Available

Public Advisory Committee Recommendation: Not Available

EVOSTC FY 2003 Final Work Plan

### **Executive Director Comments:**

Fund contingent on resolution of budget questions. This proposal builds on the two nearshore monitoring workshops held in FY02 and takes the next step of identifying monitoring alternatives.

### Executive Director Recommendation: Fund Contingent

#### **Trustee Council Comments:**

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.]

Project Number:		030584				
Project Title:		Evaluation of Airborne Remote Sensing Tools for GEM Monitoring				
Principal Investigator:		Evelyn Brown				
Affiliation:		Alaskan University				
Disbursing Agency:		ADFG				
Project Location:		All Spill Affected Areas				
Project Type:		New				
Fundin	g Approved by I	Fiscal Year:				
FY03:	\$39,300.00		FY04:	\$0.00	FY05:	\$0
FY06:	\$0.00		FY07:	\$0.00	FY08:	\$0
FY09:	\$0.00					

Total Funding Approved: \$39,300.00

#### 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.

#### Scientific and Technical Advisory Committee Comments:

This proposal was reviewed by the Chief Scientist and not by the STAC.

#### Scientific and Technical Advisory Committee Recommendation: Not Reviewed

#### **Chief Scientist Comments:**

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.

#### Chief Scientist Recommendation: Fund

#### Public Advisory Committee Comments:

Not Available

#### Public Advisory Committee Recommendation: Not Available

#### **Executive Director Comments:**

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.

.00

#### Executive Director Recommendation: Fund

#### **Trustee Council Comments:**

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.]

Project Number:		030052				
Project Title:		Tribal Natural Resource Stewardship and Meaningful Tribal Involvement in GEM				
Principal Investigator:		Patty Brown-Schwalenberg				
Affiliati	on:	NGO				
Disbursing Agency:		ADFG				
Project Location:		All Spill Affected Areas				
Project Type:		New				
Funding Approved by Fiscal Year:						
FY03:	\$169,600.00	FY04:	\$0.00	FY05:	\$0.00	
FY06:	\$0.00	FY07:	\$0.00	FY08:	\$0.00	
FY09:	\$0.00					

#### Total Funding Approved: \$169,600.00

#### 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 FY03 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 and 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.

#### Scientific and Technical Advisory Committee Comments:

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 FY02 from this project recently were submitted but have not yet been reviewed by peer reviewers or the Trustee Council.

#### Scientific and Technical Advisory Committee Recommendation: Not Reviewed

#### **Chief Scientist Comments:**

The Trustee Council has committed to community involvement in both the GEM and ongoing oil spill programs. This proposal cannot be fully evaluated until the Tribal Natural Resource Plans scheduled for completion in FY 02 from this project have been reviewed by the Trustee Council. These need to be reviewed for their content, relationship to GEM, and community commitment to implementation of the plans. Defer funding pending receipt of these plans.

#### Chief Scientist Recommendation: Defer

#### **Public Advisory Committee Comments:**

Not Available

#### Public Advisory Committee Recommendation: Not Available
## **Executive Director Comments:**

Fund interim amount--\$30,100 for Resource Program Planner first quarter salary (\$15,000), Wisdomkeeper workshop scheduled for November (\$7,000), tribal participation in GEM planning meetings (\$2,000), and related overhead (\$3,600) and general administration (\$2,500) costs; defer decision on balance of funding pending a review of FY 02 results (completion of Tribal Natural Resource Plans; tribal participation in technical workshops/training sessions; communication of EVOS results to villages). The Detailed Project Description and budget need to be revised to more directly build on the work performed in FY 02 and to avoid duplication with Project 030575, Designing a Community Involvement/Community Based Monitoring Plan for GEM. 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.

## Executive Director Recommendation: Fund

## **Trustee Council Comments:**

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 TC and essential component of GEM. (Note: \$30,100 was approved 8/02 and \$139,500 was approved 11/02).

Project Number:	030596				
Project Title:	Securing Flow Data for a Lo	ecuring Flow Data for a Lower Kenai Peninsula Salmon Stream			
Principal Investigator:	Joel Cooper				
Affiliation:	NGO				
Disbursing Agency:	ADFG				
Project Location:	Cook Inlet				
Project Type:	New				
Funding Approved by	Fiscal Year:				
<b>FY03:</b> \$22,600.00	FY04:	\$0.00	FY05:	\$0.00	
<b>FY06:</b> \$0.00	FY07:	\$0.00	FY08:	\$0.00	
<b>FY09:</b> \$0.00					

Total Funding Approved: \$22,600.00

## 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.

# Scientific and Technical Advisory Committee Comments:

This proposal was reviewed by the Chief Scientist and not by the STAC.

# Scientific and Technical Advisory Committee Recommendation: Not Reviewed

## **Chief Scientist Comments:**

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.

## Chief Scientist Recommendation: Fund

# **Public Advisory Committee Comments:**

Not Available

## Public Advisory Committee Recommendation: Not Available

# **Executive Director Comments:**

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.

## Executive Director Recommendation: Fund

## **Trustee Council Comments:**

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.]

Project Number:	030210			
Project Title:	Youth Area Watch			
Principal Investigator:	Bob Crumley			
Affiliation:	Local Government			
Disbursing Agency:	ADFG			
Project Location:	Prince William Sound, Lower Cook Inlet			
Project Type:	New			
Funding Approved by Fiscal Year:				
<b>FY03:</b> \$98,600.00	FY04:	\$0.00		
<b>FY06:</b> \$0.00	FY07:	\$0.00		

**FY05:** \$0.00 **FY08:** \$0.00

Total Funding Approved: \$98,600.00

## Abstract:

FY09: \$0.00

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.

# Scientific and Technical Advisory Committee Comments:

This proposal was reviewed by the Chief Scientist and not by the STAC.

## Scientific and Technical Advisory Committee Recommendation: Not Reviewed

# **Chief Scientist Comments:**

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.

# Chief Scientist Recommendation: Fund Contingent

# Public Advisory Committee Comments:

Not Available

# Public Advisory Committee Recommendation: Not Available

# **Executive Director Comments:**

Fund contingent on submittal and review of (a) a revised FY 01 annual report (01210) that addresses the Chief Scientist's concerns and (b) a satisfactory annual report for FY 02 (02210). 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.

## Executive Director Recommendation: Fund Contingent

## **Trustee Council Comments:**

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.]

Project	Number:	030623				
Project	Title:	PWSRCAC - EVOS Long Ter	WSRCAC - EVOS Long Term Environmental Monitoring Program			
Princip	al Investigator:	John Devens				
Affiliati	on:	NGO				
Disbur	sing Agency:	NOAA				
Project	Location:	Prince William Sound, Kodiak, Kenai Peninsula				
Project	Туре:	New				
Fundin	g Approved by I	Fiscal Year:				
FY03:	\$70,900.00	FY04:	\$0.00	FY05:	\$0.00	
FY06:	\$0.00	FY07:	\$0.00	FY08:	\$0.00	
FY09:	\$0.00					

Total Funding Approved: \$70,900.00

## 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.

# Scientific and Technical Advisory Committee Comments:

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

## Scientific and Technical Advisory Committee Recommendation: Fund

**Chief Scientist Comments:** 

Not Available

Chief Scientist Recommendation: Not Available

# Public Advisory Committee Comments:

Not Available

# Public Advisory Committee Recommendation: Not Available

# **Executive Director Comments:**

Fund for one year only. This program could provide important long-term measurements of hydrocarbon levels and sources throughout the Gulf of Alaska. Any future funding would be contingent on further evaluation of the number and location of monitoring sites and the utility of the data collected.

# Executive Director Recommendation: Fund

## **Trustee Council Comments:**

Fund for one year only. This program could provide important long-term measurements of hydrocarbon levels and sources throughout the Gulf of Alaska. Any future funding would 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].

Project	Number:	030100				
Project	Title:	Public Information, Scien	ublic Information, Science Management, and Administration			
Principa	al Investigator:	EVOS Administration				
Affiliatio	on:	State Of Alaska				
Disburs	ing Agency:	ADFG				
Project	Location:	Trustee Council Office				
Project	Туре:	New				
Funding	g Approved by I	Fiscal Year:				
FY03:	\$1,114,300.00	FYO	04:	\$0.00	FY05:	\$0.00
FY06:	\$0.00	FYO	07:	\$0.00	FY08:	\$0.00
FY09:	\$0.00					

Total Funding Approved: \$1,114,300.00

## 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.

## Scientific and Technical Advisory Committee Comments:

Not Applicable

Scientific and Technical Advisory Committee Recommendation: Not Reviewed

## **Chief Scientist Comments:**

Not Applicable

Chief Scientist Recommendation: Not Reviewed

## Public Advisory Committee Comments:

Not Applicable

Public Advisory Committee Recommendation: Not Reviewed

## **Executive Director Comments:**

This project provides overall support for administration and implementation of the Trustee Council's programs.

Executive Director Recommendation: Fund

# **Trustee Council Comments:**

This project provides overall support for administration and implementation of the Trustee Council's programs. [Note:

Funds were approved in August 2002.]

Project Number:		030250			
Project Title:		Project Management			
Principal Inve	stigator:	EVOS Administration			
Affiliation:		State Of Alaska			
Disbursing Agency:		ADFG			
Project Location:		Trustee Council Office			
Project Type:		New			
Funding Approved by Fiscal Year:					
<b>FY03:</b> \$137,6	00.00	FY04:	\$0.00		
<b>FY06:</b> \$0.00		FY07:	\$0.00		

**FY05:** \$0.00 **FY08:** \$0.00

Total Funding Approved: \$137,600.00

## Abstract:

FY09: \$0.00

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.

## Scientific and Technical Advisory Committee Comments:

Not Applicable

Scientific and Technical Advisory Committee Recommendation: Not Reviewed

## **Chief Scientist Comments:**

Not Applicable

Chief Scientist Recommendation: Not Reviewed

## Public Advisory Committee Comments:

Not Applicable

Public Advisory Committee Recommendation: Not Reviewed

## **Executive Director Comments:**

Project management helps provide accountability for the work plan process.

Executive Director Recommendation: Fund

# **Trustee Council Comments:**

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

2002.]

Project Number:	030455				
Project Title:	GEM Data System				
Principal Investigator:	EVOS Administration				
Affiliation:	State Of Alaska				
Disbursing Agency: ADFG					
Project Location:	Project Location: Trustee Council Office				
Project Type:	New				
Funding Approved by I	Fiscal Year:				
FY03: \$212,900.00	FY	Y04:	\$0.00	FY05:	\$0.00
<b>FY06:</b> \$0.00	FY	Y07:	\$0.00	FY08:	\$0.00
<b>FY09:</b> \$0.00					
Total Funding Approve	<b>d:</b> \$212,900.00				

## 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.

## Scientific and Technical Advisory Committee Comments:

This proposal was reviewed by the Chief Scientist and not by the STAC.

## Scientific and Technical Advisory Committee Recommendation: Not Reviewed

## **Chief Scientist Comments:**

Data management will be a critical component of GEM.

Chief Scientist Recommendation: Fund

## Public Advisory Committee Comments:

Not Applicable

## Public Advisory Committee Recommendation: Not Reviewed

## **Executive Director Comments:**

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.

## Executive Director Recommendation: Fund

# **Trustee Council Comments:**

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.]

Project Number:	030550			
Project Title:	aska Resources Library and Information Services (ARLIS)			
Principal Investigator:	VOS Administration			
Affiliation:	State Of Alaska			
Disbursing Agency:	ADFG			
Project Location:	ARLIS			
Project Type:	New			
Funding Approved by I	Fiscal Year:			
FY03: \$95,100.00	<b>FY04:</b> \$0.00 <b>FY05:</b>	\$0.00		
<b>FY06:</b> \$0.00	<b>FY07:</b> \$0.00 <b>FY08:</b>	\$0.00		
<b>FY09:</b> \$0.00				

Total Funding Approved: \$95,100.00

## 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.

# Scientific and Technical Advisory Committee Comments:

This proposal was reviewed by the Chief Scientist and not by the STAC.

## Scientific and Technical Advisory Committee Recommendation: Not Reviewed

# **Chief Scientist Comments:**

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.

## Chief Scientist Recommendation: Fund

# **Public Advisory Committee Comments:**

Not Applicable

# Public Advisory Committee Recommendation: Not Reviewed

# **Executive Director Comments:**

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.

## Executive Director Recommendation: Fund

## **Trustee Council Comments:**

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.]

Project Number:		030630			
Project	Title:	Scientific Management Under GEM			
Princip	al Investigator:	EVOS Administration			
Affiliati	ion:	State Of Alaska			
Disbursing Agency:		ADFG			
Project Location:		All Spill Affected Areas			
Project	туре:	New			
Fundin	g Approved by I	Fiscal Year:			
FY03:	\$552,500.00		FY04:	\$0.00	
FY06:	\$0.00		FY07:	\$0.00	
FY09:	\$0.00				

Total Funding Approved: \$552,500.00

## Abstract:

This project will provide scientific oversight of implementation of the GEM program, as well as scientific oversight of lingering effects of oil on injured resources. In FY 03, the project will support the Science and Technical Advisory Committee (STAC) and other aspects of the scientific review and advisory process, develop the FY 04 Invitation to Submit Proposals, provide peer review recommendations and scientific support for the FY 03 and FY 04 work plans, 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 review process.

## Scientific and Technical Advisory Committee Comments:

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

## Scientific and Technical Advisory Committee Recommendation: Fund

## **Chief Scientist Comments:**

Proposal will not be reviewed by Chief Scientist.

## Chief Scientist Recommendation: Not Reviewed

## Public Advisory Committee Comments:

Not Applicable

## Public Advisory Committee Recommendation: Not Reviewed

## **Executive Director Comments:**

Fund additional \$253,300 (\$278,400 was already approved in Phase I). Funds are included for STAC travel and stipends, 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

**FY05:** \$0.00 **FY08:** \$0.00 experts (the STAC), whose work will be 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.

## Executive Director Recommendation: Fund

## **Trustee Council Comments:**

Funds are included for STAC travel and stipends, 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 will be 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.]

Project	Number:	030649					
Project	Title:	Reconstructing Sockeye Po	econstructing Sockeye Populations in the GOA Over the Last Several Thousand Years				
Princip	al Investigator:	Bruce Finney					
Affiliati	ion:	Alaskan University					
Disbur	Disbursing Agency: ADFG						
Project	Project Location: Prince William Sound, Kodiak, Kenai Peninsula						
Project	туре:	New					
Fundin	g Approved by I	Fiscal Year:					
FY03:	\$92,500.00	FY04:	\$0.00	FY05:	\$0.00		
FY06:	\$0.00	FY07:	\$0.00	FY08:	\$0.00		
FY09:	\$0.00						
Total F	unding Approve	<b>d:</b> \$92,500.00					

## Abstract:

This project is reconstructing changes in sockeye salmon abundance over the last 5,000 years using the 15N 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.

# Scientific and Technical Advisory Committee Comments:

This proposal was reviewed by the Chief Scientist and not by the STAC.

## Scientific and Technical Advisory Committee Recommendation: Not Reviewed

## **Chief Scientist Comments:**

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.

## Chief Scientist Recommendation: Fund

# **Public Advisory Committee Comments:**

Not Available

## Public Advisory Committee Recommendation: Not Available

# **Executive Director Comments:**

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.

## Executive Director Recommendation: Fund

## **Trustee Council Comments:**

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.]

Project Number:	030642					
Project Title:	Database on the Marine Inve of Alaska Museum's ARCTO	atabase on the Marine Invertebrate Macrofauna of PWS: An Addition to the University Alaska Museum's ARCTOS Network				
Principal Investigator:	Nora Foster					
Affiliation:	Alaskan University					
Disbursing Agency:	ADFG					
Project Location:	Prince William Sound					
Project Type:	New					
Funding Approved by	Fiscal Year:					
FY03: \$19,200.00	FY04:	\$0.00	FY05:	\$0.00		
FY06: \$0.00	FY07:	\$0.00	FY08:	\$0.00		
<b>FY09:</b> \$0.00						
Total Funding Approve	ed: \$19,200.00					

#### 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.

## Scientific and Technical Advisory Committee Comments:

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

#### Scientific and Technical Advisory Committee Recommendation: Fund

#### **Chief Scientist Comments:**

Not Available

Chief Scientist Recommendation: Not Available

## Public Advisory Committee Comments:

Not Available

#### Public Advisory Committee Recommendation: Not Available

## **Executive Director Comments:**

Fund based on STAC recommendation contingent on submittal of late report (02608).

## Executive Director Recommendation: Fund

# **Trustee Council Comments:**

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

Project Number:	030126						
Project Title:	labitat Protection and Acquisition Support						
Principal Investigator:	Carol Fries						
Affiliation:	State Of Alaska						
Disbursing Agency:	ADNR						
Project Location: Alaska Department of Natural Resources							
Project Type:	New						
Funding Approved by	Fiscal Year:						
FY03: \$86,100.00	FY04: \$0.00 FY05	<b>5:</b> \$0.00					
<b>FY06:</b> \$0.00	<b>FY07:</b> \$0.00 <b>FY0</b>	<b>3:</b> \$0.00					
<b>FY09:</b> \$0.00							
Total Funding Approved: \$86,100.00							

## Abstract:

This project will cover certain expenses incurred by Trustee agencies in pursuing protection of important habitat.

Scientific and Technical Advisory Committee Comments:

Not Applicable

Scientific and Technical Advisory Committee Recommendation: Not Reviewed

# Chief Scientist Comments:

Not Applicable

## Chief Scientist Recommendation: Not Reviewed

## **Public Advisory Committee Comments:**

Not Applicable

# Public Advisory Committee Recommendation: Not Reviewed

# **Executive Director Comments:**

This project will fund the Alaska Department of Natural Resources to facilitate protection of coastal habitat in Perenosa Bay and other coastal habitat on northern Afognak Island. Activities to be performed are appraisal review, title review, and hazardous materials survey and site inspection.

# Executive Director Recommendation: Fund

# Trustee Council Comments:

Fund \$86,100. This project will fund the Alaska Department of Natural Resources to facilitate protection of small parcels in which the Trustee Council has expressed an interest, as well as the AJV large parcel acquisition, the

Northern Afognak/Perenosa Bay protection effort, and the Old Harbor land exchange. [Note: \$37,700 was approved in August 2002 and \$48,400 was approved in November 2002.]

Project N	umber:	030607				
Project Ti	itle:	Geographic Informati the GOA	on Sys	tems (GIS) Map of Water Quality Mo	onitorin	g Sites Across
Principal	Investigator:	Mike Gracz				
Affiliation	n:	NGO				
Disbursir	ng Agency:	NOAA				
Project L	ocation:	All Spill Affected Areas				
Project T	уре:	New				
Funding <i>J</i>	Approved by I	Fiscal Year:				
FY03: \$	13,100.00		FY04:	\$0.00	FY05:	\$0.00
<b>FY06:</b> \$0	0.00		FY07:	\$0.00	FY08:	\$0.00
<b>FY09:</b> \$0	0.00					

## Total Funding Approved: \$13,100.00

## 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.

# Scientific and Technical Advisory Committee Comments:

This proposal was reviewed by the Chief Scientist and not by the STAC.

# Scientific and Technical Advisory Committee Recommendation: Not Reviewed

## **Chief Scientist Comments:**

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. Fund contingent on clarification by the proposer of the geographic area to be included (the database should include the entire geographic area encompassed by the GEM program).

## Chief Scientist Recommendation: Fund Contingent

# Public Advisory Committee Comments:

Not Available

## Public Advisory Committee Recommendation: Not Available

# **Executive Director Comments:**

Fund contingent on clarification by the proposer of the geographic area to be covered by the project (the database

should include the entire geographic area encompassed by the GEM program). 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.

# Executive Director Recommendation: Fund Contingent

## **Trustee Council Comments:**

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.]

Project Number:	030641					
Project Title:	ShoreZone Mapping for GEM					
Principal Investigator:	John Harper					
Affiliation:	Private Enterprise					
Disbursing Agency:	Disbursing Agency: NOAA					
Project Location:	Gulf of Alaska					
Project Type:	New					
Funding Approved by Fiscal Year:						
<b>FY03:</b> \$34,400.00	FY04: \$0.00 FY0	<b>5:</b> \$0.00				
<b>FY06:</b> \$0.00	<b>FY07:</b> \$0.00 <b>FY0</b>	<b>3:</b> \$0.00				
<b>FY09:</b> \$0.00						

Total Funding Approved: \$34,400.00

## 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.

# Scientific and Technical Advisory Committee Comments:

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.

## Scientific and Technical Advisory Committee Recommendation: Fund Reduced

Chief Scientist Comments:

Not Available

Chief Scientist Recommendation: Not Available

# Public Advisory Committee Comments:

Not Available

Public Advisory Committee Recommendation: Not Available

EVOSTC FY 2003 Final Work Plan

# **Executive Director Comments:**

Fund reduced based on STAC recommendation. PI should participate in a coastal mapping workshop to be held in spring 03 to evaluate the utility of the ShoreZone mapping and other mapping options as a proposed long-term monitoring activity.

# Executive Director Recommendation: Fund Reduced

## **Trustee Council Comments:**

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.]

Project	Number:	030476			
Project	Title:	Effects of Oiled Incubation Substrate on Pink Salmon Reproduction			
Princip	al Investigator:	Ronald Heintz			
Affiliati	on:	NOAA			
Disbursing Agency: NOAA					
Project	Location:	.ocation: Little Port Walter, Baranof Island, Southeast Alaska			
Project	Туре:	New			
Fundin	g Approved by I	Fiscal Year:			
FY03:	\$37,100.00	FY04:	\$0.00	FY05:	\$0
FY06:	\$0.00	FY07:	\$0.00	FY08:	\$0
FY09:	\$0.00				

Total Funding Approved: \$37,100.00

## 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.

## Scientific and Technical Advisory Committee Comments:

This proposal was reviewed by the Chief Scientist and not by the STAC.

## Scientific and Technical Advisory Committee Recommendation: Not Reviewed

## **Chief Scientist Comments:**

This is an important project because it rigorously tests the hypothesis that pink salmon have heritable 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.

## Chief Scientist Recommendation: Fund

# Public Advisory Committee Comments:

Not Available

# Public Advisory Committee Recommendation: Not Available

.00

# **Executive Director Comments:**

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.

# Executive Director Recommendation: Fund Contingent

## **Trustee Council Comments:**

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.]

Project Number:	030656				
Project Title:	Retrospective Analysis of Nearshore Marine Communities Based on Analysis of Archaeological Material and Isotopes				
Principal Investigator:	Gail Irvine				
Affiliation:	DOI				
Disbursing Agency:	USGS				
Project Location:	Gulf of Alaska				
Project Type:	New				
Funding Approved by Fiscal Year:					
FY03: \$53,700.00	FY04:	\$0.00	<b>FY05:</b> \$0.00		
<b>FY06:</b> \$0.00	FY07:	\$0.00	<b>FY08:</b> \$0.00		
<b>FY09:</b> \$0.00					
Total Funding Approved: \$53,700.00					

## 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 hidden 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.

## Scientific and Technical Advisory Committee Comments:

This proposal was reviewed by the Chief Scientist and not by the STAC.

## Scientific and Technical Advisory Committee Recommendation: Not Reviewed

## **Chief Scientist Comments:**

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.

## Chief Scientist Recommendation: Fund

## Public Advisory Committee Comments:

Not Available

## Public Advisory Committee Recommendation: Not Available

## **Executive Director Comments:**

Fund closeout of this project contingent on submittal of overdue report (99459). 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.

# Executive Director Recommendation: Fund

## **Trustee Council Comments:**

Fund closeout of this project contingent on submittal of overdue report (99459). 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 November 2002.]

Project Number:	030625			
Project Title:	PWS Isotope Ecology Synthesis			
Principal Investigator:	Thomas Kline			
Affiliation:	Private Enterprise			
Disbursing Agency:	NOAA			
Project Location:	Prince William Sound			
Project Type:	New			
Funding Approved by Fiscal Year:   FY03: \$25,500.00 FY04: \$0.00   FY06: \$0.00 FY07: \$0.00				
<b>FY09:</b> \$0.00				

Total Funding Approved: \$25,500.00

## 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.

## Scientific and Technical Advisory Committee Comments:

This proposal was reviewed by the Chief Scientist and not by the STAC.

## Scientific and Technical Advisory Committee Recommendation: Not Reviewed

## **Chief Scientist Comments:**

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.

## Chief Scientist Recommendation: Fund

## Public Advisory Committee Comments:

Not Available

## Public Advisory Committee Recommendation: Not Available

## **Executive Director Comments:**

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).

## Executive Director Recommendation: Fund

**FY05:** \$0.00 **FY08:** \$0.00

# **Trustee Council Comments:**

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 November 2002.]

Project Number:	030666				
Project Title:	Alaska Natural Geography in Shore Areas: An Initial Field Project for the Census of Marine Life				
Principal Investigator:	Brenda Konar				
Affiliation:	Alaskan University				
Disbursing Agency:	ADFG				
Project Location:	Kodiak Island, Prince William Sound, Kachemak Bay				
Project Type:	New				
Funding Approved by Fiscal Year:					
FY03: \$266,300.00	FY04:	\$0.00	<b>FY05:</b> \$0.00		
<b>FY06:</b> \$0.00	FY07:	\$0.00	<b>FY08:</b> \$0.00		
<b>FY09:</b> \$0.00					

Total Funding Approved: \$266,300.00

## 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.

# Scientific and Technical Advisory Committee Comments:

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.

# Scientific and Technical Advisory Committee Recommendation: Fund

## Chief Scientist Comments:

Not Available

## Chief Scientist Recommendation: Not Available

# **Public Advisory Committee Comments:**

Not Available

Public Advisory Committee Recommendation: Not Available

# **Executive Director Comments:**

Fund based on STAC recommendation, contingent on resolution of budget questions. 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.

# Executive Director Recommendation: Fund

## **Trustee Council Comments:**

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.]

Project	Number:	030574				
Project	Title:	Assessment of Bivalve Recovery on Treated Mixed-Soft Beaches in PWS				
Princip	al Investigator:	Dennis Lees				
Affiliati	on:	Private Enterprise				
Disbur	sing Agency:	NOAA				
Project	Location:	Prince William Sound				
Project	Туре:	New				
Fundin	g Approved by	Fiscal Year:				
FY03:	\$36,000.00	FY04	<b>4:</b> \$0	0.00	FY05:	\$0.00
FY06:	\$0.00	FY07	<b>7:</b> \$0	0.00	FY08:	\$0.00
FY09:	\$0.00					

## Total Funding Approved: \$36,000.00

## Abstract:

Studies from 1989 through 1997 suggest that bivalve assemblages on beaches in Prince William Sound with highpressure 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 remain 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.

## Scientific and Technical Advisory Committee Comments:

This proposal was reviewed by the Chief Scientist and not by the STAC.

## Scientific and Technical Advisory Committee Recommendation: Not Reviewed

## **Chief Scientist Comments:**

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.

## Chief Scientist Recommendation: Fund

## Public Advisory Committee Comments:

Not Available

## Public Advisory Committee Recommendation: Not Available

## **Executive Director Comments:**

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.

## Executive Director Recommendation: Fund
# **Trustee Council Comments:**

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.]

Project Number:		030462				
Project	Title:	Effect of Disease on	Pacific	Herring Population Recovery in P	WS	
Principal Investigator:		Gary Marty				
Affiliation:		Non AK University				
Disbursing Agency:		ADFG				
Project Location:		Prince William Sound				
Project Type:		New				
Fundin	g Approved by I	Fiscal Year:				
FY03:	\$87,000.00		FY04:	\$0.00	FY05:	\$0
FY06:	\$0.00		FY07:	\$0.00	FY08:	\$0
FY09:	\$0.00					

Total Funding Approved: \$87,000.00

## 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.

# Scientific and Technical Advisory Committee Comments:

This proposal was reviewed by the Chief Scientist and not by the STAC.

# Scientific and Technical Advisory Committee Recommendation: Not Reviewed

#### **Chief Scientist Comments:**

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 study 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.

# Chief Scientist Recommendation: Fund Reduced

# Public Advisory Committee Comments:

Not Available

# Public Advisory Committee Recommendation: Not Available

.00

Defer decision on funding this project until November, pending contribution of funds from non-EVOS sources to carry out the project as proposed. 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). The proposer has requested funds to conduct new work on Icthyophonus hoferi in FY 03. 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 of \$25,000 to the project may be worthwhile. Deferring the project until November will provide the proposer an opportunity to secure funds from other sources. The project objective is to determine whether disease continues to limit recovery of the Prince William Sound herring population.

## Executive Director Recommendation: Defer

# **Trustee Council Comments:**

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.]

Project Number:	030012				
Project Title:	Photographic Monitoring of Resident Killer Whales				
Principal Investigator:	Craig Matkin				
Affiliation:	Private Enterprise				
Disbursing Agency:	NOAA				
Project Location:	Prince William Sound, Kenai Fjords				
Project Type:	New				
Funding Approved by	Fiscal Year:				
FY03: \$18,100.00	<b>FY04:</b> \$0.00 <b>FY05:</b>	\$0.00			
FY06: \$0.00	<b>FY07:</b> \$0.00 <b>FY08:</b>	\$0.00			
<b>FY09:</b> \$0.00					
Total Funding Approve	ed: \$18,100.00				

## 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.

## Scientific and Technical Advisory Committee Comments:

This proposal was reviewed by the Chief Scientist and not by the STAC.

#### Scientific and Technical Advisory Committee Recommendation: Not Reviewed

#### **Chief Scientist Comments:**

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.

#### Chief Scientist Recommendation: Fund

# Public Advisory Committee Comments:

Not Available

#### Public Advisory Committee Recommendation: Not Available

#### **Executive Director Comments:**

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.

# Executive Director Recommendation: Fund Contingent

# **Trustee Council Comments:**

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.]

Project Number:	030684				
Project Title:	Toward Sustainable Manage Resource Development with	ement in the Kenai River Watershed Nutrient and Energy Pathways	: Linking Human and		
Principal Investigator:	Asit Mazumder				
Affiliation:	Non AK University				
Disbursing Agency:	ADFG				
Project Location:	Kenai River Watershed				
Project Type:	New				
Funding Approved by	Fiscal Year:				
FY03: \$59,900.00	FY04:	\$0.00	<b>FY05:</b> \$0.00		
<b>FY06:</b> \$0.00	FY07:	\$0.00	<b>FY08:</b> \$0.00		
<b>FY09:</b> \$0.00					
Total Funding Approve	ed: \$59,900.00				

## 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.

# Scientific and Technical Advisory Committee Comments:

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.

#### Scientific and Technical Advisory Committee Recommendation: Do Not Fund

#### **Chief Scientist Comments:**

Not Available

# Chief Scientist Recommendation: Not Available

# Public Advisory Committee Comments:

Not Available

Public Advisory Committee Recommendation: Not Available

EVOSTC FY 2003 Final Work Plan

Do not fund based on the STAC recommendation.

## Executive Director Recommendation: Do Not Fund

## **Trustee Council Comments:**

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.]

Project Number:	030614		
Project Title:	Monitoring Program for Near Northern Pacific Ocean	r-Surface Temperature, Salinity, an	d Fluorescence in the
Principal Investigator:	Stephen Okkonen		
Affiliation:	Alaskan University		
Disbursing Agency:	ADFG		
Project Location:	Northeast Pacific Ocean		
Project Type:	New		
Funding Approved by I	Fiscal Year:		
FY03: \$29,000.00	FY04:	\$0.00	<b>FY05:</b> \$0.00
<b>FY06:</b> \$0.00	FY07:	\$0.00	<b>FY08:</b> \$0.00
<b>FY09:</b> \$0.00			

## Total Funding Approved: \$29,000.00

#### 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. This project received \$18,100 under the FY 03 Phase I invitation. The additional funds requested under 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.

#### Scientific and Technical Advisory Committee Comments:

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.

#### Scientific and Technical Advisory Committee Recommendation: Fund

#### **Chief Scientist Comments:**

This is a continuation of an innovative and cost effective project that provides data to assess the long-term recovery of resources impacted by the oil spill against the background of climate-driven variability. The potential for the proposal to provide data from a key area of Prince William Sound and the adjacent ocean relevant to long-term evaluation and interpretation of population trends for birds, fish, and mammals is excellent.

#### Chief Scientist Recommendation: Fund

# Public Advisory Committee Comments:

Not Available

#### Public Advisory Committee Recommendation: Not Available

#### **Executive Director Comments:**

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.

## Executive Director Recommendation: Fund

## Trustee Council Comments:

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.]

Project Number:	030685			
Project Title:	Visible Remote Sensing of the GOA			
Principal Investigator:	W. Scott Pegau			
Affiliation:	State Of Alaska			
Disbursing Agency:	ADFG			
Project Location:	Gulf of Alaska, Kachemak Bay			
Project Type:	New			
Funding Approved by Fiscal Year:				
<b>FY03:</b> \$77,100.00	<b>FY04:</b> \$0.00			

**FY05:** \$0.00 **FY08:** \$0.00

Total Funding Approved: \$77,100.00

#### Abstract:

**FY06:** \$0.00 **FY09:** \$0.00

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.

FY07: \$0.00

#### Scientific and Technical Advisory Committee Comments:

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.

#### Scientific and Technical Advisory Committee Recommendation: Fund

Chief Scientist Comments:

Not Available

Chief Scientist Recommendation: Not Available

**Public Advisory Committee Comments:** 

Not Available

Public Advisory Committee Recommendation: Not Available

Fund contingent on resolution of budget questions. This proposal addresses a major need for making remote sensing information more accessible.

#### Executive Director Recommendation: Fund Contingent

# **Trustee Council Comments:**

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.]

Project Number:		030585				
Project Title:		Lingering Oil: Bioavailability and Effects to Prey and Predators				
Principal Investigator:		Stanley (Jeep) Rice				
Affiliation:		NOAA				
Disbursing Agency:		NOAA				
Project Location:		Prince William Sound, Gulf of Alaska				
Project Type:		New				
Fundin	g Approved by I	Fiscal Year:				
FY03:	\$121,600.00	<b>FY04:</b> \$0.00 <b>FY05:</b>	\$0.00			
FY06:	\$0.00	<b>FY07:</b> \$0.00 <b>FY08:</b>	\$0.00			
FY09:	\$0.00					

Total Funding Approved: \$121,600.00

#### 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. Field work 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.

#### Scientific and Technical Advisory Committee Comments:

This proposal was reviewed by the Chief Scientist and not by the STAC.

#### Scientific and Technical Advisory Committee Recommendation: Not Reviewed

#### **Chief Scientist Comments:**

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.

#### Chief Scientist Recommendation: Fund

#### **Public Advisory Committee Comments:**

Not Available

# Public Advisory Committee Recommendation: Not Available

## **Executive Director Comments:**

Fund closeout of this project, including funds for additional chemical analyses and analysis of interstitial water samples, contingent on (a) approval of the revised Detailed Project Description, which reflects this additional work and (b) 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.

## Executive Director Recommendation: Fund Contingent

## **Trustee Council Comments:**

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.]

Project Number:	030620				
Project Title:	Lingering Oil and Predators: Pathways of Exposure and Population Status				
Principal Investigat	or: Stanley (Jeep) Rice				
Affiliation:	NOAA				
Disbursing Agency	: NOAA				
Project Location:	Prince William Sound, Gulf of Alaska				
Project Type:	New				
Funding Approved	by Fiscal Year:				
<b>FY03:</b> \$435,800.00	<b>FY04:</b> \$0.00 <b>FY05:</b> \$0.00				
<b>FY06:</b> \$0.00	<b>FY07:</b> \$0.00 <b>FY08:</b> \$0.00				
FY09: \$0.00					

Total Funding Approved: \$435,800.00

## 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.

#### Scientific and Technical Advisory Committee Comments:

This proposal was reviewed by the Lingering Oil Subcommittee and not 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 early October led to some recommended changes. The proposal will be revised to focus on the 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 will be accomplished by both 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.

#### Scientific and Technical Advisory Committee Recommendation: Fund

# **Chief Scientist Comments:**

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 is a very good to excellent proposal that 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. There is some concern about the experimental design for the prey base study (the National Oceanic and Atmospheric Administration (NOAA)

component), particularly being able to relate the location of foraging activities to the contamination of the forage base. The means of contamination--eating versus external contact--is also a question. Fund USGS (U.S. Geological Survey) component; defer decision on funding NOAA component pending consultation with the peer review team.

## Chief Scientist Recommendation: Defer

## **Public Advisory Committee Comments:**

Not Available

## Public Advisory Committee Recommendation: Not Available

## **Executive Director Comments:**

Fund USGS (U.S. Geological Survey) component on sea otters and harlequin ducks (\$192,300); defer decision on funding NOAA (National Oceanic and Atmospheric Administration) component on habitat and lingering oil (\$151,300) pending a workshop to be held Fall 2002 on the results to date from Project 03585/Lingering Oil: Bioavailability and Effects to Prey and Predators. If funded, funding for the NOAA component will be contingent on submittal of the principal investigators' overdue reports (00454, 01195) 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.

## Executive Director Recommendation: Fund

## **Trustee Council Comments:**

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.]

Project Number:	030561			
Project Title:	Evaluating the Feasibility of Project for GEM	Developing a Community-Based Fo	orage Fi	sh Sampling
Principal Investigator:	David Roseneau			
Affiliation:	DOI			
Disbursing Agency:	USFWS			
Project Location:	All Spill Affected Areas			
Project Type:	New			
Funding Approved by	Fiscal Year:			
<b>FY03:</b> \$17,000.00	FY04:	\$0.00	FY05:	\$0.00
<b>FY06:</b> \$0.00	FY07:	\$0.00	FY08:	\$0.00
<b>FY09:</b> \$0.00				

Total Funding Approved: \$17,000.00

## 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. This project is based on previous EVOS projects: APEX (/163, Alaska Predator Ecosystem Experiment) and 02561 and G-030561/Evaluating the Feasibility of Developing a Community-based Forage Fish Sampling Program. It is designed 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 (e.g., halibut, flounder, cod, lingcod, rockfish, salmon). The study will be conducted during April-August 2003 at Nanwalek and Port Graham on the southeastern shores of Kachemak Bay. Products will include an evaluation of community participation in the sampling efforts and an analysis of the predatory fish stomach contents collected during the project. [NOTE: This project received \$17,000 under FY 03 Phase I to compile and analyze information collected during FY 02 and write a final report].

# Scientific and Technical Advisory Committee Comments:

Results of 020561 should be evaluated as a long-term monitoring tool before a decision on funding this implementation approach is made. 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 samples of forage fish.

#### Scientific and Technical Advisory Committee Recommendation: Do Not Fund

# **Chief Scientist Comments:**

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.

## Chief Scientist Recommendation: Fund

# **Public Advisory Committee Comments:**

Not Available

## Public Advisory Committee Recommendation: Not Available

## **Executive Director Comments:**

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.

## Executive Director Recommendation: Fund

## **Trustee Council Comments:**

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.]

Project Number:	030647		
Project Title:	Investigating the Relative Re Peninsula's Rocky Intertidal	oles of Natural and Shoreline Harve	est in Altering the Kenai
Principal Investigator:	Jennifer Ruesink		
Affiliation:	Non AK University		
Disbursing Agency:	NOAA		
Project Location:	Kenai Peninsula		
Project Type:	New		
Funding Approved by	Fiscal Year:		
FY03: \$87,900.00	FY04:	\$0.00	<b>FY05:</b> \$0.00
FY06: \$0.00	FY07:	\$0.00	FY08: \$0.00
<b>FY09:</b> \$0.00			
Total Funding Approve	ed: \$87,900.00		

#### 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.

# Scientific and Technical Advisory Committee Comments:

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 will 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.

#### Scientific and Technical Advisory Committee Recommendation: Fund

Chief Scientist Comments:

Not Available

Chief Scientist Recommendation: Not Available

# Public Advisory Committee Comments:

Not Available

#### Public Advisory Committee Recommendation: Not Available

Fund based on STAC recommendations (check whether BAA or RSA with ADFG). This proposal would investigate changes in rocky intertidal areas by focusing on the black chiton, an important subsistence resource. Products would also provide GEM planning with information on measuring human impacts in the nearshore.

## Executive Director Recommendation: Fund

## **Trustee Council Comments:**

Fund based on STAC recommendations (check whether BAA or RSA with ADFG). This proposal would investigate changes in rocky intertidal areas by focusing on the black chiton, an important subsistence resource. Products would also provide GEM planning with information on measuring human impacts in the nearshore. [Note: Funds were approved in November 2002.]

Project Number:	030610
Project Title:	Kodiak Archipelago Youth Area Watch
Principal Investigator:	Teri Schneider
Affiliation:	Local Government
Disbursing Agency:	ADFG
Project Location:	Kodiak Archipelago
Project Type:	New
Funding Approved by	Fiscal Year:
<b>FY03:</b> \$63,000.00	<b>FY04:</b> \$0.00
FY06: \$0.00	<b>FY07:</b> \$0.00
<b>FY09:</b> \$0.00	
Total Funding Approv	ed: \$63,000.00

#### 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.

# Scientific and Technical Advisory Committee Comments:

This proposal was reviewed by the Chief Scientist and not by the STAC.

# Scientific and Technical Advisory Committee Recommendation: Not Reviewed

#### **Chief Scientist Comments:**

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.

# Chief Scientist Recommendation: Fund

# Public Advisory Committee Comments:

Not Available

#### Public Advisory Committee Recommendation: Not Available

#### **Executive Director Comments:**

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, Ouzinki, Chiniak, and Kodiak

**FY05:** \$0.00 **FY08:** \$0.00 City will participate.

# Executive Director Recommendation: Fund

# **Trustee Council Comments:**

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.]

Project Number:	030556				
Project Title:	High Resolution Mapping of the Intertidal and Shallow Subtidal Shores in Kachemak Bay				
Principal Investigator:	G. Carl Schoch				
Affiliation:	NGO				
Disbursing Agency:	ADFG				
Project Location:	Kachemak Bay/Lower Cook Inlet				
Project Type:	New				
Funding Approved by I	Fiscal Year:				
<b>FY03:</b> \$32,300.00	FY04: \$0.00 FY05	<b>5:</b> \$0.00			
<b>FY06:</b> \$0.00	<b>FY07:</b> \$0.00 <b>FY08</b>	<b>3:</b> \$0.00			
<b>FY09:</b> \$0.00					

Total Funding Approved: \$32,300.00

#### 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.

#### Scientific and Technical Advisory Committee Comments:

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.

## Scientific and Technical Advisory Committee Recommendation: Fund

**Chief Scientist Comments:** 

Not Available

Chief Scientist Recommendation: Not Available

Public Advisory Committee Comments:

Not Available

Public Advisory Committee Recommendation: Not Available

Fund for \$32.3 (\$29.6 in direct costs and \$2.7 in general administration), contingent on submittal of late reports (02671). This proposal would complete mapping started in FY02, create a GIS database, and include the final report. Project PIs should participate in additional mapping workshop to be held in Spring '03.

## Executive Director Recommendation: Fund Contingent

## **Trustee Council Comments:**

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.]

Project	Number:	030290				
Project Title:		Hydrocarbon Database and Interpretation Service				
Principal Investigator:		Jeffrey Short				
Affiliation:		NOAA				
Disbur	sing Agency:	NOAA				
Project Location:		All Spill Affected Areas				
Project Type:		New				
Fundin	g Approved by I	Fiscal Year:				
FY03:	\$22,500.00	FY04	\$0.00	FY05:	\$0.00	
FY06:	\$0.00	FY07	\$0.00	FY08:	\$0.00	
FY09:	\$0.00					

## Total Funding Approved: \$22,500.00

#### 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.

#### Scientific and Technical Advisory Committee Comments:

This proposal was reviewed by the Chief Scientist and not by the STAC.

#### Scientific and Technical Advisory Committee Recommendation: Not Reviewed

## **Chief Scientist Comments:**

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.

#### Chief Scientist Recommendation: Fund

#### Public Advisory Committee Comments:

Not Available

#### Public Advisory Committee Recommendation: Not Available

#### **Executive Director Comments:**

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.

# Executive Director Recommendation: Fund Contingent

# **Trustee Council Comments:**

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.]

Project Number:	030575	
Project Title:	Designing a Community Involvement/Community-Based Monitoring Plan f	or GEM
Principal Investigato	r: Marilyn Sigman	
Affiliation:	NGO	
Disbursing Agency:	NOAA	
Project Location:	Prince William Sound, Kenai Peninsula	
Project Type:	New	
Funding Approved b	y Fiscal Year:	
<b>FY03:</b> \$109,600.00	<b>FY04:</b> \$0.00 <b>FY05:</b> \$0.	.00
<b>FY06:</b> \$0.00	<b>FY07:</b> \$0.00 <b>FY08:</b> \$0.	.00
<b>FY09:</b> \$0.00		

## Total Funding Approved: \$109,600.00

#### 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.

#### Scientific and Technical Advisory Committee Comments:

This proposal was reviewed by the Chief Scientist and not by the STAC.

# Scientific and Technical Advisory Committee Recommendation: Not Reviewed

## **Chief Scientist Comments:**

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.

#### Chief Scientist Recommendation: Fund

# **Public Advisory Committee Comments:**

Not Available

#### Public Advisory Committee Recommendation: Not Available

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.

## Executive Director Recommendation: Fund

## **Trustee Council Comments:**

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.]

Project Number:	030600		
Project Title:	Synthesis of the Ecological Programs, 1989-2001	Findings from EVOS Damage Asse	ssment and Restoration
Principal Investigator:	Robert Spies		
Affiliation:	Private Enterprise		
Disbursing Agency:	ADNR		
Project Location:	All Spill Affected Areas		
Project Type:	New		
Funding Approved by	Fiscal Year:		
FY03: \$215,900.00	FY04:	\$0.00	<b>FY05:</b> \$0.00
<b>FY06:</b> \$0.00	FY07:	\$0.00	<b>FY08:</b> \$0.00
<b>FY09:</b> \$0.00			
Total Funding Approve	ed: \$215,900.00		

#### 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.

# Scientific and Technical Advisory Committee Comments:

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

# Scientific and Technical Advisory Committee Recommendation: Not Reviewed

#### **Chief Scientist Comments:**

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

## Chief Scientist Recommendation: Not Reviewed

# Public Advisory Committee Comments:

Not Available

#### Public Advisory Committee Recommendation: Not Available

# **Executive Director Comments:**

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.

## Executive Director Recommendation: Fund

## **Trustee Council Comments:**

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.]

Project Number:	030654		
Project Title:	Surface Nutrients Over the Shelf and Basin in Summer - Bottom up Control of Ecosystem Diversity		
Principal Investigator:	Phyllis Stabeno		
Affiliation:	NOAA		
Disbursing Agency:	NOAA		
Project Location:	Yakutat to Kodiak Island/Sheli	kof Strait	
Project Type:	New		
Funding Approved by	Fiscal Year:		
<b>FY03:</b> \$37,500.00	FY04:	\$0.00	<b>FY05:</b> \$0.00
<b>FY06:</b> \$0.00	FY07:	\$0.00	<b>FY08:</b> \$0.00
<b>FY09:</b> \$0.00			

Total Funding Approved: \$37,500.00

#### 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.

# Scientific and Technical Advisory Committee Comments:

Information on the role of surface nutrients in productivity in the GOA 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.

#### Scientific and Technical Advisory Committee Recommendation: Fund

#### **Chief Scientist Comments:**

Not Available

#### Chief Scientist Recommendation: Not Available

# Public Advisory Committee Comments:

Not Available

Public Advisory Committee Recommendation: Not Available

Fund based on STAC recommendation, contingent on resolution of budget questions.

# Executive Director Recommendation: Fund Contingent

## **Trustee Council Comments:**

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

Project Number:	030340		
Project Title:	Toward Long-Term Oceanographic Monitoring of the GOA Ecosystem		
Principal Investigator:	Thomas Weingartner		
Affiliation:	Alaskan University		
Disbursing Agency:	ADFG		
Project Location:	Resurrection Bay, Gulf of Alaska Shelf		
Project Type:	New		
Funding Approved by	Fiscal Year:		
<b>FY03:</b> \$51,600.00	<b>FY04:</b> \$0.00	FY05:	\$0.00
<b>FY06:</b> \$0.00	<b>FY07:</b> \$0.00	FY08:	\$0.00
<b>FY09:</b> \$0.00			

# Total Funding Approved: \$51,600.00

#### 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.

# Scientific and Technical Advisory Committee Comments:

This proposal was reviewed by the Chief Scientist and not by the STAC.

# Scientific and Technical Advisory Committee Recommendation: Not Reviewed

#### **Chief Scientist Comments:**

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.

#### Chief Scientist Recommendation: Fund

# Public Advisory Committee Comments:

Not Available

#### Public Advisory Committee Recommendation: Not Available

# **Executive Director Comments:**

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.

# Executive Director Recommendation: Fund Contingent

## **Trustee Council Comments:**

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.]

Project Number:	030670		
Project Title:	Monitoring Dynamics of the Alaska Coastal Current and Development of Applications for Management of Cook Inlet Salmon		
Principal Investigator:	T. Mark Willette		
Affiliation:	State Of Alaska		
Disbursing Agency:	ADFG		
Project Location:	Cook Inlet		
Project Type:	New		
Funding Approved by	Fiscal Year:		
FY03: \$80,900.00	FY04:	\$0.00	<b>FY05:</b> \$0.00
<b>FY06:</b> \$0.00	FY07:	\$0.00	<b>FY08:</b> \$0.00
<b>FY09:</b> \$0.00			
Total Funding Approved: \$80,900.00			

#### Abstract:

This project will collect physical oceanographic and fisheries data along a transect across lower Cook Inlet from Anchor Point to the Red River delta each day during July. The data will be made available to other researchers studying how the physical dynamics of the Alaska Coastal Current affect the productivity of biological resources in the region. Logistical support for the field sampling will be provided in part by an existing test-fishing vessel chartered annually by the Alaska Department of Fish and Game to provide inseason projections of the size of salmon runs returning to the inlet. The project will also use the physical oceanographic data to improve management of Cook Inlet salmon through improved inseason salmon run projections. Several hypotheses regarding effects of changing oceanographic conditions on salmon migratory behavior will be tested.

# Scientific and Technical Advisory Committee Comments:

The proposal continues to make a strong case for its fishery management implications. Technical concerns regarding physical oceanography previously expressed by the STAC have been addressed, except that, as written, the proposal is not likely to resolve the eddy structure. In order to do this, it would need to be coupled with a tide resolving model. Use of CODAR (Coastal Radar) data and other physical models that are available for Cook Inlet would significantly strengthen the potential results of this research. Fund contingent upon incorporation of CODAR data and other physical models into the data analysis portion of the project.

#### Scientific and Technical Advisory Committee Recommendation: Fund Contingent

Chief Scientist Comments:

Not Available

#### Chief Scientist Recommendation: Not Available

# **Public Advisory Committee Comments:**

Not Available

Public Advisory Committee Recommendation: Not Available

Defer pending submittal and review of revised proposal that addresses STAC concerns and budget questions.

## Executive Director Recommendation: Defer

## **Trustee Council Comments:**

Fund revised proposal, which incorporates CODAR (Coastal Radar) data and other physical models into the data analysis portion of the project. This proposal was deferred pending submittal and review of a revised proposal that addresses the STAC's concerns. The results of this project could make a positive contribution to fisheries management. The relation between sockeye salmon run timing, salinity, currents and temperature is not well understood. [Note: Funds were approved in April 2003.]