

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL



FEDERAL FISCAL YEAR

2004

FINAL WORK PLAN

Published March 22, 2007



Exxon Valdez Oil Spill Trustee Council
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FISCAL YEAR 2004

FINAL WORK PLAN

Published March 22, 2007

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Exxon Valdez Oil Spill Trustee Council

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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 2004 Workplan was adopted.

Notice

The abstract of each proposal submitted in response to the FY04 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.

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 not previously published for FY04. Trustee Council staff consulted transcripts, meeting minutes, court notices, and project files and compiled this FY04 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,

A handwritten signature in cursive script, appearing to read "Michael Baffrey".

Michael Baffrey
Executive Director

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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 FY04 Work Plan

This Work Plan contains a list of new projects funded in FY04 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 FY04.

The Trustee Council received 75 proposals for FY04, of which 49 were funded. Funding recommendations and decisions for all proposals and descriptions of funded proposals are contained in this document.

Total approved funding for new projects in FY04 is \$6,562,262.00. There were no projects from previous years continuing into FY04.

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.

New Projects in FY04

Project Number	Principal Investigator	Project Title (abbr.)	FY04 Funding	FY05 Funding	FY06 Funding	FY07 Funding	FY08 Funding	FY09 Funding
040636	Adams	Fisheries Management	\$46,760.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
040774	Ballachey	Oil Exposure in Nearshore Vertebrate Predators	\$178,000.00	\$150,500.00	\$0.00	\$0.00	\$0.00	\$0.00
040775	Ballachey	Lingering Oil and Sea Otters	\$20,500.00	\$206,700.00	\$34,900.00	\$0.00	\$0.00	\$0.00
040624	Batten	A CPR-Based Plankton Survey	\$135,200.00	\$135,200.00	\$135,200.00	\$0.00	\$0.00	\$0.00
040635	Bishop	Top-down and Bottom-up Processes	\$149,529.00	\$164,030.00	\$151,390.00	\$0.00	\$0.00	\$0.00
040620-2	Bodkin	Lingering Oil and Sea Otters	\$134,300.00	\$26,200.00	\$99,700.00	\$0.00	\$0.00	\$0.00
040687	Bodkin	Nearshore Monitoring Decision Process	\$10,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
040699	Cokelet	AK Marine Highway System Ferries	\$171,500.00	\$185,900.00	\$145,900.00	\$36,475.00	\$0.00	\$0.00
040210	Crumley	Youth Area Watch	\$121,100.00	\$126,400.00	\$133,200.00	\$0.00	\$0.00	\$0.00
040772	Day	Sediment Quality Survey	\$151,000.00	\$57,200.00	\$0.00	\$0.00	\$0.00	\$0.00
040702	Eckert	Natural Variability in the Nearshore	\$36,300.00	\$17,500.00	\$0.00	\$0.00	\$0.00	\$0.00
040100	EVOS Administration	Public Information and Administration	\$863,300.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
040250	EVOS Administration	Project Management	\$144,800.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
040455	EVOS Administration	Data System	\$156,800.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
040550	EVOS Administration	ARLIS	\$160,900.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
040630	EVOS Administration	Scientific Management under GEM	\$461,600.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
040630-A	EVOS Administration	NOS Grant Funding	\$248,300.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
040471	Fall	Status of Subsistence Uses	\$298,700.00	\$25,600.00	\$0.00	\$0.00	\$0.00	\$0.00
040703	Finney	Marine-Terrestrial Linkages	\$79,197.00	\$80,154.00	\$81,117.00	\$0.00	\$0.00	\$0.00
040126	Fries	Habitat Protection and Acquisition Support	\$10,355.00	\$12,400.00	\$0.00	\$0.00	\$0.00	\$0.00
040639	Goldman	Ecosystem Parameters in GOA	\$37,600.00	\$56,100.00	\$56,000.00	\$0.00	\$0.00	\$0.00

Project Number	Principal Investigator	Project Title (abbr.)	FY04 Funding	FY05 Funding	FY06 Funding	FY07 Funding	FY08 Funding	FY09 Funding
040706	Heintz	Energy Allocation and Salmon Carcasses	\$48,400.00	\$42,300.00	\$14,000.00	\$0.00	\$0.00	\$0.00
040703-A	Honnold	Marine-derived Nutrients on Sockeye Salmon	\$83,200.00	\$82,400.00	\$86,800.00	\$0.00	\$0.00	\$0.00
040159	Irons	Marine Bird Abundance Surveys	\$175,518.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
040708	Irvine	Lingering Oil on Boulder-Armored Beaches	\$71,700.00	\$17,200.00	\$21,854.50	\$0.00	\$0.00	\$0.00
040776	Jacobs	Lingering Oil: 2005 Assessment	\$650,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
040710	Kiefer	Alaskan Groundfish Feeding Ecology	\$80,900.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
040666	Konar	Natural Geography in Shore Areas	\$248,729.00	\$17,713.00	\$0.00	\$0.00	\$0.00	\$0.00
040574	Lees	Assessment of Bivalve Recovery	\$36,200.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
040716	Macklin	NGOA Metadatabase	\$100,600.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
040649	Mann	Reconstructing Sockeye Populations	\$45,000.00	\$90,400.00	\$0.00	\$0.00	\$0.00	\$0.00
040012	Matkin	Killer Whales in PWS/Kenai Fjords	\$19,502.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
040290	Nelson	Hydrocarbon Database	\$22,200.00	\$22,200.00	\$22,200.00	\$0.00	\$0.00	\$0.00
040614	Okkonen	Monitoring Program in the NE Pacific Ocean	\$27,289.00	\$30,366.00	\$31,455.00	\$0.00	\$0.00	\$0.00
040556	Pegau	High Resolution Mapping	\$15,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
040620-1	Rice	Lingering Oil: Population Status	\$60,000.00	\$61,000.00	\$29,100.00	\$0.00	\$0.00	\$0.00
040740	Rice	Lingering Oil: Contaminant Inputs	\$177,300.00	\$130,100.00	\$0.00	\$0.00	\$0.00	\$0.00
040407	Rosenberg	Harlequin Duck Population Dynamics	\$37,100.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
040647	Ruesink	Altering the Community Structure	\$81,600.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
040721	Saupe	Habitat Web Site	\$21,100.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
040610	Schneider	Kodiak Archipelago Youth Area Watch	\$63,000.00	\$63,000.00	\$63,000.00	\$0.00	\$0.00	\$0.00
040724	Short	Monitoring Exxon Valdez Oil & PWS	\$45,900.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
040600	Spies	EVOS Damage Assessment & Restoration	\$201,700.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

Project Number	Principal Investigator	Project Title (abbr.)	FY04 Funding	FY05 Funding	FY06 Funding	FY07 Funding	FY08 Funding	FY09 Funding
040654	Stabeno	Surface Nutrients Over the Shelf	\$49,500.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
040725	Thorne	Seafood Waste Discharge	\$72,680.00	\$111,692.00	\$108,943.00	\$0.00	\$0.00	\$0.00
040726	Walker	Marine Derived Nutrients	\$169,000.00	\$153,400.00	\$149,700.00	\$0.00	\$0.00	\$0.00
040340	Weingartner	Alaska Coastal Current	\$80,387.00	\$81,748.00	\$64,950.00	\$0.00	\$0.00	\$0.00
040670	Willette	Dynamics of the Alaska Coastal Current	\$89,800.00	\$68,000.00	\$27,900.00	\$0.00	\$0.00	\$0.00
040712	Woody	Nutrient-Based Resource Management	\$173,216.00	\$177,002.00	\$152,632.00	\$0.00	\$0.00	\$0.00
FY04 New Project Funding Totals			\$6,562,262.00	\$2,392,405.00	\$1,609,941.50	\$36,475.00	\$0.00	\$0.00

Total Approved Funding for Continuing Projects in FY04: \$0.00

Total Approved Funding for New Projects in FY04: \$6,562,262.00

Total Approved Funding in FY04: \$6,562,262.00

FY04 Proposal Funding Recommendations and Decisions

Project Number	Principal Investigator	Project Title (abbr.)	Total Requested	FY04 Approved	Total Approved	STAC	Science Director	PAC	Executive Director	Trustee Council
040636	Adams	Fisheries Management	\$46,760.00	\$46,760.00	\$46,760.00	Fund Contingent	Not Available	Not Available	Fund	Fund
040692	Baird	Connecting with Coastwalk	\$40,000.00	\$0.00	\$0.00	Fund Contingent	Not Available	Fund Contingent	Fund	Do Not Fund
040774	Ballachey	Oil Exposure in Nearshore Vertebrate Predators	\$328,500.00	\$178,000.00	\$328,500.00	Fund	Not Available	Not Available	Fund	Fund
040775	Ballachey	Lingering Oil and Sea Otters	\$147,400.00	\$20,500.00	\$262,100.00	Fund	Not Available	Not Available	Fund	Fund
040624	Batten	A CPR-Based Plankton Survey	\$405,600.00	\$135,200.00	\$405,600.00	Fund	Not Available	Fund	Fund	Fund
040694	Ben-David	Transfer of Nutrients from Sea	\$155,800.00	\$0.00	\$0.00	Do Not Fund	Not Available	Not Available	Do Not Fund	Do Not Fund
040695	Berenstein	Pink Salmon Fry Survival	\$134,050.00	\$0.00	\$0.00	Do Not Fund	Not Available	Not Available	Do Not Fund	Do Not Fund
040696	Bird	Mobile Data Network-Marine Hwy	\$325,900.00	\$0.00	\$0.00	Do Not Fund	Not Available	Not Available	Do Not Fund	Do Not Fund
040697	Bird	Mobile Data Network-Vessels	\$400,800.00	\$0.00	\$0.00	Do Not Fund	Not Available	Not Available	Defer	Do Not Fund
040635	Bishop	Top-down and Bottom-up Processes	\$464,949.00	\$149,529.00	\$464,949.00	Fund	Not Available	Fund	Fund	Fund
040620-2	Bodkin	Lingering Oil and Sea Otters	\$254,200.00	\$134,300.00	\$260,200.00	Defer	Not Available	Defer	Defer	Fund
040687	Bodkin	Nearshore Monitoring Decision Process	\$10,000.00	\$10,000.00	\$10,000.00	Fund	Not Available	Fund	Fund	Fund
040052	Brown-Schwalenberg	Tribal Natural Resource Stewardship	\$180,000.00	\$0.00	\$0.00	Do Not Fund	Not Available	Not Available	Do Not Fund	Do Not Fund
040698	Brown-Schwalenberg	Subsistence & Stewardship Gathering	\$31,250.00	\$0.00	\$0.00	Fund Contingent	Not Available	Fund Contingent	Defer	Do Not Fund
040699	Cokelet	AK Marine Highway System Ferries	\$539,775.00	\$171,500.00	\$539,775.00	Fund Contingent	Not Available	Fund Contingent	Fund	Fund
040700	Cooper	Community-Based Nutrient Sampling	\$285,412.00	\$0.00	\$0.00	Fund Contingent	Not Available	Fund Contingent	Fund	Do Not Fund
040701	Couvillion	Coordinated Coastal Mapping	\$98,500.00	\$0.00	\$0.00	Fund	Not Available	Not Available	Fund	Do Not Fund
040210	Crumley	Youth Area Watch	\$380,700.00	\$121,100.00	\$380,700.00	Do Not Fund	Not Available	Do Not Fund	Defer	Fund
040772	Day	Sediment Quality Survey	\$208,200.00	\$151,000.00	\$208,200.00	Fund Contingent	Not Available	Not Available	Fund	Fund
040623	Devens	PWSRCAC-EVOS Long Term Program	\$141,700.00	\$0.00	\$0.00	Do Not Fund	Not Available	Not Available	Defer	Do Not Fund
040702	Eckert	Natural Variability in the Nearshore	\$53,800.00	\$36,300.00	\$53,800.00	Fund	Not Available	Fund	Fund	Fund

Project Number	Principal Investigator	Project Title (abbr.)	Total Requested	FY04 Approved	Total Approved	STAC	Science Director	PAC	Executive Director	Trustee Council
040100	EVOS Administration	Public Information and Administration	\$843,300.00	\$863,300.00	\$863,300.00	Not Reviewed	Not Reviewed	Not Reviewed	Fund	Fund
040250	EVOS Administration	Project Management	\$144,800.00	\$144,800.00	\$144,800.00	Not Reviewed	Not Reviewed	Not Reviewed	Fund	Fund
040455	EVOS Administration	Data System	\$156,800.00	\$156,800.00	\$156,800.00	Not Reviewed	Not Reviewed	Not Reviewed	Fund	Fund
040550	EVOS Administration	ARLIS	\$180,900.00	\$160,900.00	\$160,900.00	Not Reviewed	Not Reviewed	Not Reviewed	Fund	Fund
040630	EVOS Administration	Scientific Management under GEM	\$461,600.00	\$461,600.00	\$461,600.00	Not Reviewed	Not Reviewed	Not Reviewed	Fund	Fund
040630-A	EVOS Administration	NOS Grant Funding	\$248,300.00	\$248,300.00	\$248,300.00	Not Reviewed	Not Reviewed	Not Reviewed	Not Reviewed	Fund
040471	Fall	Status of Subsistence Uses	\$324,300.00	\$298,700.00	\$324,300.00	Fund	Not Available	Fund	Fund	Fund
040703	Finney	Marine-Terrestrial Linkages	\$240,468.00	\$79,197.00	\$240,468.00	Fund	Not Available	Not Available	Fund	Fund
040704	Foster	Community Science Dialogues	\$20,800.00	\$0.00	\$0.00	Do Not Fund	Not Available	Not Available	Do Not Fund	Do Not Fund
040126	Fries	Habitat Protection and Acquisition Support	\$22,755.00	\$10,355.00	\$22,755.00	Not Reviewed	Not Reviewed	Not Reviewed	Not Reviewed	Fund
040639	Goldman	Ecosystem Parameters in GOA	\$149,700.00	\$37,600.00	\$149,700.00	Fund Contingent	Not Available	Not Available	Fund	Fund
040705	Guay	Watershed Source of Metals	\$448,300.00	\$0.00	\$0.00	Do Not Fund	Not Available	Not Available	Do Not Fund	Do Not Fund
040706	Heintz	Energy Allocation and Salmon Carcasses	\$104,700.00	\$48,400.00	\$104,700.00	Fund Contingent	Not Available	Not Available	Fund Contingent	Fund
040703-A	Honnold	Marine-derived Nutrients on Sockeye Salmon	\$252,400.00	\$83,200.00	\$252,400.00	Fund	Not Available	Not Available	Fund	Fund
040159	Irons	Marine Bird Abundance Surveys	\$175,518.00	\$175,518.00	\$175,518.00	Fund	Not Available	Fund	Fund	Fund
040708	Irvine	Lingering Oil on Boulder-Armored Beaches	\$88,900.00	\$71,700.00	\$110,754.50	Defer	Not Available	Defer	Defer	Fund
040709	Jack	Sea Otter Abundance	\$347,700.00	\$0.00	\$0.00	Do Not Fund	Not Available	Not Available	Do Not Fund	Do Not Fund
040776	Jacobs	Lingering Oil: 2005 Assessment	\$650,000.00	\$650,000.00	\$650,000.00	Not Available	Not Available	Not Available	Not Available	Fund
040710	Kiefer	Alaskan Groundfish Feeding Ecology	\$80,900.00	\$80,900.00	\$80,900.00	Fund	Not Available	Fund	Fund	Fund
040711	Kline	Exchange between GOA and PWS	\$525,600.00	\$0.00	\$0.00	Do Not Fund	Not Available	Not Available	Defer	Do Not Fund
040666	Konar	Natural Geography in Shore Areas	\$248,729.00	\$248,729.00	\$266,442.00	Fund	Not Available	Fund	Fund	Fund
040713	Kopchak	Resource Mapping	\$65,800.00	\$0.00	\$0.00	Do Not Fund	Not Available	Not Available	Do Not Fund	Do Not Fund

Project Number	Principal Investigator	Project Title (abbr.)	Total Requested	FY04 Approved	Total Approved	STAC	Science Director	PAC	Executive Director	Trustee Council
040714	Kulkarni	Design for Data Management	\$38,848.00	\$0.00	\$0.00	Do Not Fund	Not Available	Not Available	Do Not Fund	Do Not Fund
040574	Lees	Assessment of Bivalve Recovery	\$36,200.00	\$36,200.00	\$36,200.00	Fund	Not Available	Not Available	Fund	Fund
040715	Lilly	Fate and Transport Modeling	\$89,000.00	\$0.00	\$0.00	Do Not Fund	Not Available	Not Available	Do Not Fund	Do Not Fund
040716	Macklin	NGOA Metadatabase	\$100,600.00	\$100,600.00	\$100,600.00	Fund Contingent	Not Available	Fund Contingent	Fund	Fund
040649	Mann	Reconstructing Sockeye Populations	\$135,400.00	\$45,000.00	\$135,400.00	Do Not Fund	Not Available	Fund	Defer	Fund
040012	Matkin	Killer Whales in PWS/Kenai Fjords	\$19,502.00	\$19,502.00	\$19,502.00	Do Not Fund	Not Available	Do Not Fund	Defer	Fund
040684	Mazumder	Marine-Derived Nutrients	\$513,226.60	\$0.00	\$0.00	Fund Reduced	Not Available	Not Available	Defer	Do Not Fund
040717-1	McNutt	GEM Infrastructure	\$244,819.00	\$0.00	\$0.00	Fund Contingent	Not Available	Fund Contingent	Fund	Do Not Fund
040718	Meritt	GEM Watershed Synthesis	\$97,842.00	\$0.00	\$0.00	Do Not Fund	Not Available	Not Available	Defer	Do Not Fund
040290	Nelson	Hydrocarbon Database	\$66,600.00	\$22,200.00	\$66,600.00	Fund	Not Available	Fund	Fund Contingent	Fund
040614	Okkonen	Monitoring Program in the NE Pacific Ocean	\$89,110.00	\$27,289.00	\$89,110.00	Fund	Not Available	Fund	Fund	Fund
040556	Pegau	High Resolution Mapping	\$15,000.00	\$15,000.00	\$15,000.00	Fund	Not Available	Not Available	Fund	Fund
040719	Pegau	Studying the ACC	\$227,800.00	\$0.00	\$0.00	Do Not Fund	Not Available	Not Available	Do Not Fund	Do Not Fund
040720	Renner	Kittlitz's Murrelet Population Modeling	\$99,548.00	\$0.00	\$0.00	Do Not Fund	Not Available	Not Available	Do Not Fund	Do Not Fund
040620-1	Rice	Lingering Oil: Population Status	\$150,100.00	\$60,000.00	\$150,100.00	Defer	Not Available	Defer	Defer	Fund
040740	Rice	Lingering Oil: Contaminant Inputs	\$307,400.00	\$177,300.00	\$307,400.00	Fund	Not Available	Not Available	Fund	Fund
040407	Rosenberg	Harlequin Duck Population Dynamics	\$37,100.00	\$37,100.00	\$37,100.00	Fund Contingent	Not Available	Fund Contingent	Fund Contingent	Fund
040647	Ruesink	Altering the Community Structure	\$81,600.00	\$81,600.00	\$81,600.00	Fund	Not Available	Fund	Fund	Fund
040721	Saupe	Habitat Web Site	\$21,100.00	\$21,100.00	\$21,100.00	Fund	Not Available	Fund	Fund	Fund
040610	Schneider	Kodiak Archipelago Youth Area Watch	\$189,000.00	\$63,000.00	\$189,000.00	Fund	Not Available	Fund	Fund	Fund
040722	Schoch	Oceanographic & Ecological Processes	\$311,300.00	\$0.00	\$0.00	Do Not Fund	Not Available	Not Available	Do Not Fund	Do Not Fund
040717-2	Schumacher	GEM Infrastructure	\$67,779.00	\$0.00	\$0.00	Fund Contingent	Not Available	Fund Contingent	Fund Contingent	Do Not Fund

Project Number	Principal Investigator	Project Title (abbr.)	Total Requested	FY04 Approved	Total Approved	STAC	Science Director	PAC	Executive Director	Trustee Council
040724	Short	Monitoring Exxon Valdez Oil & PWS	\$45,900.00	\$45,900.00	\$45,900.00	Fund Contingent	Not Available	Fund Contingent	Fund Contingent	Fund
040600	Spies	EVOS Damage Assessment & Restoration	\$201,700.00	\$201,700.00	\$201,700.00	Fund Contingent	Not Available	Fund Contingent	Fund Contingent	Fund
040654	Stabeno	Surface Nutrients Over the Shelf	\$49,500.00	\$49,500.00	\$49,500.00	Fund	Not Available	Not Available	Fund	Fund
040725	Thorne	Seafood Waste Discharge	\$293,315.00	\$72,680.00	\$293,315.00	Fund	Not Available	Fund	Fund	Fund
040552	Vaughan	Hinchinbrook Entrance	\$81,799.00	\$0.00	\$0.00	Do Not Fund	Not Available	Not Available	Defer	Do Not Fund
040726	Walker	Marine Derived Nutrients	\$472,100.00	\$169,000.00	\$472,100.00	Fund Contingent	Not Available	Not Available	Fund	Fund
040727	Wang	GEM Infrastructure	\$308,586.00	\$0.00	\$0.00	Do Not Fund	Not Available	Not Available	Do Not Fund	Do Not Fund
040340	Weingartner	Alaska Coastal Current	\$227,100.00	\$80,387.00	\$227,085.00	Fund	Not Available	Fund	Fund	Fund
040670	Willette	Dynamics of the Alaska Coastal Current	\$185,700.00	\$89,800.00	\$185,700.00	Fund Contingent	Not Available	Not Available	Fund	Fund
040712	Woody	Nutrient-Based Resource Management	\$502,850.00	\$173,216.00	\$502,850.00	Fund Contingent	Not Available	Not Available	Fund	Fund
Total Funds Requested and Approved			\$15,722,990.60	\$6,562,262.00	\$10,601,083.50					

Total Number of Proposals Received in FY04: 75

Total Number of New Projects Funded in FY04: 49

Descriptions of New and Continuing Projects in FY04

Project Number: 040636
Project Title: Fisheries Management Applications
Principal Investigator: Kenneth Adams
Affiliation: Private Enterprise
Disbursing Agency: NOAA
Project Location: Prince William Sound
Project Type: New

Funding Approved by Fiscal Year:

FY04: \$46,760.00	FY05: \$0.00	FY06: \$0.00
FY07: \$0.00	FY08: \$0.00	FY09: \$0.00

Total Funding Approved: \$46,760.00

Abstract:

The proposal is submitted under the category of Community Involvement. The project, begun in March of FY02, will continue to build bridges between the scientific community and resource managers, enhancement programs, subsistence, and other stakeholder user groups. The scientific community is describing and attempting to predict variation in biological production, whereas the commercial fishing community desires application for this new information. We will develop a mini-symposium of the annual GEM workshop for presentation in small communities. We will also continue the successful series of workshops created in Cordova for identification of PWS fishery community issues and needs and will seek resolution of the identified issues and needs by application of EVOSTC supported research. The results contained in the Sound Ecosystem Assessment (SEA) program are especially valuable to this process. This project provides clear and positive opportunities for the resource dependent community to become involved in GEM and can also help identify how products of GEM can be made meaningful to the community.

Scientific and Technical Advisory Committee Comments:

This proposal is for three additional years of funding for Prince William Sound Fisheries Research Applications and Planning (PWSFRAP). This was originally funded as a pilot project for 1.5 years. It has been highly successful in that the proposers have used this venue to inform and involve the Cordova community in issues of fisheries, especially those that were examined as part of SEA research. The PIs have been extremely involved in GEM; Adams has attended all the public components of the GEM process and has relayed the knowledge to an interested Cordova community. These PIs made a presentation to the GEM PAC in Cordova in June. Their project was very well received by the PAC. The proposal is well written and includes lots of objectives to get scientific information to the public and to get information back from them. Unfortunately, the proposal is rather weak on the methods of how these objectives will be accomplished. This proposal specifically fulfills the invitation in that it proposes to conduct "mini-symposia" that are synopses of the annual EVOS meetings. It is disconcerting that the proposal does not give any details about how the mini-symposia are expected to be done. Past community workshops have been highly successful and these should be continued. Objective to bring symposium events to villages is important, but it is not clear that current technology is adequate. The budget is well above the \$10-20K limit suggested in the invitation. The STAC recommends the proposal be revised to provide some specific methods for extending the successful workshop approach employed in Cordova to other communities in the spill area for an amount not to exceed \$20K. Fund reduced for one year, amount contingent upon receipt of revised proposal.

Scientific and Technical Advisory Committee Recommendation: Fund Contingent

Science Director Comments:

Not Available

Science Director Recommendation: Not Available

Public Advisory Committee Comments:

Not Available

Public Advisory Committee Recommendation: Not Available

Executive Director Comments:

The project has proven effective in working with the fishing community in Cordova to identify projects for GEM that are important to the long-term economic development of Prince William Sound. It has also been effective in communicating the potential benefits of the GEM program to the Cordova fishing community. The revised proposal identifies how the project is expected to continue its excellent record of success in building community involvement by extending its work to other communities in the spill region.

Executive Director Recommendation: Fund

Trustee Council Comments:

Approved at November 10, 2003 TC meeting.

Trustee Council Decision: Fund

Project Number: 040774
Project Title: Oil Exposure Biomarkers and Population Trends of PWS Marine Vertebrates
Principal Investigator: Brenda Ballachey
Affiliation: DOI
Disbursing Agency: USGS
Project Location: Prince William Sound
Project Type: New

Funding Approved by Fiscal Year:

FY04: \$178,000.00	FY05: \$150,500.00	FY06: \$0.00
FY07: \$0.00	FY08: \$0.00	FY09: \$0.00

Total Funding Approved: \$328,500.00

Abstract:

Some of the strongest evidence of continuing effects of lingering oil from the Exxon Valdez oil spill comes from long term monitoring of vertebrate populations and their exposure to hydrocarbons. Population recovery of sea otters remained incomplete as of 2002, and individual sea otters continue to exhibit elevated levels of the Cytochrome P450 1A biomarker in areas where lingering oil deposits are most prominent. Surveys of population size and individual P450 measures of sea otters and marine birds will provide continuing information on population trend and individual exposure to lingering oil.

Scientific and Technical Advisory Committee Comments:

I support funding for this project and view it as an important part of fulfilling the Trustees' obligation to the public to monitor recovery of still injured species.

Scientific and Technical Advisory Committee Recommendation: Fund

Science Director Comments:

Not Available

Science Director Recommendation: Not Available

Public Advisory Committee Comments:

Not Available

Public Advisory Committee Recommendation: Not Available

Executive Director Comments:

I find this project to be an excellent project. Please consider this my recommendation for funding.

Executive Director Recommendation: Fund

Trustee Council Comments:

Fund (DOL grant).

Trustee Council Decision: Fund

Project Number: 040775
Project Title: Lingering Oil and Sea Otters: Pathways of Exposure and Recovery Status
Principal Investigator: Brenda Ballachey
Affiliation: DOI
Disbursing Agency: USGS
Project Location: Prince William Sound
Project Type: New

Funding Approved by Fiscal Year:

FY04: \$20,500.00	FY05: \$206,700.00	FY06: \$34,900.00
FY07: \$0.00	FY08: \$0.00	FY09: \$0.00

Total Funding Approved: \$262,100.00

Abstract:

Some of the strongest evidence of continuing effects of lingering oil from the Exxon Valdez spill comes from long term monitoring of sea otter populations and their exposure to hydrocarbons. Sea otters in heavily oiled areas of western PWS had not recovered as of 2003. Through 2002, sea otters continued to exhibit elevated levels of the cytochrome P4501A biomarker in areas where lingering oil deposits are most prominent. In 2002/03, sea otters at northern Knight Island were instrumented with radiotransmitters and time-depth recorders. Ongoing monitoring of these individuals is quantifying home ranges relative to known intertidal lingering oil deposits, and when the dive data are retrieved and analyzed we will link foraging behaviors of individual sea otters to oiled shorelines and relate patterns of habitat use to individual variation in cytochrome levels. For FY2005, we propose to conduct surveys of population size and distribution, continue to monitor instrumented sea otters to obtain habitat use and survival information, and obtain an additional sample of cytochrome P4501A. This will allow evaluation of continuing exposure to residual oil, population trends, and the status of recovery of sea otters in western PWS.

Scientific and Technical Advisory Committee Comments:

This is a spectacular project; well conceived and well justified by important questions and concerns over the causes of ongoing exposures of sea otters and continuing failures to recover. The information will be of great interest to the public and the PIs present their results in a form that is nicely prepared and readily interpreted. I see this project as the most important of all the studies of continuing injury supported by the Trustee Council.

Scientific and Technical Advisory Committee Recommendation: Fund

Science Director Comments:

Not Available

Science Director Recommendation: Not Available

Public Advisory Committee Comments:

Not Available

Public Advisory Committee Recommendation: Not Available

Executive Director Comments:

I find this project to be an excellent project. Please consider this my recommendation for funding.

Executive Director Recommendation: Fund

Trustee Council Comments:

Fund (DOL grant).

Trustee Council Decision: Fund

Project Number: 040624
Project Title: Acquisition and Application of CPR data in the GOA
Principal Investigator: Sonia Batten
Affiliation: Private Enterprise
Disbursing Agency: NOAA
Project Location: Alaskan Shelf and Gulf of Alaska
Project Type: New

Funding Approved by Fiscal Year:

FY04: \$135,200.00	FY05: \$135,200.00	FY06: \$135,200.00
FY07: \$0.00	FY08: \$0.00	FY09: \$0.00

Total Funding Approved: \$405,600.00

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 GoA are strongly influenced by changes in ocean climate. Recent CPR data have shown significant changes occurring in all plankton communities in the GoA, associated with the recent climate shift. We will continue the acquisition of CPR data in the Gulf of Alaska on the current transect that crosses the ACC and add an additional transect in FY05 that will sample the ACC further 'downstream' and provide baseline, seasonal plankton data for the lower Cook Inlet and its transition to the Gulf of Alaska. We also propose analysis of data already collected to investigate the links between plankton and juvenile salmon migrations, and the larval distribution of commercially important decapods sampled by the CPR.

Scientific and Technical Advisory Committee Comments:

Batten and Welch, using resources of the Sir Alister Hardy Foundation for Ocean Science (SAHFOS), GEM and NPRB, have been conducting continuous plankton recorder (CPR) studies in the Gulf of Alaska since 1998. Those were initially exploratory, but have been run consistently in a time-series monitoring mode since March 2000. Roughly monthly transects are run through the spring each year from Hinchinbrook Entrance to Long Beach by CPRs towed by oil tankers. In addition, a transect has been run several times in recent years from Vancouver, B. C. to Yokohama. Among other things, the results show (1) the north-south seasonality gradient of the large, particle grazing copepods of the GOA (earlier south, later north), (2) evidence of transport into oceanic waters of coastal zooplankton by recurring (or persistent) eddies along the BC coast, and (3) clear evidence correlating with more coast-bound studies of faunal changes occurring at the apparent pelagic regime shift at the end of the 1990's. Three strong publications have resulted from the work so far, covering those results, and Dr. Batten also has been active in studies and publications on the statistical validity of CPR work generally. Community involvement includes the volunteer observing ship activity itself, and preparation and loading of CPRs by community college personnel in Valdez. The proposal emphasizes the value of zooplankton time series for early identification of regime shifts and other responses of the pelagic ecosystem to climate change. Present funds available to GEM do not justify committing to the expanded transects in FY 05 and 06 in light of need to establish other vessels of opportunity programs. Fund project as written for FY 04 through FY 06 at funding level of FY 04.

Scientific and Technical Advisory Committee Recommendation: Fund

Science Director Comments:

Not Available

Science Director Recommendation: Not Available

Public Advisory Committee Comments:

Not Available

Public Advisory Committee Recommendation: Fund

Executive Director Comments:

Past performance of investigators has been exemplary in all respects, and the project is producing information on long-term changes in conditions that affect production of birds, fish and mammals in the Gulf. Responsiveness of investigators to requests for information and reporting deadlines is very good. Present funds available to GEM do not justify committing to the expanded transects in FY 05 and 06 in light of need to establish other vessels of opportunity programs. Possibility is recognized that changes in vessels may occur, and that some changes in routing may be expected as a result. Project is to be conducted with FY 04 objectives and funding levels from FY 04 through FY 06.

Executive Director Recommendation: Fund

Trustee Council Comments:

Approved at November 10, 2003 TC meeting.

Trustee Council Decision: Fund

Project Number: 040635

Project Title: Trophic Dynamics of Intertidal Soft-Sediment Communities: Interaction between Top-down and Bottom-up Processes (Renewal, Submitted under the BAA)

Principal Investigator: Mary Anne Bishop

Affiliation: Private Enterprise

Disbursing Agency: NOAA

Project Location: Southeast Prince William Sound (Orca Inlet) and the Cooper River Delta

Project Type: New

Funding Approved by Fiscal Year:

FY04: \$149,529.00	FY05: \$164,030.00	FY06: \$151,390.00
FY07: \$0.00	FY08: \$0.00	FY09: \$0.00

Total Funding Approved: \$464,949.00

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 mud/sand flats occurs in the Copper River Delta and southeastern Prince William Sound (Orca Inlet). Here we propose 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 we propose (physical/chemical parameters – phytoplankton/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. At the completion of this project (FY 06), the results of both projects will be synthesized and a subset of key physical/chemical parameters will be identified for long-term monitoring.

Scientific and Technical Advisory Committee Comments:

This proposal takes advantage of the PWSSC location and complementary funding to develop the ‘bottom-up’ sampling program to match a ‘top-down’ project already in place. The proposed sampling is intensive and reasonably extensive in space and time, and it is therefore comparatively expensive. The concept of understanding trophic dynamics from both ends is certainly attractive if, in fact, they meet in the middle. The project will establish a baseline of biodiversity in the habitat. Long-term the project will need to address the sustainability of a monitoring program built around helicopter sampling.

Scientific and Technical Advisory Committee Recommendation: Fund

Science Director Comments:

Not Available

Science Director Recommendation: Not Available

Public Advisory Committee Comments:

Not Available

Public Advisory Committee Recommendation: Fund

Executive Director Comments:

The proposal meets an essential GEM objective by continuing research into understanding how to monitor soft sediment nearshore habitats nearby the oil spill affected areas. It is highly leveraged with outside funding and helps develop a desirable partnership with a regional marine lab, PWSSC.

Executive Director Recommendation: Fund

Trustee Council Comments:

Approved at November 10, 2003 TC meeting.

Trustee Council Decision: Fund

Project Number: 040620-2
Project Title: Lingering Oil and Sea Otters: Pathways of Exposure and Recovery Status
Principal Investigator: James Bodkin
Affiliation: DOI
Disbursing Agency: USGS
Project Location: Prince William Sound
Project Type: New

Funding Approved by Fiscal Year:

FY04: \$134,300.00	FY05: \$26,200.00	FY06: \$99,700.00
FY07: \$0.00	FY08: \$0.00	FY09: \$0.00

Total Funding Approved: \$260,200.00

Abstract:

Some of the strongest evidence of continuing effects of lingering oil from the Exxon Valdez oil spill comes from long term monitoring of sea otter populations and their exposure to hydrocarbons. Population recovery remained incomplete as of 2002, and individual sea otters continue to exhibit elevated levels of the Cytochrome P450 1A biomarker in areas where lingering oil deposits are most prominent. Work in progress is quantifying home ranges of sea otters at northern Knight Island relative to known intertidal lingering oil deposits, but relocation sampling limits our ability to link foraging behaviors to oiled shorelines. To address the question of where individuals are foraging relative to lingering oil requires data on foraging depths. In 2003 USGS will be instrumenting 20 of the radio-instrumented sea otters at Knight Island with time-depth-recorders. These instruments will provide accurate information on the proportion of each individuals foraging that occurs in intertidal habitats, the area where known oil deposits remain, for one full year. Surveys of population size and individual P450 measures will provide continuing information on population trend and individual exposure to lingering oil.

Scientific and Technical Advisory Committee Comments:

This is a well thought out proposal for further work on the sea otters around northern Knight Island, Prince William Sound, which are clearly not recovering to their pre-spill numbers. The research plan maps out a clear strategy that will attempt to link biomarker of contaminant exposure, P4501A, with individual behavior, particularly foraging, in contaminated areas of Northern Knight Island. Of particular interest will be the outcome of attempts to link biomarker response in individual animals to their foraging in patches of contaminated prey. This proposal conforms to the strategy of determining if there is a close link between remaining deposits of oil in PWS and population problems of species in the area. While this is a challenging undertaking the investigators have a proven track record with this sort of approach and have shown that they can take the measurements necessary to test the hypotheses. The results are to be prepared for publication in a peer reviewed journal before attendance at the meeting in FY 06. 1. The proposed work is highly relevant to further work on species not recovered from the spill. Therefore, it is responsive to the invitation for FY 04. 2. Technical merit: high. 3. Relevance to management and community involvement is moderate. 4. Qualifications and past performance are both excellent. 5. Defer pending outcome of November workshop.

Scientific and Technical Advisory Committee Recommendation: Defer

Science Director Comments:

Not Available

Science Director Recommendation: Not Available

Public Advisory Committee Comments:

Not Available

Public Advisory Committee Recommendation: Defer

Executive Director Comments:

The specific requirements for further work on lingering oil need to be further developed during a workshop to be conducted in November 2003. As identified by the STAC, it is important for the preliminary results of the FY 2003 field season to be considered by legal counsel, EVOS staff, advising scientists and the Trustee Council before decisions on funding are made. The exchange between legal, policy and science people will be reported to the Trustee Council before making decisions on what to do in the summer of 2004, which is the last full field season of data that could be fully analyzed before deciding the path to the re-opener. Defer funding decisions pending the outcome of the November workshop.

Executive Director Recommendation: Defer

Trustee Council Comments:

Fund contingent on submittal of overdue report 030585/ Lingering Oil: Bioavailability and Effects to Prey and Predators. Approved at the November 10, 2003 TC meeting. Reports turned in; contingency removed.

Trustee Council Decision: Fund

Project Number: 040687
Project Title: Monitoring in the Nearshore: A Process for Making Reasoned Decisions
Principal Investigator: James Bodkin
Affiliation: DOI
Disbursing Agency: USGS
Project Location: No field work. Study areas in the Gulf of Alaska.
Project Type: New

Funding Approved by Fiscal Year:

FY04: \$10,000.00	FY05: \$0.00	FY06: \$0.00
FY07: \$0.00	FY08: \$0.00	FY09: \$0.00

Total Funding Approved: \$10,000.00

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. In FY 03 we were funded under Project 03687 to outline a process whereby specific alternatives to monitoring are developed and presented to the EVOS Trustee Council for consideration. As part of this process, two key elements are required before reasoned decisions can be made. These are: 1) a comprehensive historical perspective of locations and types of past studies conducted in the nearshore marine communities within Gulf of Alaska, and 2) estimates of costs for each element of a proposed monitoring program. We have developed 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. We also provide cost estimates for specific monitoring plan alternatives and outline several alternative plans that can be accomplished within reasonable budgetary constraints. The products that we will provide are: 1) A GIS database and maps showing the location and types of information available from the nearshore in the Gulf of Alaska; 2) A list of several specific monitoring alternatives that can be conducted within reasonable budgetary constraints; and 3) Cost estimates for proposed tasks to be conducted as part of the nearshore program. Because data compilation and management will not be completed until late in FY03 we are requesting support for close-out of this project in FY 04.

Scientific and Technical Advisory Committee Comments:

The proposal completes the process of understanding the data available to guide planning for nearshore monitoring under GEM by providing a report on the activities concluded in FY 03.

Scientific and Technical Advisory Committee Recommendation: Fund

Science Director Comments:

Not Available

Science Director Recommendation: Not Available

Public Advisory Committee Comments:

Not Available

Public Advisory Committee Recommendation: Fund

Executive Director Comments:

The proposal provides funding for close-out and reporting of project begun in FY 03.

Executive Director Recommendation: Fund

Trustee Council Comments:

Fund contingent on submittal of overdue report 030585/ Lingering Oil: Bioavailability and Effects to Prey and Predators. Approved at the November 10, 2003 TC meeting. Reports turned in, contingency removed.

Trustee Council Decision: Fund

Project Number: 040699
Project Title: Biophysical Observation Aboard Alaska Marine Highway Systems Ferries
Principal Investigator: Edward Cokelet
Affiliation: NOAA
Disbursing Agency: NOAA
Project Location: Alaska Coastal Current, Prince William Sound
Project Type: New

Funding Approved by Fiscal Year:

FY04: \$171,500.00	FY05: \$185,900.00	FY06: \$145,900.00
FY07: \$36,475.00	FY08: \$0.00	FY09: \$0.00

Total Funding Approved: \$539,775.00

Abstract:

The Alaska Coastal Current flows counterclockwise along the edge of the Gulf of Alaska carrying the river runoff, nutrients and plankton that fuel the productive coastal-marine ecosystem. As seen in satellite images, a strong "chlorophyll front" develops in summer between the nutrient-poor region to seaward and a productive region around Kodiak Island that extends northward to the Kenai Peninsula. Conventional wisdom predicts that the Gulf ecosystem should not be productive because the average wind pattern favors downwelling oceanic conditions that fail to restore nutrients to the sunlit upper layers. The chlorophyll front presents a natural study area over which low and high productivity regions lie in close proximity. The Alaska Marine Highway System ferry M/V Tustumena crosses this front over 280 times each year. We propose to instrument the Tustumena to measure physical and biological oceanographic parameters across the Alaska Coastal Current and in Prince William Sound. This will begin a GEM oceanographic monitoring program in the Gulf that will lead to understanding nutrient replenishment and document ecosystem trends for years to come.

Scientific and Technical Advisory Committee Comments:

This is an excellent response to the GEM request for proposals to use State of Alaska ferries as platforms for collecting environmental observations. It requests a major commitment of funds; however the returns are commensurate with the costs. It should generate a working, robust system and a suite of data from tracks of maximum interest in the GEM target region, the oil spill trajectory. The M/V Tustamena is selected because it makes the maximum number of crossings each year of the ACC. The routes (mostly Kodiak-Homer and Kodiak-Seward) will cross the coastal to oceanic chlorophyll front and salinity gradient. It is proposed to follow, by and large, the recommendations of the PICES 2002 report on engine room instrumentation for VOS. A rather full installation is proposed for the ship's April yard period in 2004. A thermosalinograph to sample at the ship's sea chest is to be purchased and installed and backed up by hull conductance thermometry. Cokelet et al. propose to loan the project fluorometry, transmissometry, colored dissolved matter spectrometry (CDOM) and automated nitrate analysis facilities in the first year, replacing them with project-purchased sensors in later years. Cokelet et al. give evidence of experience dealing with ship operators concerning such installations, a key aspect of such projects worldwide. The STAC recommends that the investigators must accommodate the needs of the AMHS regarding in-ship communication. The proposers need to investigate the status of the meteorologic observations collected by the vessel. A wireless remote system is needed to collect these data. Two revisions are required; the real-time communication and costs should be eliminated from the proposal. The ADCP should be eliminated from this proposal because the information received is not proportional to the cost required. Fund contingent upon revised proposal with reduced instrumentation described above.

Scientific and Technical Advisory Committee Recommendation: Fund Contingent

Science Director Comments:

Not Available

Science Director Recommendation: Not Available

Public Advisory Committee Comments:

Not Available

Public Advisory Committee Recommendation: Fund Contingent

Executive Director Comments:

Agreement in principle has been reached with the AMHS engineering and operations staff concerned and a memorandum of agreement on the specifics of the project is in process. This agreement and project are historic milestones that provide for highly cost effective monitoring of the coastal environment of Alaska. Revised proposal addressed STAC recommendations.

Executive Director Recommendation: Fund

Trustee Council Comments:

Approved at November 10, 2003 TC meeting.

Trustee Council Decision: Fund

Project Number: 040210
Project Title: Youth Area Watch
Principal Investigator: Bob Crumley
Affiliation: Local Government
Disbursing Agency: ADFG
Project Location: PWS, Kenai Peninsula
Project Type: New

Funding Approved by Fiscal Year:

FY04: \$121,100.00	FY05: \$126,400.00	FY06: \$133,200.00
FY07: \$0.00	FY08: \$0.00	FY09: \$0.00

Total Funding Approved: \$380,700.00

Abstract:

This project links students in the oil spill impacted area with research and monitoring projects funded by the Trustee Council and outside agencies. Youth conduct research identified and delegated by principal investigators who have indicated interest in working with students. The project involves students in the acquisition and monitoring of oceanographic and meteorological data over time. Students also develop a local restoration project, which provides them the skills to participate in community-based science. 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 04-06 will be Chenega Bay, Cordova, Seward, Tatitlek, Valdez, and Whittier.

Scientific and Technical Advisory Committee Comments:

The proposal is not responsive to the invitation even though it does seek community involvement. The proposal is weak in providing any linkages to GEM long term monitoring program. The past restoration projects may or may not be appropriate for GEM monitoring. The proposal seems to contain a large amount of text from the previous restoration-oriented youth area watch proposals with occasional insertions of "GEM." In part, the program is dependent on principal investigators who are interested in working with students rather than focused on GEM goals. Furthermore, there is no indication of whether the student developed projects will relate to GEM. In fact, the proposal states that "students also develop a local restoration project..." It may be time to rework this Youth Area Watch project to make it more responsive to GEM goals and objectives.

Scientific and Technical Advisory Committee Recommendation: Do Not Fund

Science Director Comments:

Not Available

Science Director Recommendation: Not Available

Public Advisory Committee Comments:

Not Available

Public Advisory Committee Recommendation: Do Not Fund

Executive Director Comments:

The report on approaches to community involvement commissioned by the Trustee Council in FY 2003 will not be available until the end of September 2003. The report is expected to provide the basis for a thorough examination of the role of community involvement in the GEM program to be conducted by the Executive Director during FY 2004. Until that examination is complete funding of community involvement projects will be based on responsiveness to the criteria in the FY 04 Invitation and past and future utility for implementing the GEM program. Unlike the Kodiak Youth Area Watch proposal, the PWS YAW proposal is not well grounded in the principles of the GEM program and shows a lack of understanding of the concepts of the need for community involvement in long-term monitoring programs. Based on the lack of connection to the GEM Science Plan, and the recommendations of the STAC, I cannot support this project. Following a recommendation of the PAC, the PI is invited to join the Executive Director during FY 2004 in exploring ways to re-constitute the PWS YAW program to be responsive to the GEM program, consistent with emerging community involvement guidelines.

Executive Director Recommendation: Defer

Trustee Council Comments:

Approved at the November 10, 2003 TC meeting.

Trustee Council Decision: Fund

Project Number: 040772
Project Title: Sediment Quality Survey of Heavily-Oiled Beaches in PWS
Principal Investigator: Betsy Day
Affiliation: Private Enterprise
Disbursing Agency: ADOL
Project Location: Prince William Sound
Project Type: New

Funding Approved by Fiscal Year:

FY04: \$151,000.00	FY05: \$57,200.00	FY06: \$0.00
FY07: \$0.00	FY08: \$0.00	FY09: \$0.00

Total Funding Approved: \$208,200.00

Abstract:

Recent work by Short et al. (2004) demonstrated that lingering oil is found in subsurface intertidal sediments in 43 of the 91 beaches sampled during the summer of 2001. This proposed research project is directed at understanding potential ecological effects to invertebrate populations resulting from lingering oil in subsurface intertidal sediments. Sediments from five locations containing heavily-oiled subsurface sediments and five nearby reference areas will be collected concurrently with the NMFS continuing lingering oil studies and evaluated for PAHs, sediment toxicity using the mussel larvae bioassay, and benthic community structure. The results will provide information on the potential ecological impacts from lingering subsurface oil and will be evaluated using a weight-of-evidence approach. If this project shows that the heavily-oiled sediments are not causing impacts to benthic invertebrates then it can be assumed that benthic invertebrate populations in moderately or lightly-oiled sediments would not be affected by the lingering oil.

Scientific and Technical Advisory Committee Comments:

I see several weaknesses with this proposal, some serious.

(1) First, the benthic community analysis portion of the study is compromised by low sample replication and a design that does not adequately pair invertebrate samples with associated chemical-sediment samples. Only 5 faunal samples will be analyzed for each oiled and 5 for each control site. This replication is defended by reference to Ferraro et al. (1994), who claim that 4 replicates of such benthic samples are sufficient to achieve adequate power. This reference is applied uncritically and incorrectly here because several factors will vary from sample to sample, most significantly elevation level on the beach; there will be high uncontrolled error variance among the 5 "replicate" samples. Furthermore, because the sampling for PAH concentration and organic content and grain size will only be done from a composite sample from each site, there is no possible way to use those variables as covariates to remove the uncontrolled error variance.

(2) Second, the benthic community analysis portion of the study uses inadequate analytic methodology. The most powerful method of distinguishing patterns in community composition is achieved by Bob Clarke's nonmetric MDS (multi-dimensional scaling), an ordination procedure. The methods and software have been well developed by IMER in Plymouth and are available as a commercial package. This technique is now universally adopted and accepted as the best tool for achieving powerful discrimination in community ecology. This replaces the old-fashioned t-test contrasts of species numbers, information theoretic index values, and evenness. The PRIMER software package even includes programs that quantify the degree to which various taxa contribute to differences in community composition and programs that allow correlation between independent chemical-physical variables and the biological patterns. This analysis should be part of any community contrast and should even be the centerpiece.

(3) Third, the amphipod sediment bioassay really is an important component of such a study. It provides an endpoint that is growth as well as one that is mortality. Such sublethal impacts have potential to translate into population effects and are important to include. Furthermore, this test involves sediment directly, extends over a longer time frame so approaches chronic exposures, and includes another sensitive phylum, a crustacean. Absent this test, the study is

incomplete and its justification rings hollow.

(4) Fourth, the PIs do not really have much of a publication record in the peer-reviewed literature. I would prefer to see that form of vetting and dissemination of EVOS study results.

Overall evaluation:

I endorse and strongly urge a project like this one. However, this study design needs improvement to address the concerns that I raise before it is conducted. Note that a proper response to my concerns would necessarily increase the costs.

Scientific and Technical Advisory Committee Recommendation: Fund Contingent

Science Director Comments:

Not Available

Science Director Recommendation: Not Available

Public Advisory Committee Comments:

Not Available

Public Advisory Committee Recommendation: Not Available

Executive Director Comments:

I find this project to be an excellent project. Please consider this my recommendation for funding.

Executive Director Recommendation: Fund

Trustee Council Comments:

Fund (DOL grant).

Trustee Council Decision: Fund

Project Number: 040702
Project Title: A Synthesis of Natural Variability in the Nearshore: Can We Detect Change?
Principal Investigator: Ginny Eckert
Affiliation: Alaskan University
Disbursing Agency: ADFG
Project Location: Alaska (Synthesis)
Project Type: New

Funding Approved by Fiscal Year:

FY04: \$36,300.00	FY05: \$17,500.00	FY06: \$0.00
FY07: \$0.00	FY08: \$0.00	FY09: \$0.00

Total Funding Approved: \$53,800.00

Abstract:

One of the primary goals of the GEM program is to detect anthropogenic changes within the four focal habitats in the Gulf of Alaska; however natural variability in these systems can be so high that it prevents detection of human-induced effects. The goal of this proposal is to synthesize existing data to identify, within the nearshore habitat, environments and species that have less natural variability so that these variables can be included in the GEM monitoring plan. Data will be synthesized from the Gulf of Alaska and across a broad range of geographic areas to identify general characteristics that predict lower levels of natural variability in nearshore marine populations. The principal investigator is well suited to conduct this analysis because she was a coauthor of the current GEM nearshore monitoring plan, and she has conducted extensive analyses of natural population variability in nearshore organisms.

Scientific and Technical Advisory Committee Comments:

This proposal provides a badly needed integrative service. The right person doing the right thing.

Scientific and Technical Advisory Committee Recommendation: Fund

Science Director Comments:

Not Available

Science Director Recommendation: Not Available

Public Advisory Committee Comments:

Not Available

Public Advisory Committee Recommendation: Fund

Executive Director Comments:

The project provides synthesis in an important habitat type, the nearshore, at a critical time. The nearshore is closer to establishing a comprehensive monitoring program than other habitat types, so synthesis is particularly important in the nearshore habitat type.

Executive Director Recommendation: Fund

Trustee Council Comments:

Approved at the November 10, 2003 TC meeting.

Trustee Council Decision: Fund

Project Number: 040100
Project Title: Public Information, Science Management, and Administration
Principal Investigator: EVOS Administration
Affiliation: State Of Alaska
Disbursing Agency: ADFG
Project Location: Trustee Council Office
Project Type: New

Funding Approved by Fiscal Year:

FY04: \$863,300.00	FY05: \$0.00	FY06: \$0.00
FY07: \$0.00	FY08: \$0.00	FY09: \$0.00

Total Funding Approved: \$863,300.00

Abstract:

Project 040100 provides overall support for public and community involvement and administration of the Trustee Council programs through the Trustee Council office. This includes funding support for the staff working at the direction of the Trustee Council through the Executive Director, as well as public involvement efforts including the participation of the 20 member Public Advisory Committee (PAC).

Scientific and Technical Advisory Committee Comments:

Not Applicable

Scientific and Technical Advisory Committee Recommendation: Not Reviewed

Science Director Comments:

Not Applicable

Science Director Recommendation: Not Reviewed

Public Advisory Committee Comments:

Not Applicable

Public Advisory Committee Recommendation: Not Reviewed

Executive Director Comments:

Not Available

Executive Director Recommendation: Fund

Trustee Council Comments:

Not Available

Trustee Council Decision: Fund

Project Number: 040250
Project Title: EVOS TC Project Management
Principal Investigator: EVOS Administration
Affiliation: State Of Alaska
Disbursing Agency: ADFG
Project Location: Trustee Council Office
Project Type: New

Funding Approved by Fiscal Year:

FY04: \$144,800.00	FY05: \$0.00	FY06: \$0.00
FY07: \$0.00	FY08: \$0.00	FY09: \$0.00

Total Funding Approved: \$144,800.00

Abstract:

Project management supports those Trustee agencies that administer and/or implement EVOS projects on behalf of the Trustee Council. Tasks performed by project managers include coordinating activities between principal investigators and the Trustee Council Office, reviewing project expenditure activity, assisting in the development of project proposals, and tracking project reports. This is a close out for this project as program management needs will be met from other sources in FY 2005.

Scientific and Technical Advisory Committee Comments:

Not Applicable

Scientific and Technical Advisory Committee Recommendation: Not Reviewed

Science Director Comments:

Not Applicable

Science Director Recommendation: Not Reviewed

Public Advisory Committee Comments:

Not Applicable

Public Advisory Committee Recommendation: Not Reviewed

Executive Director Comments:

Not Available

Executive Director Recommendation: Fund

Trustee Council Comments:

Not Available

Trustee Council Decision: Fund

Project Number: 040455
Project Title: Gulf Ecosystem Monitoring and Research Program Data System
Principal Investigator: EVOS Administration
Affiliation: State Of Alaska
Disbursing Agency: ADFG
Project Location: Trustee Council Office
Project Type: New

Funding Approved by Fiscal Year:

FY04: \$156,800.00	FY05: \$0.00	FY06: \$0.00
FY07: \$0.00	FY08: \$0.00	FY09: \$0.00

Total Funding Approved: \$156,800.00

Abstract:

This project will provide continuing funding for ongoing development of the data management and information transfer system for the Gulf of Alaska Ecosystem Monitoring and Research (GEM) program. GEM is designed to monitor the ecosystems of the northern Gulf of Alaska and adjacent coastal regions for a very long time period (more than 100 years). 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:

Not Applicable

Scientific and Technical Advisory Committee Recommendation: Not Reviewed

Science Director Comments:

Not Applicable

Science Director Recommendation: Not Reviewed

Public Advisory Committee Comments:

Not Applicable

Public Advisory Committee Recommendation: Not Reviewed

Executive Director Comments:

Not Available

Executive Director Recommendation: Fund

Trustee Council Comments:

Not Available

Trustee Council Decision: Fund

Project Number: 040550
Project Title: Alaska Resources Library and Information Services (ARLIS)
Principal Investigator: EVOS Administration
Affiliation: State Of Alaska
Disbursing Agency: ADFG
Project Location: ARLIS
Project Type: New

Funding Approved by Fiscal Year:

FY04: \$160,900.00	FY05: \$0.00	FY06: \$0.00
FY07: \$0.00	FY08: \$0.00	FY09: \$0.00

Total Funding Approved: \$160,900.00

Abstract:

Project 040550 represents the Trustee Council's contribution to Alaska Resources Library and Information Services (ARLIS). ARLIS serves as the central access point for information generated through the Trustee Council restoration process and the GEM program. In addition, ARLIS is the public repository for reports and other materials generated from and related to the cleanup, damage assessment, and restoration efforts following the Exxon Valdez oil spill (EVOS). ARLIS supports the research efforts and information needs of the Trustee Council Office, principal investigators, natural resources professionals, and the general public. The Council has contributed budgetary support for ARLIS since the library was established in 1997. ARLIS is providing services that were previously provided through the Oil Spill Public Information Center (OSPIC). With the exception of Fiscal Year 1994, this activity has historically been funded under the Public Information, Science Management and Administration Budget (Project /100). Funding as a separate project began in Fiscal Year 2001, as Project 01550.

Scientific and Technical Advisory Committee Comments:

Not Applicable

Scientific and Technical Advisory Committee Recommendation: Not Reviewed

Science Director Comments:

Not Applicable

Science Director Recommendation: Not Reviewed

Public Advisory Committee Comments:

Not Applicable

Public Advisory Committee Recommendation: Not Reviewed

Executive Director Comments:

Not Available

Executive Director Recommendation: Fund

Trustee Council Comments:

Not Available

Trustee Council Decision: Fund

Project Number: 040630
Project Title: Scientific Management under GEM (GEM Book)
Principal Investigator: EVOS Administration
Affiliation: State Of Alaska
Disbursing Agency: ADFG
Project Location: Trustee Council Office
Project Type: New

Funding Approved by Fiscal Year:

FY04: \$461,600.00	FY05: \$0.00	FY06: \$0.00
FY07: \$0.00	FY08: \$0.00	FY09: \$0.00

Total Funding Approved: \$461,600.00

Abstract:

This project will provide scientific oversight of the Gulf of Alaska Ecosystem Monitoring and Research (GEM) program and of lingering effects of oil on injured resources. Implementation will be based on the GEM Program Document (GPD), which describes how a network of monitoring and supporting activities will be implemented over a five-year period that started in FY 03 using synthesis, research, and modeling, and how the results will be captured and communicated through data management and information transfer. In FY 04, the project will support the Scientific and Technical Advisory Committee (STAC), three GEM subcommittees (habitat, data management and lingering oil), and four workshops for developing GEM and other aspects of the scientific review process; provide peer review recommendations and scientific support for the existing Work Plan, Annual Reports, and Final Reports; develop the FY05 Invitation to Submit Proposals; continue developing a "State of the Gulf Report"; and provide regional input to a status report on North Pacific resources now being developed by PICES.

Scientific and Technical Advisory Committee Comments:

Not Applicable

Scientific and Technical Advisory Committee Recommendation: Not Reviewed

Science Director Comments:

Not Applicable

Science Director Recommendation: Not Reviewed

Public Advisory Committee Comments:

Not Applicable

Public Advisory Committee Recommendation: Not Reviewed

Executive Director Comments:

Not Available

Executive Director Recommendation: Fund

Trustee Council Comments:

An additional \$70,000 was approved for Modeling efforts at the Feb 9, 2004 TC meeting.

Trustee Council Decision: Fund

Project Number: 040630-A
Project Title: NOS Grant Funding
Principal Investigator: EVOS Administration
Affiliation: State Of Alaska
Disbursing Agency: ADFG
Project Location: Trustee Council Office
Project Type: New

Funding Approved by Fiscal Year:

FY04: \$248,300.00	FY05: \$0.00	FY06: \$0.00
FY07: \$0.00	FY08: \$0.00	FY09: \$0.00

Total Funding Approved: \$248,300.00

Abstract:

See 040630.

Scientific and Technical Advisory Committee Comments:

Not Applicable

Scientific and Technical Advisory Committee Recommendation: Not Reviewed

Science Director Comments:

Not Applicable

Science Director Recommendation: Not Reviewed

Public Advisory Committee Comments:

Not Applicable

Public Advisory Committee Recommendation: Not Reviewed

Executive Director Comments:

Not Applicable

Executive Director Recommendation: Not Reviewed

Trustee Council Comments:

Not Available

Trustee Council Decision: Fund

Project Number: 040471
Project Title: Update of the Status of Subsistence Uses in Exxon Valdez Oil Spill Area Communities
Principal Investigator: James Fall
Affiliation: State Of Alaska
Disbursing Agency: ADFG
Project Location: Prince William Sound, Kodiak, Kenai Peninsula, and Alaska Peninsula
Project Type: New

Funding Approved by Fiscal Year:

FY04: \$298,700.00	FY05: \$25,600.00	FY06: \$0.00
FY07: \$0.00	FY08: \$0.00	FY09: \$0.00

Total Funding Approved: \$324,300.00

Abstract:

The project will provide information for an update of the status of subsistence uses in the Exxon Valdez Oil Spill area. Subsistence uses are a vital natural resource service that was injured by the spill and has not recovered. The project will be a partnership between the Alaska Department of Fish and Game, the Chugach Regional Resources Commission, the Kodiak Area Native Association, and the Bristol Bay Native Association. In early 2004 local research assistants and department researchers will interview face-to-face approximately 760 households in 14 communities about their subsistence activities in 2003. The questionnaire will be similar to that used in previous rounds of interviews. A planning workshop and data review workshop will be held involving study community representatives. A database with study findings and a final report will be produced. Training of local researchers and capacity building are key goals of the project.

Scientific and Technical Advisory Committee Comments:

The last subsistence survey in spill affected communities was 1998. The project proposes to survey 760 HH in 15 communities related to 2003 subsistence activities. The project would be a collaborative effort between ADF&G, Division of Subsistence, CRRC, KANA, BBNA, and the communities. A key project goal is training local researchers in survey administration and data entry and review. The project design, including goals, sampling and survey methods, data analysis and statistical methods, are sound. The proposal incorporates community involvement in most stages of the project (except data analysis). The schedule is reasonable and the qualifications of the ADF&G Division of Subsistence are high. The proposal is responsive to the invitation (community involvement) and specifically responds to invited proposals under Lingering Oil Effects (collect, analyze and report information about current subsistence uses in a subset of oil spill area communities using methodology that is comparable with previous research results). Fall (ADF&G Division of Subsistence) was the PI for most of the previous research. The proposal is consistent with GEM strategies (incorporate community involvement and local knowledge) and goals (detect change, provide information to facilitate understanding of causes of change). The proposed project is part of a long-term monitoring of subsistence activities in the communities affected by the oil spill and includes both restoration and monitoring goals.

Scientific and Technical Advisory Committee Recommendation: Fund

Science Director Comments:

Not Available

Science Director Recommendation: Not Available

Public Advisory Committee Comments:

Not Available

Public Advisory Committee Recommendation: Fund

Executive Director Comments:

In the last survey of subsistence uses in 1998 it was found that this injured service had not recovered to pre-spill levels. A follow-up survey to assess the status of recovery is needed.

Executive Director Recommendation: Fund

Trustee Council Comments:

Approved at the November 10, 2003 TC meeting.

Trustee Council Decision: Fund

Project Number: 040703

Project Title: Marine-Terrestrial Linkages in Northern GOA Watersheds: Towards Monitoring the Effects of Anadromous Marine-Derived Nutrients on Biological Production

Principal Investigator: Bruce Finney

Affiliation: Alaskan University

Disbursing Agency: ADFG

Project Location: Karluk Lake, Spiridon Lake, Kodiak, Alaska

Project Type: New

Funding Approved by Fiscal Year:

FY04: \$79,197.00	FY05: \$80,154.00	FY06: \$81,117.00
FY07: \$0.00	FY08: \$0.00	FY09: \$0.00

Total Funding Approved: \$240,468.00

Abstract:

The proposed project is a comprehensive study examining the role of marine-derived nutrients (MDNs) in the productivity of a sockeye nursery lake ecosystem. The research plan integrates studies of nutrient cycling, primary productivity, zooplankton dynamics, and juvenile sockeye abundance and growth, within a framework of stable isotope natural abundance. The study sites are an ideal pair, very similar in characteristics except for access by spawning salmon (anadromous Karluk Lake and control Spiridon Lake). The project will take advantage of the wealth of previous research including relatively long-term limnological data for both sites. Based on previous work, signals from MDNs are anticipated to be relatively strong, which will help elucidate nutrient pathways. The research design is the first to utilize detailed vertical and temporal sampling of the water column, coupled with measurements of rates of primary productivity, and fully integrated stable isotope analyses, with contemporaneous sampling in a well-matched pair of salmon and control lakes. The overall goal of this project is to provide the framework for designing monitoring projects to detect changes in marine terrestrial linkages in Gulf of Alaska sockeye.

Scientific and Technical Advisory Committee Comments:

This is a proposal to partner with a resource management agency (see Honnold) to understand the influence of marine derived nutrients in a comparison of two watersheds. This proposal covers project design, stable isotope measures and nitrate chemistry, and the partner proposal covers limnology, logistics, and sampling personnel. The proposals together evaluate several indicators of marine linkages across species and two distinct watersheds in close cooperation with a natural resource management agency. The proposal has several unique advantages; 1) a pair of similar lakes with and without apparent marine connections, 2) one lake has very long time series of data on fish abundance and stable isotope levels, 3) both lakes have good baseline data on limnological properties such as nutrients, primary productivity and euphotic volume, and 4) one lake has authoritative peer reviewed publications by one of the PIs that support the basic concepts of the proposal. The proposal would develop a strong partnership between university based researchers and a state agency (ADF&G) that would provide information useful to natural resource managers. State agency has close links to the local community and other government agencies. Prospects are good for learning how to measure and interpret linkages of coastal (oligotrophic) lake systems to the marine environment in the Gulf of Alaska in ways that will have practical applications of very large potential significance.

Scientific and Technical Advisory Committee Recommendation: Fund

Science Director Comments:

Not Available

Science Director Recommendation: Not Available

Public Advisory Committee Comments:

Not Available

Public Advisory Committee Recommendation: Not Available

Executive Director Comments:

Proposal provides an important comparison between salmon and non-salmon bearing lakes in the oil spill affected area that is important to establishing GEM watershed monitoring. PI's submitted an e-mail agreeing to participate in a watershed workshop that will be held at the January 2005 GEM meeting, and to present an up-to-date report on progress and participate in comparison and evaluation of methods.

Executive Director Recommendation: Fund

Trustee Council Comments:

Approved at the November 10, 2003 TC meeting.

Trustee Council Decision: Fund

Project Number: 040126
Project Title: Habitat 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:

FY04: \$10,355.00	FY05: \$12,400.00	FY06: \$0.00
FY07: \$0.00	FY08: \$0.00	FY09: \$0.00

Total Funding Approved: \$22,755.00

Abstract:

Not Available

Scientific and Technical Advisory Committee Comments:

Not Applicable

Scientific and Technical Advisory Committee Recommendation: Not Reviewed

Science Director Comments:

Not Applicable

Science Director Recommendation: Not Reviewed

Public Advisory Committee Comments:

Not Applicable

Public Advisory Committee Recommendation: Not Reviewed

Executive Director Comments:

Not Applicable

Executive Director Recommendation: Not Reviewed

Trustee Council Comments:

Not Available

Trustee Council Decision: Fund

Project Number: 040639
Project Title: Monitoring Ecosystem Parameters in the Northern GOA
Principal Investigator: Kenneth Goldman
Affiliation: State Of Alaska
Disbursing Agency: ADFG
Project Location: Kachemak Bay, Cook Inlet
Project Type: New

Funding Approved by Fiscal Year:

FY04: \$37,600.00	FY05: \$56,100.00	FY06: \$56,000.00
FY07: \$0.00	FY08: \$0.00	FY09: \$0.00

Total Funding Approved: \$149,700.00

Abstract:

This project will refine long-term monitoring of forage species populations in Cook Inlet, an area representative of ecosystem conditions and changes in the northern Gulf of Alaska. Finfish and shellfish will be sampled annually in May with a small-mesh bottom trawl to determine whether competitive and predatory interactions or different responses to the environment may be favoring the abundance of one species over another. Project funding includes mounting a thermosalinograph on the survey platform to collect surface temperature and salinity data during all fieldwork conducted by the survey vessel throughout the calendar year. Products will include annual reports, presentations at scientific meetings, and a manuscript submission to a peer-reviewed journal. Project data will be also made available to other researchers to facilitate broader ecosystem modeling for the Gulf of Alaska. The study will incorporate community outreach and education involving local science classes in the collection of field data.

Scientific and Technical Advisory Committee Comments:

GEM has an actual monitoring project here to support. There's an old and excellent time series to continue and upgrade. It concerns once commercially important animals (pink shrimp, bottom fish) in a coastal inlet (Kachemak Bay) with well populated (by Alaska standards) shores. The time series shows interannual or, just as likely, interdecadal change in the bottom fauna. Probably the once per year schedule is enough to show interannual changes. The trawling involved does no more habitat harm than a) has long since been done and b) possibly is sustained by current fishing activity, although these points deserve informed review. Station numbers are large enough to generate some statistics and stations are well enough distributed to show aerial variability. The agency that originated the survey cannot justify the resources to sustain it solely as a normal management agency function since stocks of the initial target species, pink shrimp, has declined well below the point of commercial interest. However, providing coastal fishing communities and scientists at management agencies with an early warning of the return of pink shrimp (the possible "crustacean mode" of the ecosystem) would be of considerable value, value that can accrue to GEM's credit. Agency should be encouraged to do anything practical with the samples to generate better insight as to what drives the shrimp-fish switching. Replace the thermosalinograph with station profiling by means of a SeaCat or similar device, such as a simple, self-contained CTD (e.g., the Seabird model is ca. \$8K) lowered at each of the many stations before the trawl is shot. If a weight (30# downrigger ball) is suspended 2 m below the CTD, it can be lowered until the weight hits, giving data from very close to the bottom. Over the station grid as a whole this would give a strong characterization of the system hydrography, much better than any number of surface values. Fund contingent on receipt of revised proposal implementing above recommendations.

Scientific and Technical Advisory Committee Recommendation: Fund Contingent

Science Director Comments:

Not Available

Science Director Recommendation: Not Available

Public Advisory Committee Comments:

Not Available

Public Advisory Committee Recommendation: Not Available

Executive Director Comments:

The project meets GEM needs for data that can be used to detect changes in natural resources in the Gulf of Alaska and to develop an understanding of the factors responsible for that change. It also responds to a GEM mandate to leverage funding through partnerships with existing programs and projects, and represents a reasonable division of financial responsibilities between EVOSTC and ADF&G. It will add value to a long-term trawl survey by providing oceanographic data that can be used to understand changes in the trawl catches due to natural forcing. Revised proposal incorporated peer review comments to substantially improve the value and quality of the oceanographic data to be collected.

Executive Director Recommendation: Fund

Trustee Council Comments:

This project is not pertinent at this time, will reevaluate if funds become available. Defer.

TC approved funding of this project at its March 1, 2004 meeting.

Trustee Council Decision: Fund

Project Number: 040706
Project Title: The Influence of Adult Salmon Carcasses on Energy Allocation in Juvenile Salmonids
Principal Investigator: Ronald Heintz
Affiliation: NOAA
Disbursing Agency: NOAA
Project Location: Kenai Peninsula
Project Type: New

Funding Approved by Fiscal Year:

FY04: \$48,400.00	FY05: \$42,300.00	FY06: \$14,000.00
FY07: \$0.00	FY08: \$0.00	FY09: \$0.00

Total Funding Approved: \$104,700.00

Abstract:

This proposal seeks to examine the effect of adult salmon carcasses on the energy allocation in juvenile salmon. Juvenile salmon allocate energy between the competing demands of growth and energy storage to minimize exposure to predation while forestalling starvation over winter. This proposal will contrast annual energy dynamics in age-0 Dolly Varden from Kenai Peninsula streams with and without salmon carcasses present. Fatty acid analysis will be used to identify marine signal strength and persistence in the lipids of the juveniles. The investigators will combine proximate and lipid class analyses to determine the proportions of their total energy allocated to storage versus structure, and examine how seasonal variation in allocation differs among streams and carcass densities. They also will examine the influence of carcasses on growth rate and the relation between growth and energy allocation.

Scientific and Technical Advisory Committee Comments:

Responds to watershed invitation. Provides novel approach to measuring the effects of MDN on resident freshwater species and juvenile salmon in partnership with other proposal (Walker). The GEM program identifies a need for indicators that show how and when to measure marine-related biological production in watersheds. Results from this study will provide additional information about the efficacy of changes in the intensity of the marine signal and lipid reserves between fall and spring as a tool for monitoring the impacts of marine nutrients on the production and survival of juveniles. Potential direct application to fishery management through understanding of factors contributing to year class strength in resident species (growth and over winter survival). Such a tool would have wide application for management of salmon and salmon spawning habitat in the state.

Scientific and Technical Advisory Committee Recommendation: Fund Contingent

Science Director Comments:

Not Available

Science Director Recommendation: Not Available

Public Advisory Committee Comments:

Not Available

Public Advisory Committee Recommendation: Not Available

Executive Director Comments:

Proposal provides a desirable resource management dimension to the watershed study of Walker, however outstanding reports from the PI need to be submitted. PI agreed to participate in a watershed workshop that will be held at the January 2005 GEM meeting, and to present an up-to-date report on progress and participate in comparison and evaluation of methods. Fund contingent on receipt of review drafts of all outstanding reports.

Executive Director Recommendation: Fund Contingent

Trustee Council Comments:

Fund contingent on submittal of overdue report 030476/ Effects of Oiled Incubation Substrate on Pink Salmon Reproduction.

Trustee Council Decision: Fund

Project Number: 040703-A
Project Title: Monitoring the Effects of Anadromous Marine-Derived Nutrients on Sockeye Salmon
Principal Investigator: Steven Honnold
Affiliation: State Of Alaska
Disbursing Agency: ADFG
Project Location: Kodiak Island, Alaska
Project Type: New

Funding Approved by Fiscal Year:

FY04: \$83,200.00	FY05: \$82,400.00	FY06: \$86,800.00
FY07: \$0.00	FY08: \$0.00	FY09: \$0.00

Total Funding Approved: \$252,400.00

Abstract:

We propose to comprehensively examine the role of MDN in sockeye salmon nursery lake ecosystem productivity by integrating studies of nutrient cycling, primary productivity, zooplankton dynamics, and juvenile sockeye abundance and growth, within a framework of stable isotope natural abundance. The project will take advantage of previous research including relatively long-term limnological data for Karluk Lake on Kodiak Island. We will utilize detailed vertical and temporal sampling of the water column, coupled with measurements of rates of primary productivity, and fully integrated stable isotope analyses, with contemporaneous sampling in a well matched pair of salmon (Karluk) and control (Spiridon) lakes. We propose to determine the extent to which the functioning and productivity of watersheds depends on marine-nutrient inputs and how this marine-terrestrial linkage can be better detected and understood. The overall goal of this project is to provide the framework for designing monitoring projects to detect changes in marine terrestrial linkages in Gulf of Alaska sockeye watersheds.

Scientific and Technical Advisory Committee Comments:

This proposal is from a state agency to partner with university based expertise (see Finney) to understand the influence of marine derived nutrients in a comparison of two watersheds. This proposal covers limnology, logistics, and sampling personnel and the university proposal covers overall project design, stable isotope measures and nitrate chemistry. The proposals together evaluate several indicators of marine linkages across species and two distinct watersheds in close cooperation with a natural resource management agency. The proposal has several unique advantages; 1) a pair of similar lakes with and without apparent marine connections, 2) one lake has very long time series of data on fish abundance and stable isotope levels, 3) both lakes have good baseline data on limnological properties such as nutrients, primary productivity and euphotic volume, and 4) one lake has authoritative peer reviewed publications by one of the PIs that support the basic concepts of the proposal. The proposal would develop a strong partnership between university based researchers and a state agency (ADF&G) that would provide information useful to natural resource managers. State agency has close links to the local community and other government agencies. Prospects are good for learning how to measure and interpret linkages of coastal (oligotrophic) lake systems to the marine environment in the Gulf of Alaska in ways that will have practical applications of very large potential significance.

Scientific and Technical Advisory Committee Recommendation: Fund

Science Director Comments:

Not Available

Science Director Recommendation: Not Available

Public Advisory Committee Comments:

Not Available

Public Advisory Committee Recommendation: Not Available

Executive Director Comments:

Proposal provides an important comparison between salmon and non-salmon bearing lakes in the oil spill affected area that is important to establishing GEM watershed monitoring. PI agreed to participate in a watershed workshop, which will be held at the January 2005 GEM meeting, and to present an up-to-date report on progress and participate in comparison and evaluation of methods.

Executive Director Recommendation: Fund

Trustee Council Comments:

Approved at November 10, 2004 TC meeting.

Trustee Council Decision: Fund

Project Number: 040159
Project Title: Surveys to Monitor Marine Bird Abundance in PWS During Winter and Summer 2004
Principal Investigator: David Irons
Affiliation: DOI
Disbursing Agency: USGS
Project Location: Prince William Sound, Alaska
Project Type: New

Funding Approved by Fiscal Year:

FY04: \$175,518.00	FY05: \$0.00	FY06: \$0.00
FY07: \$0.00	FY08: \$0.00	FY09: \$0.00

Total Funding Approved: \$175,518.00

Abstract:

We propose to conduct small boat surveys to monitor abundance of marine birds and sea otters (*Enhydra lutris*) in Prince William Sound, Alaska during March and July 2004. Seven previous surveys have monitored population trends for >65 bird and 8 marine mammal species in Prince William Sound after the Exxon Valdez oil spill. We will use data collected in 2004 to examine trends from summer 1989-2004 and from winter 1990-2004 by determining whether populations in the oiled zone changed at the same rate as those in the unoiled zone. We will also examine overall population trends for the Sound from 1989-2004. Due to the lack of data prior to the Exxon Valdez oil spill, continued monitoring of marine birds and sea otters is needed to determine whether populations injured by the spill are recovering. Data collected in 2000 indicated that bald eagles (*Haliaeetus leucocephalus*) are increasing in winter and summer throughout Prince William Sound, harlequin ducks (*Histrionicus histrionicus*) are increasing in the oiled area in winter, and black oystercatchers are increasing throughout Prince William Sound in summer. Numbers of all other injured species are either not changing or are declining in the oiled area. Common loons (*Gavia immer*), cormorants (*Phalacrocorax* spp.), and common murrelets (*Uria aalga*) are showing no trend in the oiled area; pigeon guillemots (*Cephus columba*) and marbled murrelets (*Brachyramphus marmoratus*) are declining in the oiled areas of Prince William Sound and Kittlitz's Murrelet (*Brachyramphus brevirostris*) is declining throughout Prince William Sound. Results of these surveys up through 1998 have been published by Irons et al. (2000) and Lance et al. (2001). Analyses of these survey data are the only ongoing means to evaluate the recovery of most of these injured species. A final report will be written upon completion of the project that will address population status of species observed during the survey.

Scientific and Technical Advisory Committee Comments:

This proposal would continue a systematic survey by boat of birds and sea otters in PWS. There is an established standard methodology for these surveys. These surveys go back to the mid-1970s and provide some of the few quantitative data sets for animal populations from before the spill. Starting in the mid-1990s these surveys were carried out every 3 years and the present proposal is for continuation of this series. Aside from their value in understanding whether post-spill populations of sea birds in PWS are attaining pre-spill levels, the survey results now constitute one of the few long-term data sets for sea birds in the northern GOA. It also includes many species that are not otherwise measured in other censuses of sea birds. The proposed work therefore constitutes a valuable addition to the FY04 work plan both as follow up on the spill injury to birds, which was extensive, but also as a valuable data set for addressing GEM goals relative to shifting animal populations.

Scientific and Technical Advisory Committee Recommendation: Fund

Science Director Comments:

Not Available

Science Director Recommendation: Not Available

Public Advisory Committee Comments:

Not Available

Public Advisory Committee Recommendation: Fund

Executive Director Comments:

The project adds another point in an increasingly valuable time series of sea bird population abundance in the areas of the spill. The need to survey bird populations to assess recovery status is well justified, as several injured bird species have not shown signs of recovery since the spill.

Executive Director Recommendation: Fund

Trustee Council Comments:

Approved at November 10, 2003 TC meeting.

Trustee Council Decision: Fund

Project Number: 040708
Project Title: Monitoring Lingering Oil on Boulder-Armored Beaches in the GOA
Principal Investigator: Gail Irvine
Affiliation: DOI
Disbursing Agency: USGS
Project Location: Kenai Peninsula, Alaska Peninsula
Project Type: New

Funding Approved by Fiscal Year:

FY04: \$71,700.00	FY05: \$17,200.00	FY06: \$21,854.50
FY07: \$0.00	FY08: \$0.00	FY09: \$0.00

Total Funding Approved: \$110,754.50

Abstract:

We propose to continue monitoring the persistence and degradation of oil at boulder-armored Gulf of Alaska beaches that have been studied since 1992 and investigate how stability of the boulder armors affects both persistence and weathering. These sites were re-sampled in 1994 and 1999; 2004 would be the next targeted study date. The continued contamination of these sites, arrayed along the Katmai and Kenai Fjords National Park coasts, compromises the aesthetics and wilderness values of some of the most pristine wilderness-coast parklands in the world. The lack of weathering of much of the oil means that the oil, if released, could pose a risk to biota. Subsurface oil persisted at these sites in 1999 with little change in extent or chemical weathering since 1994. Data also suggests that the boulder armors are largely stable. We propose to assess changes in surface and subsurface oiling, chemical weathering of the oil, and stability of the boulder armors. Results will be published.

Scientific and Technical Advisory Committee Comments:

This proposal directly addresses the question of the persistence of oil on armored gravel beaches outside of PWS 15 years after the spill. This survey has been carried out several times at various intervals after the spill. It is important to extend this study one more time to understand the larger geographic picture of oil persistence subsurface in beaches long after the floating oil and oil on beaches has disappeared from view. The extent and degree of oil weathering are both addressed. The reviewer had some suggestions for changes in the proposed work, particularly in the area of geomorphology, which should be addressed before the work is carried out in FY 04. The work also needs to be coordinated with and made consistent with shoreline mapping efforts. Defer contingent on publication of results of past studies and receipt of revised proposal addressing peer reviewer concerns and the recommendation of the November 2003 work shop on lingering oil.

Scientific and Technical Advisory Committee Recommendation: Defer

Science Director Comments:

Not Available

Science Director Recommendation: Not Available

Public Advisory Committee Comments:

Not Available

Public Advisory Committee Recommendation: Defer

Executive Director Comments:

The specific requirements for further work on lingering oil need to be further developed during a workshop to be conducted in November 2003, and publication of results of past work in this area are needed before this project can proceed.

Executive Director Recommendation: Defer

Trustee Council Comments:

Fund contingent on submittal of overdue report 030656/ Retrospective Analysis of Nearshore Marine Communities Based on Analysis of Archaeological Material and Isotopes. Approved at the November 10, 2003 TC meeting. Reports turned in, contingency removed.

Trustee Council Decision: Fund

Project Number: 040776
Project Title: 2005 Assessment of Lingering Oil and Resource Injuries from EVOS
Principal Investigator: Lucinda Jacobs
Affiliation: Private Enterprise
Disbursing Agency: ADOL
Project Location: Integral Consulting, Inc.
Project Type: New

Funding Approved by Fiscal Year:

FY04: \$650,000.00	FY05: \$0.00	FY06: \$0.00
FY07: \$0.00	FY08: \$0.00	FY09: \$0.00

Total Funding Approved: \$650,000.00

Abstract:

An authoritative synthesis of information on the status of injured resources will be produced by an independent panel of scientists. Conclusions with respect to the probable status of injured resources and possible remedies for injured resources will be presented. The natural resources and habitats of Prince William Sound and other Alaskan waters have been studied extensively for the 15 years since the occurrence of the Exxon Valdez Oil spill. The collective data from studies conducted largely by natural resource Trustee scientists suggest that the coastal and marine ecosystems in the oil spill region have not fully recovered; that populations of several species remain impaired; and that continued exposure to persistent, biologically available and toxic Exxon Valdez oil (EVO) might be at least partially responsible. These findings are not without scientific or public controversy. Most recently, for example, Exxon-funded scientists published data suggesting that EVO was neither bioavailable nor toxic, and that the methods used and conclusions reached by NOAA researchers in the lingering oil studies were flawed. A full and complete understanding of the degree to which natural resources are injured and the degree to which that injury is caused by lingering oil is critical to defining the probability and timeframe of resource recovery; the options (if any) for restoration; and the necessity, type, and geographic extent of continued monitoring and research. We propose to conduct a series of evaluations using the available scientific data to provide an independent and comprehensive analysis of recovery status of key resources and define any linkage to residual oil. The overall goal of this work will be to provide information that can be used to better characterize recovery status, better define restoration options, better target future monitoring and research, and more explicitly define when restoration can be considered complete.

Scientific and Technical Advisory Committee Comments:

Not Available

Scientific and Technical Advisory Committee Recommendation: Not Available

Science Director Comments:

Not Available

Science Director Recommendation: Not Available

Public Advisory Committee Comments:

Not Available

Public Advisory Committee Recommendation: Not Available

Executive Director Comments:

Not Available

Executive Director Recommendation: Not Available

Trustee Council Comments:

Not Available

Trustee Council Decision: Fund

Project Number: 040710
Project Title: Alaskan Groundfish feeding Ecology: An OBIS Information System
Principal Investigator: Dale Kiefer
Affiliation: Non AK University
Disbursing Agency: NOAA
Project Location: GOA, Aleutian Islands, Bering Sea
Project Type: New

Funding Approved by Fiscal Year:

FY04: \$80,900.00	FY05: \$0.00	FY06: \$0.00
FY07: \$0.00	FY08: \$0.00	FY09: \$0.00

Total Funding Approved: \$80,900.00

Abstract:

We propose to develop an OBIS data server node containing information characterizing the distribution and feeding ecology of Alaskan groundfish in relation to environmental parameters. Capitalizing upon our experience as participants in several OBIS projects and using established OBIS tools and protocols for Web-based access to biogeographic datasets, this information system will archive, analyze, and provide a means to distribute via the Internet information on the spatial and temporal distribution of a large number of groundfish and associated prey species sampled in the Gulf of Alaska, Aleutian Island waters, and the Bering Sea by NMFS Alaska Fisheries Science Center (AFSC). This biogeographic information system will include data on the gut contents of specimens as well as environmental information characterizing the habitats of the species. These datasets provide a biogeographic description of groundfish distribution and dynamics in relation to habitat structure and environmental variability. They also provide a detailed account of interspecific and environmental interactions that are integral to ecosystem-based fisheries assessment and management approaches. Biological databases used in this project will derive from AFSC, while environmental information will come from databases at the Pacific Marine Ecological Laboratory, AFSC and other sources such as the Institute of Marine Science, University of Alaska Fairbanks. Datasets employed are diverse in nature, and will include satellite imagery, hydrographic and fishery surveys data. The information system will address the problem of integrating multivariate data that has been collected on differing spatial and temporal scales. It will also provide GIS tools to analyze, visualize, and disseminate information according to OBIS technical protocols. Our goal is to develop a pilot system that will not only augment OBIS, but also characterize the habitat and behavior of Alaskan groundfish, and provide a model of how the integration of environmental information can aid in the assessment of marine resources.

Scientific and Technical Advisory Committee Comments:

This proposal provides a structured, proven approach to the implementation of an OBIS (Oceanographic Biological Information System) node in the Alaskan region in addition to addressing the invitation very well. Kiefer has chosen the Alaska Fisheries Science Center Groundfish Databases as a candidate series of datasets to be upscaled into the Census of Marine Life's (CoML) bio-geographic database schema known as OBIS. Four dimensional (x,y,z,t) visualization tools will be accessible through the web or client connection using EASy WEB Server or EASy client respectively. EASy is a product which has been developed by Kiefer and has been integrated with many regional observing systems such as the Gulf of Maine Biological Information System (GIMBIS) and has been ported to the DODS server (a product of the OPeNDAP Group). In addition to providing GEM with a regional OBIS node, this proposal will also assist in the initialization of the Alaskan Oceanographic Observing System (AOOS) by providing a data node which will pipe information to the national level (IOOS). Focus the demonstration on the geographic region of the GEM Program. The Alaska Groundfish data set is only a starting point for implementation, and the extension to more GEM-relevant data sets such as SEA, APEX, NVP, is recommended for the future. Interactions with potential users, such as the GEM modeling group, the authors of GEM synthesis sections, and interested members of the public.

Scientific and Technical Advisory Committee Recommendation: Fund

Science Director Comments:

Not Available

Science Director Recommendation: Not Available

Public Advisory Committee Comments:

Not Available

Public Advisory Committee Recommendation: Fund

Executive Director Comments:

The proposal takes a big step toward meeting GEM needs for database standards, and for improving access of scientists and the public to GEM data, as well as to GEM related data. The use of the groundfish database is justified because it saves development costs by providing a well known standard against which results may be judged. Once the proof of concept is established, the products from the project are extensible to many different types of data at small marginal cost.

Executive Director Recommendation: Fund

Trustee Council Comments:

Approved at the November 10, 2003 TC meeting.

Trustee Council Decision: Fund

Project Number: 040666
Project Title: Alaska Natural Geography in Shore Areas: Year 2 of a Census of Marine Life Initial Field Project
Principal Investigator: Brenda Konar
Affiliation: Alaskan University
Disbursing Agency: ADFG
Project Location: Kodiak Island, PWS and Kachemak Bay
Project Type: New

Funding Approved by Fiscal Year:

FY04: \$248,729.00	FY05: \$17,713.00	FY06: \$0.00
FY07: \$0.00	FY08: \$0.00	FY09: \$0.00

Total Funding Approved: \$266,442.00

Abstract:

This proposal seeks funding to complete the initial nearshore biodiversity surveys that were started in the summer of 2003 in Kodiak Island, Prince William Sound, and Kachemak Bay. These surveys are part of a pole-to-pole latitudinal gradient in macroalgal rocky bottom and seagrass soft bottom habitats that is applying standardized protocols developed under the Census of Marine Life program. In our second year of funding we will resurvey all sites that were sampled in 2003 for temporal resolution and will retrieve the temperature data loggers that were deployed at all sites in 2003 so that physical data can be incorporated for each study site. The project is heavily based on local community involvement for sampling. Expected outcomes are establishment of a biodiversity database for current regional and global comparisons and future long-term monitoring programs, capacity building, and a broad outreach to the public.

Scientific and Technical Advisory Committee Comments:

This proposal seeks funds to complete the initial nearshore biodiversity surveys started in the summer of 2003 in Kodiak Island, Prince William Sound, and Kachemak Bay. The surveys were funded using EVOS funds. The surveys are part of a pole-to-pole latitudinal gradient in macroalgal rocky bottom and seagrass soft bottom habitats that is applying standardized protocols developed under the Census of Marine Life Program. Funding in second year will allow resurvey of all sites sampled in 2003 and incorporate physical data for each study site. The sampling aspects of the surveys have strong local community involvement. The results of this project will establish a biodiversity database for current regional and global comparisons and future long-term monitoring programs, capacity building, and a broad outreach to the public. Fund at level requested originally.

Scientific and Technical Advisory Committee Recommendation: Fund

Science Director Comments:

Not Available

Science Director Recommendation: Not Available

Public Advisory Committee Comments:

Not Available

Public Advisory Committee Recommendation: Fund

Executive Director Comments:

The proposal continues a process started in FY 03 for exploring possibilities for nearshore monitoring sites that are conducive to community involvement in terms of the questions addressed and the data collected. Sites were explored and samples collected in FY 03 and analysis and recommendations are expected during FY 04.

Executive Director Recommendation: Fund

Trustee Council Comments:

Approved at the November 10, 2003 TC meeting.

Trustee Council Decision: Fund

Project Number: 040574
Project Title: Assessment of Bivalve Recovery on Treated Mixed-Soft Beaches in PWS
Principal Investigator: Dennis Lees
Affiliation: Private Enterprise
Disbursing Agency: NOAA
Project Location: Prince William Sound
Project Type: New

Funding Approved by Fiscal Year:

FY04: \$36,200.00	FY05: \$0.00	FY06: \$0.00
FY07: \$0.00	FY08: \$0.00	FY09: \$0.00

Total Funding Approved: \$36,200.00

Abstract:

Due to favorable weather, we were able to collect 25 percent more infaunal samples during the August 2002 field effort for Project No. 02574 than we had initially proposed for this work. This should improve the program's statistical power by about 15 percent. Current trends observed in samples analyzed to date suggest that treated sites have fewer bivalves than reference sites. Unfortunately, sediment characteristics differed substantially between the new sampling sites and those sampled during previous work in the region. Consequently, sample volumes for these infaunal samples are four to five times larger than was anticipated. Therefore, the time required to sort the samples far exceeds the budget for sorting.

This proposal is directed at obtaining additional funds for sample sorting. Accelerating the sorting process will allow us to complete sample analysis and publication of our results and will allow the Trustee Council to draw inferences regarding lingering effects to intertidal bivalve assemblages from the oil spill in a timely manner.

Scientific and Technical Advisory Committee Comments:

I would like to know how the sediments on the newly sampled beaches differ from those on the HAZMAT beaches, but even armed with that knowledge, I would be inclined to support the new request because of how much improved geographic coverage (and thus public confidence) and statistical power it buys. Putting this concern to the test is a worthy goal because the Trustees should know if they have an unfulfilled responsibility to restore this habitat. This is little enough (additional) money to answer this question at long last.

Scientific and Technical Advisory Committee Recommendation: Fund

Science Director Comments:

Not Available

Science Director Recommendation: Not Available

Public Advisory Committee Comments:

Not Available

Public Advisory Committee Recommendation: Not Available

Executive Director Comments:

I find this project to be an excellent project. Please consider this my recommendation for funding.

Executive Director Recommendation: Fund

Trustee Council Comments:

Fund (DOL grant).

Trustee Council Decision: Fund

Project Number: 040716

Project Title: A Comprehensive, Web-accessible, Geo-referenced Metadatabase of Marine-related Physical and Biological Databases of the Northern GOA

Principal Investigator: S. Allen Macklin

Affiliation: NOAA

Disbursing Agency: NOAA

Project Location: Seattle, WA

Project Type: New

Funding Approved by Fiscal Year:

FY04: \$100,600.00	FY05: \$0.00	FY06: \$0.00
FY07: \$0.00	FY08: \$0.00	FY09: \$0.00

Total Funding Approved: \$100,600.00

Abstract:

This project will adapt for GEM purposes the North Pacific Ecosystem Metadatabase (NPEM, <http://www.pmel.noaa.gov/np/mdb/>) that has served information via the World-Wide Web since 1998. The adaptation will be a web-accessible metadatabase of marine science databases of the northern Gulf of Alaska. Appropriate records from the NPEM will be transferred to the GEM metadatabase, and additional records pertaining to GEM, PICES, NPRB, UAF/IMS, GLOBEC, FOCI, and similar research efforts will be added. Metadata will be coded to the FGDC standard using the 26 elements specified by MetaLite. As possible, metadata will include thematic, semantic and syntactic descriptors. This utility will include filtering capabilities to extract from existing metadata records those specific to the regions, habitat types, and subject areas defined by the working concepts of the GEM Science Plan. Compound searches of the metadatabase will allow selection of records by time, space, keyword, text string, etc., and results will be ranked according to their agreement with the search criteria. Work will be accomplished over a three-year period in Seattle, Washington.

Scientific and Technical Advisory Committee Comments:

This proposal responds to data management needs identified in the invitation, however it goes beyond the needs identified and needs to be modified and reduced in order to be useful to the GEM program. Reduce the amount of effort outside the GEM program, apply additional effort to build expertise inside the GEM program. Scale down proposal to exclude Objective 2. Change proposal to focus on Objectives 1, 4 and 5, with emphasis on the GEM region and the nearshore areas in Objective 5. Remove the first part of Objective 3 which is to establish a web site as FGDC node, which is a NOAA responsibility. Clarify the need for remaining part of Objective 3 with respect the FGDC NSDI and include in Objective 1 if possible. Fund the project for two years at amount not to exceed \$90K total over two years contingent on receipt of revised proposal addressing points above.

Scientific and Technical Advisory Committee Recommendation: Fund Contingent

Science Director Comments:

Not Available

Science Director Recommendation: Not Available

Public Advisory Committee Comments:

Not Available

Public Advisory Committee Recommendation: Fund Contingent

Executive Director Comments:

The proposal provides a workable solution to the metadatabase requirements of the GEM program, however its scope is well beyond that envisioned in the Invitation for Proposals. The proposal has been re-written and the budgets formulated to accommodate the recommendations of the STAC.

Executive Director Recommendation: Fund

Trustee Council Comments:

Approved at the November 10, 2003 TC meeting.

Trustee Council Decision: Fund

Project Number: 040649

Project Title: Reconstructing Sockeye Populations in the GOA over the Last Several Thousand Years: The Natural Background to Future Changes

Principal Investigator: Daniel Mann

Affiliation: Alaskan University

Disbursing Agency: ADFG

Project Location: Prince William Sound, Kodiak, Kenai Peninsula

Project Type: New

Funding Approved by Fiscal Year:

FY04: \$45,000.00	FY05: \$90,400.00	FY06: \$0.00
FY07: \$0.00	FY08: \$0.00	FY09: \$0.00

Total Funding Approved: \$135,400.00

Abstract:

We are reconstructing changes in sockeye salmon abundance over the last 10,000 years using the 15N record left by salmon carcasses in the sediments of spawning lakes. Our 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? Our results provide a much-needed background to monitoring studies within the GEM program and to fisheries managers who are working to preserve and restore natural salmon runs. Results from 2002 and 2003 include two new and unexpectedly complete records of salmon abundance in lakes on the Kenai Peninsula. Both records extend back to the time of regional deglaciation around 10,000 years ago. These new cores provide records of changing 15N that are five times longer than any previous record of salmon-run history. The unexpected length and richness of these new lake-core records have motivated us to request additional funds from EVOS to cover an additional year of full funding followed by a final year of analysis and synthesis.

Scientific and Technical Advisory Committee Comments:

Mann and Finney propose to continue their studies of 15N in sediments in the spawning lakes. They are able to extend the record back 10,000 years. A goal is to establish what is normal salmon abundance and its variability. They propose to compare these sediments with other climate records in an attempt to explain causes of this variability. However, their assumption that the 15N post 1900 reflect the population size is incorrect. Since commercial fishing harvests began, it only reflects changes in salmon escapement. There is concern that because of limited other types of data, the investigators might develop simplified ideas regarding population changes. Since the sediments will remain viable for future analysis it was felt that this work did not require immediate funding.

Scientific and Technical Advisory Committee Recommendation: Do Not Fund

Science Director Comments:

Not Available

Science Director Recommendation: Not Available

Public Advisory Committee Comments:

Not Available

Public Advisory Committee Recommendation: Fund

Executive Director Comments:

Although this proposal is in an area of work that was not invited, it would provide comparative historical data on salmon abundance or salmon escapement levels of use in planning GEM watershed and nearshore studies. Based on the strength of the peer reviews, and the recommendation of the Public Advisory Committee, this study should be done if funds can be found. Issues remain with respect to the budget.

Executive Director Recommendation: Defer

Trustee Council Comments:

This project was funded at a reduced rate due to late funding by the TC (funded at the March 1, 2004 TC meeting). Awaiting revised budget, budget justification and DPD prior to release of funds. Documents have been provided.

Trustee Council Decision: Fund

Project Number: 040012
Project Title: Monitoring of Killer Whales in PWS/Kenai Fjords in 2004
Principal Investigator: Craig Matkin
Affiliation: Private Enterprise
Disbursing Agency: NOAA
Project Location: PWS, Kenai Fjords Alaska
Project Type: New

Funding Approved by Fiscal Year:

FY04: \$19,502.00	FY05: \$0.00	FY06: \$0.00
FY07: \$0.00	FY08: \$0.00	FY09: \$0.00

Total Funding Approved: \$19,502.00

Abstract:

This project transitions monitoring of the damaged resident AB pod and other resident pods and the petitioned as depleted AT1 transient population into a cooperative program with additional collaborative support from the Alaska Sea Life Center, NMFS and various foundations. Monitoring has occurred on a yearly basis since 1984 and was crucial in evaluating the continuing effects from the oil spill. In addition, the role of killer whales in the nearshore ecosystem and possible effects on sea otters will be examined. Community based initiatives such as Youth Area Watch and tour operator educational programs will be integrated. The proposed work will augment current research directed at transient killer whales (ASLC) and provide for annual monitoring of AB pod and other resident pods and includes analysis and reporting of results. In future years the project will be integrated with oceanographic monitoring.

Scientific and Technical Advisory Committee Comments:

This proposal is by a hard-working, dedicated researcher who has followed these whales in Prince William Sound over many years. It is clear that killer whales in general are enjoying good growth of their populations. Some of the pods, such as AB and AT1 have experienced problems and in the case of the AT1 pod may be headed for extinction. The paradigms of killer whale social structure and what we wish to see happen are open to challenge, as for example "members" of AB pod are usually seen with another pod when they are sighted. It is clear that if AB pod was injured by the spill that it is on its way to recovery. There is little or no evidence that the problems of AT1 pod, if they are as the investigator asserts related to the oil spill, as beaching of individual animals in 2000 and 2001 are eleven and twelve years after the spill. If the Trustee Council wishes to follow killer whale pod AB to recovery of pre-spill numbers, which is projected to occur in 2015, then monitoring need only be occasional.

Scientific and Technical Advisory Committee Recommendation: Do Not Fund

Science Director Comments:

Not Available

Science Director Recommendation: Not Available

Public Advisory Committee Comments:

Not Available

Public Advisory Committee Recommendation: Do Not Fund

Executive Director Comments:

Although the proposal does not provide a compelling case that the information gathered is essential for determining the status of an injured species, and the STAC raises serious concerns regarding the link to the presumed effects on killer whales to oiling, this is a very cost effective and highly leveraged proposal to extend a long time series of interest to many in the GEM region. As a highly leveraged project with multiple partners it has potential as a monitoring project in the GEM program, however fiscal constraints preclude a fund recommendation on this project.

Executive Director Recommendation: Defer

Trustee Council Comments:

Appropriate at this time, final year of project. Approved at the November 10, 2003 TC meeting.

Trustee Council Decision: Fund

Project Number: 040290
Project Title: The Exxon Valdez Trustee Hydrocarbon Database and Interpretation Service
Principal Investigator: Bonita Nelson
Affiliation: NOAA
Disbursing Agency: NOAA
Project Location: Entire Spill Area
Project Type: New

Funding Approved by Fiscal Year:

FY04: \$22,200.00	FY05: \$22,200.00	FY06: \$22,200.00
FY07: \$0.00	FY08: \$0.00	FY09: \$0.00

Total Funding Approved: \$66,600.00

Abstract:

This project is an on-going service project providing data and sample archiving services for all samples collected for hydrocarbon analysis in support of Exxon Valdez Oil Spill Trustee Council projects. These data represent samples collected since the oil spill in 1989 to the present and include environmental and laboratory Response (National Resource Damage Assessment - NRDA) and Restoration data. Additionally, we provide interpretive services for hydrocarbon analysis, provide public releases of the database (including FOIA requests), and maintain the hydrocarbon sample archives.

Scientific and Technical Advisory Committee Comments:

This proposal would extend the management of the database that is used to track samples for hydrocarbon analyses and continue to make available interpretive services related to origin of oil and its composition, including the likelihood of toxicity. This project is modest in cost and is needed if the Trustee Council is to continue to investigate possible links between oil remaining in the environment and species that apparently have not recovered from the spill.

Scientific and Technical Advisory Committee Recommendation: Fund

Science Director Comments:

Not Available

Science Director Recommendation: Not Available

Public Advisory Committee Comments:

Not Available

Public Advisory Committee Recommendation: Fund

Executive Director Comments:

Fund contingent upon submittal of overdue reports:

- J. Short/J. Rice - 03585/ Lingering Oil: Bioavailability and Effects to Prey and Predators
- J. Short - 00598/ Publication: Resolution of Mixtures Containing Exxon Valdez Oil and Regional Background

Hydrocarbons in Subtidal Sediments

- J. Short - 01599/ Evaluation of Yakataga Oil Seeps as Regional Background Hydrocarbon Sources in Benthic Sediments of the Spill Area
- J. Short - 02195/ Pristane Monitoring in Mussels

Executive Director Recommendation: Fund Contingent

Trustee Council Comments:

Approved at November 10, 2003 TC meeting.

Trustee Council Decision: Fund

Project Number: 040614

Project Title: A Monitoring Program for Near-Surface Temp, Salinity, and Fluorescence Fields in the northeast Pacific Ocean: Transition to an Operational Program

Principal Investigator: Stephen Okkonen

Affiliation: Alaskan University

Disbursing Agency: ADFG

Project Location: N. Gulf of Alaska

Project Type: New

Funding Approved by Fiscal Year:

FY04: \$27,289.00	FY05: \$30,366.00	FY06: \$31,455.00
FY07: \$0.00	FY08: \$0.00	FY09: \$0.00

Total Funding Approved: \$89,110.00

Abstract:

This proposed project responds to the Gulf Ecosystem Monitoring and Research Program invitation category F.2. (Alaska Coastal Current / Collecting physical and biological observations from non-AMHS ships-of-opportunity). Funds are requested to continue (1) the maintenance and operation of a thermosalinograph (TSG) that was installed on the tanker vessel Polar Alaska in July 2002 and (2) the analyses of the collected data. The TSG was originally funded as a pilot project by the EVOS Trustee Council in FY02.

Scientific and Technical Advisory Committee Comments:

Dr. Okkonen and subcontractor Dave Cutchin of Scripps maintain and collect data from a thermosalinograph operating continuously during sea runs on the tanker T/V Polar Alaska transiting from Valdez to alternately San Francisco and Long Beach. Cutchin meets the ships at the south end, consults with the chief and second engineers about concerns regarding the system, copies the data from the hard drive of the dedicated computer and services the system (6 times per year). Okkonen reviews, quality checks and archives the data, updating it on a public web site each operation cycle. Okkonen is also using the data to identify the locations on each passage of specific current features (ACC is discerned as drops in S and T; the shelf-break jet or Alaska stream similarly, and oceanic eddies as extended drops in just salinity). He is comparing these features to sea surface topography from TOPEX-POSEIDON altimetry. Data are transferred to the Batten-Welch CPR project that also operates from the Polar Alaska. An initial fluorometer installation failed, but fluorometry should be available by mid-summer 2003. Sustaining fluorometry is anticipated.

Scientific and Technical Advisory Committee Recommendation: Fund

Science Director Comments:

Not Available

Science Director Recommendation: Not Available

Public Advisory Committee Comments:

Not Available

Public Advisory Committee Recommendation: Fund

Executive Director Comments:

Past performance of the investigators and the results to date, have established this project as a low cost means of collecting basic physical data in the nearshore and offshore areas that should be of use to the GEM Model when it is operational.

Executive Director Recommendation: Fund

Trustee Council Comments:

Approved at the November 10, 2003 TC meeting.

Trustee Council Decision: Fund

Project Number: 040556
Project Title: High Resolution Mapping of Intertidal and Shallow Subtidal Shores in Kachemak Bay
Principal Investigator: W. Scott Pegau
Affiliation: State Of Alaska
Disbursing Agency: ADFG
Project Location: Kachemak Bay/Lower Cook Inlet
Project Type: New

Funding Approved by Fiscal Year:

FY04: \$15,000.00	FY05: \$0.00	FY06: \$0.00
FY07: \$0.00	FY08: \$0.00	FY09: \$0.00

Total Funding Approved: \$15,000.00

Abstract:

This is a continuation of the field-mapping project started in FY02 by Dr. G. Carl Schoch. This proposal seeks funding to complete the field mapping and building a database of the geomorphology and physical attributes of shallow intertidal habitats for the Kachemak Bay 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:

Not Available

Scientific and Technical Advisory Committee Recommendation: Fund

Science Director Comments:

Not Available

Science Director Recommendation: Not Available

Public Advisory Committee Comments:

Not Available

Public Advisory Committee Recommendation: Not Available

Executive Director Comments:

Not Available

Executive Director Recommendation: Fund

Trustee Council Comments:

(mid-term request)

Trustee Council Decision: Fund

Project Number: 040620-1

Project Title: Lingering Oil: Pathways of Exposure and Population Status (ABL)

Principal Investigator: Stanley (Jeep) Rice

Affiliation: NOAA

Disbursing Agency: NOAA

Project Location: Prince William Sound

Project Type: New

Funding Approved by Fiscal Year:

FY04: \$60,000.00

FY05: \$61,000.00

FY06: \$29,100.00

FY07: \$0.00

FY08: \$0.00

FY09: \$0.00

Total Funding Approved: \$150,100.00

Abstract:

Lingering oil from the Exxon Valdez oil spill remains throughout Western Prince William Sound and appears to have chronic effects on sea otter and sea duck populations in these areas. Studies conducted in 2001-02 have documented the extent of oiling throughout the sound, and as of this writing, we have determined that oil is bioavailable to predators. Bioavailability defines potential for exposure, but is not equal to exposure or significance. In 2003 and 2004, we are determining the significance of lingering oil by quantifying the probability of oil encounters in areas where sea otters and sea ducks have not recovered. Prey and passive samplers collected in 2003 will be analyzed in 2004, and will be supplemented with additional samples in 2004 to meet the needs of the on-going tagging studies of otters and ducks by USGS. With the mechanism of exposure from lower intertidal oil deposits determined, the research theme will move toward the goal of determining the extent and probability of oil exposure in three restricted areas: Herring Bay, Lower Passage, and Bay of Isles. Information gained in this project could aid in the decision process regarding future mitigation, litigation, or clean-up actions.

Scientific and Technical Advisory Committee Comments:

This project is well designed and complementary to the sea otter/sea duck project by Bodkin et al. It is a key component of the strategy the Trustee Council undertook in FY2002 to determine if remaining oil is a significant factor in lack of recovery of some species such as sea otter and sea ducks. The technical merits are high. The proposal is responsive to the invitation with relevance to management and community involvement. The management application is moderate. The qualifications of the PIs are excellent as is their past performance on other EVOS funded projects. Defer funding decision pending outcome of November workshop and disposition of the matter of reports for projects 00396 and 00454.

Scientific and Technical Advisory Committee Recommendation: Defer

Science Director Comments:

Not Available

Science Director Recommendation: Not Available

Public Advisory Committee Comments:

Not Available

Public Advisory Committee Recommendation: Defer

Executive Director Comments:

The specific requirements for further work on lingering oil need to be further developed during a workshop to be conducted in November 2003. As identified by the STAC, it is important for the preliminary results of the FY 2003 field season to be considered by legal counsel, EVOS staff, advising scientists and the Trustee Council before decisions on funding are made. The exchange between legal, policy and science people will be reported to the Trustee Council before making decisions on what to do in the summer of 2004, which is the last full field season of data that could be fully analyzed before deciding the path to the re-opener. Defer funding decisions pending the outcome of the November workshop.

Executive Director Recommendation: Defer

Trustee Council Comments:

Fund contingent on submittal of overdue reports;

- J. Short/J. Rice - 03585/ Lingering Oil: Bioavailability and Effects to Prey and Predators (Draft submitted for peer review)
- J. Rice – 00454/ Evidence and Consequences of Persistent Oil Contamination in Pink Salmon Natal Habitats (Draft submitted for peer review)
- J. Short - 00598/ Publication: Resolution of Mixtures Containing Exxon Valdez Oil and Regional Background Hydrocarbons in Subtidal Sediments (Draft submitted for peer review)
- J. Short - 01599/ Evaluation of Yakataga Oil Seeps as Regional Background Hydrocarbon Sources in Benthic Sediments of the Spill Area (Draft submitted for peer review)
- J. Short - 02195/ Pristane Monitoring in Mussels (update from project manager 06/09/04: a draft should be submitted 06/10/04)

Trustee Council Decision: Fund

Project Number: 040740

Project Title: Lingering Oil: Contaminant Inputs to PWS and CYP1A Induction in Fish - Midterm Lingering Oil Project (DOL Grant)

Principal Investigator: Stanley (Jeep) Rice

Affiliation: NOAA

Disbursing Agency: NOAA

Project Location: Prince William Sound

Project Type: New

Funding Approved by Fiscal Year:

FY04: \$177,300.00	FY05: \$130,100.00	FY06: \$0.00
FY07: \$0.00	FY08: \$0.00	FY09: \$0.00

Total Funding Approved: \$307,400.00

Abstract:

Recently lingering oil studies have found that Exxon Valdez oil persists, and continued CYP1A induction in sea otters and sea ducks have become the best documented long-term impacts of the spill. Exxon scientists suggest there are many other potential pollutant sources in PWS that confound measurements of CYP1A induction. The project proposed here will definitively assess contributions, if any, from other contaminant sources to contaminant stresses on biota in Prince William Sound (PWS). At a suite of sites, passive sampling devices will be deployed and then analyzed to evaluate their induction potential. Aliquots of concentrated extracts from the samplers will be injected into cultured rainbow trout (*Oncorhynchus mykiss*), and the induction of cytochrome P450A1A (CYP1A) measured. These measurements would compliment the on-going sea otter studies of FY04, where a final measurement of CYP1A will be made in summer 2004.

Scientific and Technical Advisory Committee Comments:

I am enthusiastic about the value of this project to furthering our understanding of lingering impacts of EVO and distinguishing between oil effects and effects of possible POPs on some fishes. I endorse the methods, with the exception of the concern that I have for inclusion of a calibration process for the injection portion, which may require switching fish species. I would be positive about support even if this calibration process proved impossible.

Scientific and Technical Advisory Committee Recommendation: Fund

Science Director Comments:

Not Available

Science Director Recommendation: Not Available

Public Advisory Committee Comments:

Not Available

Public Advisory Committee Recommendation: Not Available

Executive Director Comments:

I find this project to be an excellent project. Please consider this my recommendation for funding.

Executive Director Recommendation: Fund

Trustee Council Comments:

Fund (DOL grant).

Trustee Council Decision: Fund

Project Number: 040407
Project Title: Harlequin Duck Population Dynamics in Prince William Sound: Measuring Recovery
Principal Investigator: Dan Rosenberg
Affiliation: State Of Alaska
Disbursing Agency: ADFG
Project Location: Prince William Sound
Project Type: New

Funding Approved by Fiscal Year:

FY04: \$37,100.00	FY05: \$0.00	FY06: \$0.00
FY07: \$0.00	FY08: \$0.00	FY09: \$0.00

Total Funding Approved: \$37,100.00

Abstract:

This project will address the effects of lingering oil in nearshore habitats of Prince William Sound on populations of harlequin ducks. We will conduct winter boat surveys to test if harlequin ducks have recovered from the effects of the EVOS by comparing population structure and trends between oiled and unoiled treatments in four areas (2 oiled, 2 unoiled) of PWS. Similar structure and trends between oiled and unoiled areas will indicate populations have recovered or are in a position to recover. Work will be complimentary to studies addressing cytochrome P450 induction and over winter survival of female harlequin ducks to give a complete picture of the effects of lingering oil. We will also test for geographic differences in population structure and trend for oiled and unoiled treatments. This is a continuation of surveys begun in 1997. Up to 3 years of surveys are proposed with the results of each year determining the need for continuation.

Scientific and Technical Advisory Committee Comments:

The proposal was well reviewed and is relevant to the Trustee Council's strategy for investigating the links between oil and the recovery of affected populations. Fund contingent on resolution of outstanding reports 00273 and 02407.

Scientific and Technical Advisory Committee Recommendation: Fund Contingent

Science Director Comments:

Not Available

Science Director Recommendation: Not Available

Public Advisory Committee Comments:

Not Available

Public Advisory Committee Recommendation: Fund Contingent

Executive Director Comments:

This is a reasonably priced survey to estimate the abundance of a species, the harlequin duck, which is known to have continuing exposure to Exxon Valdez in the oil spill affected areas of Prince William Sound. Unfortunately there are overdue reports associated with project personnel, so the proposal cannot move forward until conclusion of matter of

outstanding reports on scoters.

Executive Director Recommendation: Fund Contingent

Trustee Council Comments:

Fund Contingent upon receipt of two over due reports 00273 & 02407. Phil Mundy accepted annual report on project 00273 in lieu of final report. Report 02407 draft report has been submitted for peer review - contingency removed. Project Manager indicates 00273 data should be in our office by July 1, 2004 and report will be in after field season (update from project manager 06/04).

Trustee Council Decision: Fund

Project Number: 040647

Project Title: Investigating the Relative Roles of Natural Factors and Shoreline Harvest in Altering the Community Structure, Dynamics and Diversity of the Kenai Peninsula

Principal Investigator: Jennifer Ruesink

Affiliation: Non AK University

Disbursing Agency: NOAA

Project Location: Kenai Peninsula

Project Type: New

Funding Approved by Fiscal Year:

FY04: \$81,600.00	FY05: \$0.00	FY06: \$0.00
FY07: \$0.00	FY08: \$0.00	FY09: \$0.00

Total Funding Approved: \$81,600.00

Abstract:

The surf swept 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, we will evaluate the relative roles of natural factors (predation/grazing & 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 an additional field season (2004) of valuable baseline monitoring in the intertidal zone that could be continued in the future as part of a long-term time series. 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:

This proposal has strong community involvement. It is probably as well designed as it can be in this context, although it is not absolutely certain it can resolve the fundamental questions asked. It does have long term monitoring potential and is probably good value in terms of baseline information, even if the scientific question remains unresolved. Fund at level originally requested in FY 2003.

Scientific and Technical Advisory Committee Recommendation: Fund

Science Director Comments:

Not Available

Science Director Recommendation: Not Available

Public Advisory Committee Comments:

Not Available

Public Advisory Committee Recommendation: Fund

Executive Director Comments:

The proposal has a strong community involvement component, having been originated by the village of Port Graham as an investigation targeting an important subsistence resource (the black chiton also known as the Bidarki or black gumboot) that is not studied by other agencies. It is also likely to make a substantial contribution to the development of the nearshore monitoring program.

Executive Director Recommendation: Fund

Trustee Council Comments:

Approved at the November 10, 2003 TC meeting.

Trustee Council Decision: Fund

Project Number: 040721
Project Title: Alaska Coastal Habitat Web Site
Principal Investigator: Susan Saupe
Affiliation: Private Enterprise
Disbursing Agency: NOAA
Project Location: Kenai Peninsula including Kachemak Bay and outer coast
Project Type: New

Funding Approved by Fiscal Year:

FY04: \$21,100.00	FY05: \$0.00	FY06: \$0.00
FY07: \$0.00	FY08: \$0.00	FY09: \$0.00

Total Funding Approved: \$21,100.00

Abstract:

This proposal is to develop an Alaska Coastal Habitat Web Site based on several products currently being produced using ShoreZone Mapping techniques. This proposal will tie together several components in a user-friendly, web-accessible format. In a recent workshop hosted by EVOS and attended by personnel from local, state, and federal agencies; universities; and not-for profit organizations, participants strongly endorsed a coordinated process for continuing coastal mapping and the wide-spread distribution of data through web accessibility. The group also emphasized that the data should be provided in a user-friendly way that will facilitate use by the general public. This proposal outlines a plan to a) make recently collected ShoreZone data immediately web-accessible, b) combine ShoreZone mapping data with the existing Gulf of Alaska Coastal Imagery web site, and c) combine ShoreZone mapping data with detailed site-specific data for various habitats and descriptions of biological assemblages and species. The project will be coordinated by the Cook Inlet RCAC through a subcontract to Coastal and Ocean Resources, Inc. (CORI) who developed the ShoreZone techniques and who is currently conducting various ShoreZone mapping projects in the GEM area. CORI is located in Sidney, British Columbia, where much of the work will be conducted. The public outreach development portion will be conducted in Kenai at the Cook Inlet RCAC offices and community visits will take place at various places on the Kenai Peninsula as well as to resources agencies in Anchorage.

Scientific and Technical Advisory Committee Comments:

This proposal provides a mechanism for the dissemination of biological coastal information through the web which is cost efficient and practical. Drawing upon methodologies previously implemented in past years, Saupe and Harper plan to expand their coastal web site technology to include more Alaskan coastline in addition to more specific site data (e.g., "data for various habitats and descriptions of biological assemblages and species"). Saupe and Harper will use an ArcIMS mapping engine to facilitate their electronic mapping which is a robust solution but has its drawback due to it being proprietary to ESRI. The project will need to be vigilant in identifying clients using MAPInfo who have a difficult time downloading data from the website and using it on their systems. Overall, this proposal delivers a high degree of data visualization for the small amount requested.

Scientific and Technical Advisory Committee Recommendation: Fund

Science Director Comments:

Not Available

Science Director Recommendation: Not Available

Public Advisory Committee Comments:

Not Available

Public Advisory Committee Recommendation: Fund

Executive Director Comments:

The project provides and adds value to coastal habitat mapping information collected by GEM and other agencies by making the information more readily available. The information is expected to have a high potential for use in planning research and to local governments in understanding and managing coastal development.

Executive Director Recommendation: Fund

Trustee Council Comments:

Approved at November 10, 2003 TC meeting.

Trustee Council Decision: Fund

Project Number: 040610
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:

FY04: \$63,000.00	FY05: \$63,000.00	FY06: \$63,000.00
FY07: \$0.00	FY08: \$0.00	FY09: \$0.00

Total Funding Approved: \$189,000.00

Abstract:

The Kodiak Archipelago Youth Area Watch is an ongoing community involvement project designed to 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 TEK, publishing it in a district oral history magazine. Participation of KAYAW adults and students in the annual Academy of Elders/Science Camp will be strongly encouraged. Participants will share their research during annual gatherings. 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. Students will explore local knowledge as it relates to marine mammal populations, inter-tidal environment, impact of humans on the coastal environment, human use overtime and intergenerational changes and cultural beliefs and practices that may provide insight in scientific studies. The value and implications of TEK will be strongly emphasized throughout the implementation of the KAYAW project.

Scientific and Technical Advisory Committee Comments:

This is a very competent proposal that creates its own activities based on addressing local interests and concerns as they relate to GEM. The types of activities described in the proposal (resource inventory, habitat mapping, ecology, human effects on resources (page 1) are consistent with information needed to be able to design a local monitoring program. The KAYAW has expanded slowly and the proposed work areas (continuing harbor seal data gathering; continuing focus archaeological and natural resources, and working with the nearshore monitoring project conducted by UAF [Dr. Robert Foy]) are a form of monitoring. Furthermore, the project design has monitoring objectives and study procedures. The proposal is responsive to the invitation (continuing community involvement project), is consistent with one of two GEM strategies (incorporate community involvement), and is proactive in moving toward a GEM-style monitoring youth area watch program.

Scientific and Technical Advisory Committee Recommendation: Fund

Science Director Comments:

Not Available

Science Director Recommendation: Not Available

Public Advisory Committee Comments:

Not Available

Public Advisory Committee Recommendation: Fund

Executive Director Comments:

The report on approaches to community involvement commissioned by the Trustee Council in FY 2003 will not be available until the end of September 2003. The report is expected to provide the basis for a thorough examination of the role of community involvement in the GEM program to be conducted by the Executive Director during FY 2004. Until that examination is complete, funding of community involvement projects will be based on responsiveness to the criteria in the FY 04 Invitation and past and future utility for implementing the GEM program. The Kodiak Youth Area Watch proposal is well grounded in the principles of the GEM program and shows a keen understanding of the concepts of the roles and needs for community involvement in long-term monitoring programs. The connection to the GEM Science Plan is clear, and the recommendations of the STAC are very positive.

Executive Director Recommendation: Fund

Trustee Council Comments:

Approved at the November 10, 2003 TC meeting.

Trustee Council Decision: Fund

Project Number: 040724

Project Title: Development of a Strategy for Monitoring Exxon Valdez Oil and other Contamination in PWS

Principal Investigator: Jeffrey Short

Affiliation: NOAA

Disbursing Agency: NOAA

Project Location: Prince William Sound

Project Type: New

Funding Approved by Fiscal Year:

FY04: \$45,900.00	FY05: \$0.00	FY06: \$0.00
FY07: \$0.00	FY08: \$0.00	FY09: \$0.00

Total Funding Approved: \$45,900.00

Abstract:

This project will evaluate alternative sampling designs and strategies for monitoring oil from the T/V Exxon Valdez remaining on beaches in Prince William Sound, along with other hydrocarbon contaminants from anthropogenic and natural sources, and will make recommendations regarding overall sampling design, duration and frequency. The recommended strategy will be optimized for statistical power based on existing knowledge of the distributions of hydrocarbons from known sources, and will include a means of increasing power as more knowledge is gained through sampling as monitoring proceeds. The recommended strategy will incorporate results from the Prince William Sound Regional Citizens' Advisory Committee's Long Term Environmental Monitoring Program, and will explicitly recommend how the results from this program may be efficiently augmented. This project will directly address a core concern of the GEM program, by determining the persistence of Exxon Valdez oil placed in the context of other hydrocarbons in the region.

Scientific and Technical Advisory Committee Comments:

A distinct advantage of this project is that two top scientists, Roger Green and Jeff Short, will provide a very solid basis for future monitoring for hydrocarbons of all sources. Optimizing sampling for maximum power to detect change is particularly beneficial for programs that the TC has chosen to support, e.g., the Regional Citizen's Advisory Committee mussel watch type program in PWS. The technical merits are good. The proposal is responsive to the invitation with relevance to management and community involvement. The qualifications of the PIs are outstanding. Fund contingent upon receipt of outstanding reports 00195, 01195, 02195, 00290, 01290, 00598, 01599, and 02543.

Scientific and Technical Advisory Committee Recommendation: Fund Contingent

Science Director Comments:

Not Available

Science Director Recommendation: Not Available

Public Advisory Committee Comments:

Not Available

Public Advisory Committee Recommendation: Fund Contingent

Executive Director Comments:

Proposal would provide very useful information on how to incorporate the study of lingering oil effects into the GEM monitoring program, however the PI has eight overdue reports. Funding is contingent on receipt of acceptable drafts of overdue reports.

Executive Director Recommendation: Fund Contingent

Trustee Council Comments:

Trustee Council Action: Fund contingent on submittal of overdue reports;

- J. Short/J. Rice - 03585/ Lingering Oil: Bioavailability and Effects to Prey and Predators (Draft submitted for peer review)
- J. Short - 00598/ Publication: Resolution of Mixtures Containing Exxon Valdez Oil and Regional Background Hydrocarbons in Subtidal Sediments
- J. Short - 01599/ Evaluation of Yakataga Oil Seeps as Regional Background Hydrocarbon Sources in Benthic Sediments of the Spill Area (Draft submitted for peer review)
- J. Short - 02195/ Pristane Monitoring in Mussels (update from project manager 06/10/04: draft expected at EVOS office 06/10/04)

Trustee Council Decision: Fund

Project Number: 040600

Project Title: A Synthesis of the Ecological Findings from EVOS Damage Assessment and Restoration Programs, 1989-2001

Principal Investigator: Robert Spies

Affiliation: Private Enterprise

Disbursing Agency: ADNR

Project Location: No field work

Project Type: New

Funding Approved by Fiscal Year:

FY04: \$201,700.00	FY05: \$0.00	FY06: \$0.00
FY07: \$0.00	FY08: \$0.00	FY09: \$0.00

Total Funding Approved: \$201,700.00

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 results of the work will be an integrated synthesis book. The book will consist of three major sections: 1. The basic structure and function of the ecosystem, 2. How does it change over time and in respond to disturbances? and, 3. The effect of the spill; a summary of the spill effects and recovery as well as 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 the Gulf Ecosystem Monitoring Program.

Scientific and Technical Advisory Committee Comments:

This proposal is to continue funding to write a book of "Synthesis of the ecological findings from EVOS". This project proposes to do more than just summarize work that has been done. It actually proposes to produce synthetic results from EVOS-funded and other relevant research. Specifically they propose to have four sections in the book: (1) Structure and function of the ecosystem, (2) Ecosystem changes, (3) Effect of the spill, and (4) Implications. This synthesis directly answers the invitation Part A. Synthesis. As structured the Invitation asks for individual syntheses for each of the habitats, however, this overall ecosystem synthesis is definitely needed. The writing has been divided among a core writing team, members of which have been contracted to write and oversee specific components of the book. All of the members of the team are well-respected scientists. In addition to Bob Spies, the rest of the team consists of Gordon Kruse, Ted Cooney, Tom Weingartner, Alan Springer, Jeep Rice, and Jennifer Allen. Unfortunately, this proposal seems to have fallen under the list of proposals submitted last year for multiple years, but that still need to submit a proposal this year. As such, the proposal as submitted is basically the same one from last year. It does not represent the progress that has been accomplished. The proposal does not even include a current version of the book outline with assignments among team members. There is no budget, just one large number. Fund contingent upon receipt and approval of detailed proposal including milestones, time line and budget.

Scientific and Technical Advisory Committee Recommendation: Fund Contingent

Science Director Comments:

Not Available

Science Director Recommendation: Not Available

Public Advisory Committee Comments:

Not Available

Public Advisory Committee Recommendation: Fund Contingent

Executive Director Comments:

The project is to complete an ongoing synthesis of past work from the Restoration program which is expected to be an important tool for GEM program planning. The proposal has been revised to incorporate milestones, timeline and detailed budgets, and a current outline of the manuscript. Fund contingent on receipt of the most recent draft of the manuscript.

Executive Director Recommendation: Fund Contingent

Trustee Council Comments:

Fund contingent on reevaluation of contract agreement. TC approved contract, contingency removed.

Trustee Council Decision: Fund

Project Number: 040654

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/Shelikof of Strait

Project Type: New

Funding Approved by Fiscal Year:

FY04: \$49,500.00	FY05: \$0.00	FY06: \$0.00
FY07: \$0.00	FY08: \$0.00	FY09: \$0.00

Total Funding Approved: \$49,500.00

Abstract:

This proposal is for continuation of Project 030654 funded in FY03. Our goal 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 GOA. We propose monitoring nitrate over the shelf and basin. Underway samples will be collected as part of the NMFS-OCC/GLOBEC salmon survey in July/August of 2004. This survey includes a transit across the central GOA and 10 cross-shelf oceanographic and juvenile salmon transects from Yakutat to Kodiak Island. This will be the broadest nutrient survey of the northern GOA. Nutrient maps will be used to support NPZ 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.

Scientific and Technical Advisory Committee Comments:

Stabeno and Mordy propose to carry out another surface mapping of nutrients in the Gulf of Alaska in July/August 2004. This will add another seasonal snapshot of nitrate over the central Gulf of Alaska and shelf that will be combined with other fisheries and plankton sampling that we be gathered underway during the annual NMFS/OCC/GLOBEC cruise. This will be the second year of these cruises. It is a relatively inexpensive add-on. I am not as optimistic as the proposers as to the usefulness of these data on determining decadal and interannual nutrient variability. These annual snapshots are aliased and could easily lead to erroneous results and conclusions. Their proposed work to determine seasonal and interannual variability of nutrients here needs to have a finer temporal resolution. This is a highly leveraged program and the investigators are very productive.

Scientific and Technical Advisory Committee Recommendation: Fund

Science Director Comments:

Not Available

Science Director Recommendation: Not Available

Public Advisory Committee Comments:

Not Available

Public Advisory Committee Recommendation: Not Available

Executive Director Comments:

The proposal offers to continue a highly cost effective partnership with GLOBEC to investigate the transfer of fertilizer (nitrate) from deep ocean areas to nearshore areas where it can drive production of birds, fish, and mammals.

Executive Director Recommendation: Fund

Trustee Council Comments:

Not pertinent at this time - Defer.

This project was funded by the Trustee Council at its February 9, 2004 TC meeting.

Trustee Council Decision: Fund

Project Number: 040725
Project Title: Impacts of Seafood Waste Discharge in Orca Inlet, PWS
Principal Investigator: Richard Thorne
Affiliation: Private Enterprise
Disbursing Agency: NOAA
Project Location: Orca Inlet, Prince William Sound
Project Type: New

Funding Approved by Fiscal Year:

FY04: \$72,680.00	FY05: \$111,692.00	FY06: \$108,943.00
FY07: \$0.00	FY08: \$0.00	FY09: \$0.00

Total Funding Approved: \$293,315.00

Abstract:

This proposal brings together several entities with concerns over the impacts of seafood waste discharge into Cordova Harbor (Orca Inlet). The Prince William Sound Science Center (PWSSC) is acting as the facilitator of this effort because of its strategic location and long-term interest in the problem. Primary collaborators are DEC, ADF&G and Cordova seafood processors. Anticipated collaborators include the Native Village of EYAK and the City of Cordova. The proposed research will investigate possible impacts of seafood waste discharge through a series of experiments that will evaluate the nearshore community response to alternate techniques of seafood waste discharge, including different grind sizes and whole carcasses, as well as a pile remediation study. These experiments will not only aid our understanding of the historic impacts, but will form the basis for a more healthy and productive approach to seafood waste recycling. A three-year project is proposed, with the first year devoted to baseline observations and experimental design.

Scientific and Technical Advisory Committee Comments:

This proposal brings together several entities such as the Alaska Department of Environmental Conservation (ADEC), the Alaska Department of Fish and Game (ADFG), Cordova seafood processors, the Native Village of EYAK, and the City of Cordova with concerns over the impacts of seafood waste discharge into Cordova Harbor (Orca Inlet). The research would investigate possible impacts of seafood waste discharge through a series of experiments by evaluating the nearshore community response to alternate techniques of seafood waste discharge. The results of the research would aid the understanding of historic impacts and form the basis for a more healthy and productive approach to seafood waste recycling. The first year of the proposed 3-year project will be devoted to baseline observations and experimental design. This collaborative project addresses two invitation categories: community involvement and nearshore. The study would also provide information for similar concerns in southeastern Alaska and complement ongoing ADEC studies in Ketchikan. The PI should consider application of these findings to the wider GEM area.

Scientific and Technical Advisory Committee Recommendation: Fund

Science Director Comments:

Not Available

Science Director Recommendation: Not Available

Public Advisory Committee Comments:

Not Available

Public Advisory Committee Recommendation: Fund

Executive Director Comments:

The proposal would add the dimension of human effects to the development of the nearshore monitoring program, and it is a good match of GEM objectives to the management of an important pollution concern for coastal communities throughout the oil spill affected area.

Executive Director Recommendation: Fund

Trustee Council Comments:

Approved at November 10, 2003 TC meeting.

Trustee Council Decision: Fund

Project Number: 040726

Project Title: Presence and Effects of Marine Derived Nutrients (MDN) in Stream, Riparian and Nearshore Ecosystems on Southern Kenai Peninsula, Alaska

Principal Investigator: Coowe Walker

Affiliation: State Of Alaska

Disbursing Agency: ADFG

Project Location: Southern Kenai Peninsula

Project Type: New

Funding Approved by Fiscal Year:

FY04: \$169,000.00	FY05: \$153,400.00	FY06: \$149,700.00
FY07: \$0.00	FY08: \$0.00	FY09: \$0.00

Total Funding Approved: \$472,100.00

Abstract:

Marine derived nutrients and carbon (MDN) delivered by salmon and other anadromous fishes are considered important drivers in riverine ecosystems, providing nutrients and food to these land-based food webs. However, we know little about the relative value of MDN compared to other nutrient and carbon sources (e.g., watershed-derived) in the Gulf of Alaska region. The objectives of this study are to develop a water chemistry proxy for monitoring salmon returns, and to track and measure MDN effects in stream, riparian and nearshore environments, on the southern Kenai Peninsula. We will accomplish this by linking stream chemistry, marine isotope signatures, marine terrestrial fatty acid ratios, and key animal and plant community density, growth, and lipid measures along a gradient from river mouth to headwaters in key watersheds. This study will be integrated with related studies proposed in other areas of southcentral Alaska to develop a broader regional understanding and widely-applicable long-term monitoring program for the GEM region.

Scientific and Technical Advisory Committee Comments:

The proposal provides clear and workable approaches to collecting the data necessary to meet the needs identified for watersheds in the invitation. It would provide geographic and physical contrasts between two (anadromous and non-anadromous) peat wetlands watersheds on the southern Kenai Peninsula, and it would establish a partnership with a resource management agency (ADFG) for operation of a salmon counting weir. Measures C, N, and S stable isotopes, and evaluates full suite of water quality measures containing N, P, C in resident fish, invertebrates and plants. Incorporates direct and re-mineralization routes of C and N through food webs. The proposal would have the ability to compare streams with and without salmon, and to look at production of salmon in a system where escapements are counted (Anchor River tributary). Measures of longitudinal distributions of MDN from headwaters to mouth would provide an important contrast. Measures of proxies cover water chemistry parameters and fatty acid levels and ratio of omega-3 fatty acids to total fatty acids in animals. Excellent ties to local community through Citizens Environmental Monitoring Program, (CEMP is EPA/ADEC funded). Prospects are good for learning how to measure and interpret linkages of coastal peat wetland stream systems to the marine environment in the Gulf of Alaska in ways that will have practical applications of very large potential significance. Fund contingent on a letter from the Principal Investigators agreeing to participate in a watershed workshop to be held at the January 2005 GEM meeting, and to present an up-to-date report on progress and participate in comparison and evaluation of methods.

Scientific and Technical Advisory Committee Recommendation: Fund Contingent

Science Director Comments:

Not Available

Science Director Recommendation: Not Available

Public Advisory Committee Comments:

Not Available

Public Advisory Committee Recommendation: Not Available

Executive Director Comments:

Proposal provides a resident stream fish dimension to the watershed habitat type. PI has agreed to participate in a watershed workshop which will be held at the January 2005 GEM meeting, and to present an up-to-date report on progress and participate in comparison and evaluation of methods.

Executive Director Recommendation: Fund

Trustee Council Comments:

Approved at the November 10, 2003 TC meeting. An additional \$18.8K was approved at the March 1, 2004 TC meeting for operation of the weir on the N. Fork of Anchor River.

Trustee Council Decision: Fund

Project Number: 040340
Project Title: Long-Term Monitoring of the Alaska Coastal Current
Principal Investigator: Thomas Weingartner
Affiliation: Alaskan University
Disbursing Agency: ADFG
Project Location: Gulf of Alaska Shelf offshore of Resurrection Bay
Project Type: New

Funding Approved by Fiscal Year:

FY04: \$80,387.00	FY05: \$81,748.00	FY06: \$64,950.00
FY07: \$0.00	FY08: \$0.00	FY09: \$0.00

Total Funding Approved: \$227,085.00

Abstract:

This proposal is for monitoring temperatures, salinities, and spring bloom characteristics of the Alaska Coastal Current (ACC) from a mooring and monthly sampling at station GAK 1 near Seward. The project builds upon the 33-year record at this station. These data can predict ACC (baroclinic) transport anomalies so this variable is obtained indirectly. The results will be examined with respect to variations in terrestrial runoff and atmospheric heat fluxes. We will provide daily maps of satellite scatterometer-derived winds, make these available to the public via a website, and archive them for future analyses. All variables affect biological production at higher trophic levels. The results have value for interpreting continuous plankton recorder data to be obtained from ferries under GEM sponsorship, evaluating performance of numerical ocean circulation models, and conducting retrospective analyses of biological productivity. Logistics costs are shared with the NSF-NOAA funded GLOBEC program.

Scientific and Technical Advisory Committee Comments:

Weingartner proposes to continue the 33 year hydrographic time series, maintain a mooring and provide daily wind estimates for the northern Gulf of Alaska. He will also measure fluorescence and light transmission to estimate the primary production. He suggests that it will only be the spring bloom estimates rather than the entire year due to potential biological fouling of the instruments. The GAK1 measurements are vital for the determination of ocean climate conditions. The proposal is well written and Weingartner is productive. The basic work should be funded. The inclusion of the daily wind field processing is questionable. Why would mariners be interested in today's (prior) winds rather than the predictions that are provided by the NWS? Providing real time winds is not a primary function of this program or an academic institution. Also, why are nitrate sensors not included in the mooring? These should prove to be more valuable than quasi-real-time winds. The leverage provided for this project is excellent and the requested costs are modest. Why isn't the request for multiple years rather than just one year? Recommend continued funding this project. This project has repeatedly proved its value to the scientific community in the Northern Gulf of Alaska. Recommend funding at this level for FY04, FY05 and FY06.

Scientific and Technical Advisory Committee Recommendation: Fund

Science Director Comments:

Not Available

Science Director Recommendation: Not Available

Public Advisory Committee Comments:

Not Available

Public Advisory Committee Recommendation: Fund

Executive Director Comments:

The project has proven to be a cost effective partnership to enhance the value of one of the oldest time series of marine environmental data in the North Pacific. Proposal is to be funded at this level with these objectives for three years, FY 2004 - 2006.

Executive Director Recommendation: Fund

Trustee Council Comments:

This project was approved at the November 10, 2003 TC meeting for three years. Brett Huber, Project Manager, is getting a revised budget to include all years funded. An additional \$4,905 was approved at the Feb. 9, 2004 TC meeting (equipment calculation error on 1st approved budget).

Trustee Council Decision: Fund

Project Number: 040670

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:

FY04: \$89,800.00	FY05: \$68,000.00	FY06: \$27,900.00
FY07: \$0.00	FY08: \$0.00	FY09: \$0.00

Total Funding Approved: \$185,700.00

Abstract:

This project will use a vessel of opportunity to collect physical oceanographic and fisheries data along a transect, across lower Cook Inlet from Anchor Point to the Red River delta. Logistical support for the field sampling will be provided in part by the Alaska Department of Fish and Game which has chartered a vessel annually to fish along this transect each day during July providing in season projections of the size of salmon runs returning to the inlet. The work proposed here is for long-term monitoring of oceanographic conditions in Cook Inlet as part of these ongoing fisheries surveys. Investigators will also use physical oceanographic data collected by the project to improve management of Cook Inlet salmon through improved in season salmon run projections. Several hypotheses regarding effects of changing oceanographic conditions on salmon migratory behavior will be tested. The oceanographic data collected by the project will also provide for valuable validation of remote sensing products, improved understanding of ocean dynamics in lower Cook Inlet, and a highly powerful statistical evaluation of the oil spill risk analysis models.

Scientific and Technical Advisory Committee Comments:

Contributions to the central GEM goal (recurring ecosystem status evaluations) will be continuation of the salmon stock data series for Cook Inlet. ADCP results will be collected on a schedule that is not necessarily coordinated with the tidal periodicities of flow in the Inlet. No scheme for “de-tiding” the data is proposed, but even if one is found, the weak, low-frequency signals of ACC flow may be difficult to extract from the transect series. CTD data may help to define water sources, however an explicit scheme for doing that needs to be laid out. Coordination with inlet CODAR (shore-based radars measuring nearsurface currents) programs is proposed, but availability of CODAR systems in '04-'06 is stated to be quite uncertain. Willette, a fisheries biologist for ADFG, and Pegau, a physical oceanographer at Kachemak Reserve, are competent and will get what can be gotten from the data. A proposal to run more transects for just physical data in some other months (October, January, April?) would give the data set some comparisons, a basis for writing up the results.

The important component of this proposal is testing hypotheses of the effect of the physical oceanography on the salmon fisheries of Cook Inlet. It remains to be established if the Anchor Point July transect is where long-term monitoring for GEM is desired. However, while this evaluation is occurring, the project should provide some short-term payoff by directly relating real-time physical oceanographic conditions and movement of fish for management purposes. Continuous fixed-point measurements of physical data are needed to go with the observations proposed to be collected in this proposal. These continuous physical data should assist with de-tiding data. Funding half of the vessel charter is a significant funding policy question. Is this a normal agency expense that should be paid for as part of this project? Fund contingent on addressing STAC technical concerns and resolution of policy issue on funding transect.

Scientific and Technical Advisory Committee Recommendation: Fund Contingent

Science Director Comments:

Not Available

Science Director Recommendation: Not Available

Public Advisory Committee Comments:

Not Available

Public Advisory Committee Recommendation: Not Available

Executive Director Comments:

The proposal builds physical data collection into a long established (1979) fishing transect at Anchor Point in Cook Inlet. Anchor Point is at the biologically critical juncture of Gulf marine waters and glacially silted freshwater runoff. Proposal also provides an important link between salmon fishery management and physical oceanography that is expected to provide substantial benefits to economic development and enhanced recreational fishing opportunities in the oil spill affected areas of Cook Inlet. Funding a portion of the transect expenses is a fair distribution of responsibilities in our partnership with ADF&G which changes the uses and configuration of the vessel from a fishing charter to a joint fishing and oceanography charter. A revised proposal addressing STAC technical concerns was received.

Executive Director Recommendation: Fund

Trustee Council Comments:

11/10/04 TC meeting action (Not pertinent at this time - Defer). This project was funded by the Trustee Council at its February 9, 2004 TC meeting.

Trustee Council Decision: Fund

Project Number: 040712
Project Title: Research for Nutrient-Based Resource Management in Watersheds and Estuaries
Principal Investigator: Carol Ann Woody
Affiliation: DOI
Disbursing Agency: USGS
Project Location: Prince William Sound
Project Type: New

Funding Approved by Fiscal Year:

FY04: \$173,216.00	FY05: \$177,002.00	FY06: \$152,632.00
FY07: \$0.00	FY08: \$0.00	FY09: \$0.00

Total Funding Approved: \$502,850.00

Abstract:

Proposal offers a strategy for developing a monitoring program for watersheds that would form the basis for a comprehensive understanding of water quality and biological production in relation to natural and human induced variability. Sampling strategy effectively leverages existing funding from Oil Spill Recovery Institute and North Pacific Research Board to minimize costs. Data derived on isotopic signatures of C, N, and S will be invaluable in designing monitoring throughout the GEM area. Important new information would be produced on effects of watersheds on productivities of nearshore environments, the feasibility of using sulfur as indicator of marine related effects, and the relation of MDN to freshwater residence time in juvenile salmon.

Scientific and Technical Advisory Committee Comments:

Proposal offers a clear strategy for developing a monitoring program for watersheds that would form the basis for a comprehensive understanding of water quality and biological production in relation to natural and human induced variability. Sampling strategy effectively leverages existing funding from Oil Spill Recovery Institute and North Pacific Research Board to minimize costs. Data derived on isotopic signatures of C, N, and S will be invaluable in designing monitoring throughout the GEM area. Important new information would be produced on effects of watersheds on productivities of nearshore environments, the feasibility of using sulfur as indicator of marine related effects, and the relation of MDN to freshwater residence time in juvenile salmon. Proposal makes good case that the management implications of information for salmon and salmon-dependent economies and wildlife are very strong for ADF&G, NMFS, and USFWS. On the negative side the proposal has some serious shortcomings in the presentation of hypotheses and methods. Hypotheses need to be re-written to remove tautologies, maps of sampling localities need to be provided, and field methods for sampling and estimation of abundance need to be clearly explained. Fund contingent on receipt of revised proposal addressing peer reviewer concerns.

Scientific and Technical Advisory Committee Recommendation: Fund Contingent

Science Director Comments:

Not Available

Science Director Recommendation: Not Available

Public Advisory Committee Comments:

Not Available

Public Advisory Committee Recommendation: Not Available

Executive Director Comments:

The project provides information on terrestrial-marine linkages in the nearshore and riverine environments that is essential to planning watershed monitoring. Revised proposal addressed peer reviewer concerns. The principal investigators agreed to participate in a watershed workshop that will be held at the January 2005 GEM meeting, and to present an up-to-date report on progress and participate in comparison and evaluation of methods.

Executive Director Recommendation: Fund

Trustee Council Comments:

Approved at the November 10, 2003 TC meeting.

Trustee Council Decision: Fund