

SCIENTIFIC MANAGEMENT UNDER GEM AND LINGERING OIL PROGRAMS

(This is an interim project description and budget. More detail will be provided in a revised proposal to be submitted to the Trustee Council for consideration at their November 25, 2002 meeting.)

Project Number: 030630

Restoration Category: Research/Monitoring

Proposer: Restoration Office / Trustee Council

Lead Trustee Agency: ADF&G (Restoration Office)

Cooperating Agencies: All

Alaska SeaLife Center: No

Duration: Ongoing

Cost FY 03: \$278,400

Cost FY 04: \$ Approximately same

Geographic Area: Spill area wide

Injured Resource/Service: All injured resources and services

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 starting 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 03, the project will support the Scientific and Technical Advisory Committee (STAC) and other aspects of the scientific review process, develop the FY04 *Invitation to Submit Proposals*, provide peer review recommendations and scientific support for the FY 04 GEM Phase II Work Plan, 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, and support the lingering oil effects subcommittee and review process.

INTRODUCTION

In conjunction with the 10th anniversary of the 1989 *Exxon Valdez* oil spill, the Trustee Council, in March 1999, formally dedicated a portion of the Restoration Reserve to long-term monitoring and research in the spill area and adjacent northern Gulf of Alaska. This project will conclude planning for implementing the Trustee Council's vision, now known as the Gulf of Alaska Ecosystem Monitoring and Research program (GEM). In FY 00 a draft scoping document, the Draft GEM Science Program (April 2000), was developed and submitted to the National Research Council (NRC) for preliminary review. This report was preceded and followed by an extensive public involvement process. Meetings to gather advice on the content and future of GEM were held in communities throughout the spill-affected region with stakeholder groups, Alaska Native organizations and tribes, state and federal policy makers, and scientists. This consultation continued into FY 01 with a statewide GEM workshop that drew attendance from throughout the U.S. Building on ideas from the consultations, the workshop and preliminary NRC recommendations, the draft GEM Program Document (GPD), including a draft monitoring and research plan, was produced and forwarded to the NRC for its review in August 2001. The NRC's final report was received in May 2002, revisions to the GEM Program Document were made, and final approval by the Trustee Council is expected in July 2002. In FY 03, this project will support the Scientific and Advisory committee (STAC) and other aspects of the scientific review and advisory process, provide peer review recommendations and scientific support for the FY 03 GEM Phase II Work Plan, develop the FY04 *Invitation to Submit Proposals*, provide peer review recommendations and scientific support for the FY 04 GEM Phase II Work Plan, continue developing a "State of the Gulf Report" as well as regional input to a status report on North Pacific resources now being developed by PICES, and support the lingering oil effects subcommittee and continued efforts.

NEED FOR THE PROJECT

A. Statement of the Problem

In order for the Trustee Council's vision for GEM to be implemented over a five-year period starting in FY 03, the following activities need to be completed in FY 03: 1) support STAC and other aspects of the scientific review and advisory process; 2) provide scientific support for the FY 03 GEM Phase II Work Plan; 3) develop the FY04 *Invitation to Submit Proposals*; 4) support peer review and scientific review process for the FY 04 GEM Phase II Work Plan; 5) continue development of "State of the Gulf Report" as well as regional input to a status report on North Pacific resources now being developed by PICES; and 6) support the lingering oil effects subcommittee and scientific review process.

B. Rationale/Link to Restoration

In deciding to allocate a significant portion of the Restoration Reserve for long-term monitoring and research, the Trustee Council explicitly recognized that complete recovery from the oil spill will not occur for decades and that long-term observation and, possibly, restoration actions are needed if injured resources and services are to be fully restored. The Council further recognized that conservation and improved management of these resources and services will require a

substantial ongoing investment to improve understanding of the biology and marine and coastal ecosystems that support the services as well as the people of the spill region. Hence, the Council made a commitment to development of a long-term monitoring and research program for the spill region that will inform and promote the full recovery and restoration, conservation, and improved management of spill-area resources.

C. Location

The transition to the GEM program will occur primarily at the Restoration Office in Anchorage, with input from spill-area communities and key experts outside Alaska. Monitoring and research carried out under GEM will take place mostly in the coastal and marine environment within the oil spill area and, to the extent necessary, in adjacent parts of the northern Gulf of Alaska.

COMMUNITY INVOLVEMENT AND TRADITIONAL ECOLOGICAL KNOWLEDGE

The incorporation of substantial community involvement and the use of traditional ecological knowledge into the overall GEM program is an important goal and strategy to be addressed during this phase of planning for the GEM project. The Restoration Office will work closely with the Public Advisory Group, stakeholder groups, tribes, and other members of the public in order to ensure that community interests are well represented in the plans for long-term monitoring and research. Community and TEK experts will be included as committees and work groups are developed and will be encouraged to participate in workshops as the program develops.

PROJECT DESIGN

A. Objectives

Specific objectives are to:

- 1) Support the Scientific and Advisory committee (STAC) and other aspects of the scientific review and advisory process:
 - a) Provide scientific guidance and support in developing the Scientific and Technical Advisory Committee (STAC), subcommittees, work groups, and new procedures for peer review and proposal solicitations.
 - b) Provide scientific support to the committees in furthering development of the GEM Monitoring and Research Strategic Plan, including updating and maintaining the GEM gap analysis database.
 - c) Assist Data Systems Manager in developing and implementing data and information policies and procedures.
 - d) Work with stakeholders, interested community groups, and existing community-based projects to develop meaningful ways to incorporate traditional ecological knowledge and community involvement and resource management applications into the program.

- e) Consult and coordinate with other marine research efforts to develop a network of partnerships to complement core monitoring efforts, aid in the peer review process, and expand the scope of the GEM Program. Potential partners include NEP GLOBEC, USGOOS, CORE, PICES, SSSF, NPRB, NPAFC, AAAS, the Northern Fund, and others.
- 2) Provide technical and scientific peer review and support for the FY 03 GEM Phase II Work Plan;
- 3) Develop the FY04 *Invitation to Submit Proposals*;
- 4) Provide peer review and scientific support for the FY 04 GEM Phase II Work Plan;
- 5) Continue developing a “State of the Gulf Report” as well as regional input to a status report on North Pacific resources now being developed by PICES; and
- 6) Support the lingering oil effects subcommittee and associated review process.

B. Methods

The methods described below are organized by project objective (in parentheses):

- (1) Support the Scientific and Advisory committee (STAC) and other aspects of the scientific review and advisory process.
This objective will take the combined efforts of the existing Trustee Council staff, including the Science Director and Science Coordinator, as we continue with the transition to the GEM Program. During FY 02, all the administrative functions of the program were reviewed (procedures for issuing invitation for proposals, receiving and reviewing proposals, reporting requirements, project management, etc.). The Trustee Council made significant changes in these procedures and policies in order to streamline the program, increase efficiency, reduce costs, and ensure public input and involvement and scientific credibility. The office will continue this review in FY 03. In addition, staff will
 - a. Provide scientific guidance and support in working with the Scientific and Technical Advisory Committee (STAC), subcommittees, and work groups. Staff will be instrumental in defining the processes, locating members and organizing staff support for developing the committees. In addition, staff will support implementation of new procedures for peer review and proposal solicitations.
 - b. Provide scientific support to the committees in furthering development of the GEM Monitoring and Research Implementation Plan. This will include organizing meetings and workshops as needed and improving and maintaining the GEM gap analysis database, the GEM and TC bibliographies and supporting document collections.
 - c. Assist Data Systems Manager in implementing data and information policies and procedures. Quality data management is a priority for the GEM Program. Establishing a Data Management Subcommittee, rescuing previously acquired data, and implementing data and information policies and procedures will involve substantial staff time.
 - d. Work with stakeholders, interested community groups, and existing community-based projects to develop meaningful ways to incorporate traditional ecological knowledge, community involvement, and resource management applications into the program. Staff will support and participate in the efforts of ongoing projects

and planning efforts. Staff will review all project proposals for opportunities for TEK, community involvement and resource management applicability.

- e. Consult and coordinate with other marine research efforts.
 - i. Develop a network of partnerships. This will be accomplished through participation in CORE and PICES, active memberships on the Alaska SeaLife Center Scientific Advisory Committee, the Science Coordination Panel of the Southeast Sustainable Salmon Fund, the Board of the North Pacific Research Board, the PICES MONITOR Task Team, and the US GOOS Steering Committee, and by attending and making presentations on GEM at meetings of scientific organizations and other marine research institutions including NEP-GLOBEC, NPAFC, AFS, AAAS, AGU, ASLO, KBRR, PWSSC-OSRI, and at academic institutions such as UAF and UAA. In addition, the Executive Director will continue to pursue a formal Memorandum of Agreement with other research and monitoring entities at the Trustee Council's direction.
 - ii. Assist with other meetings. The Trustee Council is frequently asked to contribute to the costs of other scientific and policy meetings and symposia that would be of benefit to the GEM Program. Participation in this manner greatly aids in building partnerships. In FY 03 these include the PICES MONITOR meeting and a joint meeting with the North Pacific Research Board.

- (2) Provide peer review recommendations and scientific support for the FY 03 GEM Phase II Work Plan. Staff will organize technical peer review of all Phase II proposals and provide recommendations to the STAC. Staff will support STAC review of Phase II proposals.
- (3) Develop the FY04 *Invitation to Submit Proposals*, in consultation with the STAC, the Public Advisory Committee, and other input.
- (4) Provide peer review recommendations and scientific support for the FY 04 Work Plan, as in (2) above.
- (5) Continue development of a "State of the Gulf Report" and provide regional input to a status report on the North Pacific. Working in cooperation with the PICES Secretariat and PICES members, begin developing the "State of the Gulf Report" as part of a larger north Pacific effort now being organized and coordinated by the PICES Secretariat.
- (6) Support the lingering oil effects subcommittee. Assist in organizing peer review and meeting support as needed.

C. Cooperating Agencies, Contracts, and Other Agency Assistance

Federal and state resource agencies will be actively involved in further development of GEM, as will other institutions, particularly the scientific committees involved with planning and implementing monitoring and research in the North Pacific Ocean. These include, for example, the North Pacific Research Board, the North Pacific Marine Science Organization (PICES), the North Pacific Anadromous Fish Commission (NPAFC), the Northern Fund, the Southeast Sustainable Salmon Fund, the Global Oceans Ecosystems Dynamics (GLOBEC) Northeast Pacific Project funded by NOAA and NSF, the Ocean Carrying Capacity (OCC) study of the

National Marine Fisheries Service (NMFS), the Fisheries and Oceanography Coordinated Investigations (FOCI) of NMFS-PMEL, and other NOAA entities.

SCHEDULE

A. Measurable Project Tasks

- October 2002: Support peer review of FY03 Work Plan, Phase II proposals. Assist STAC with review of subcommittee nominations.
- October 2002: Participate in PICES MONITOR task team meeting to present GEM Program Document (GPD), follow ships of opportunity instrumentation development.
- October 29, 2002: Participate in joint Trustee Council-North Pacific Research Board meeting.
- November 2002: Develop STAC recommendations for FY 03 Phase II Work Plan for the November 25, 2002 Trustee Council meeting.
- January 2003: EVOS Annual Meeting joint coordination with SSLI and GLOBEC.
(Other tasks will be included in Full DPD and Budget to be considered by Trustee Council on November 25, 2002.)

B. Project Milestones and Endpoints

- Objective 1: Recommendations for subcommittee members. Attend PICES MONITOR Task Team meeting.
- Objective 2: Scientific recommendations for FY 03 Work Plan, Phase II.
- Objective 3: Develop the FY04 *Invitation to Submit Proposals*.
- Objective 4: Peer review recommendations and scientific support for the FY 04 GEM Work Plan.
- Objective 5: Continued development of “State of the Gulf Report” and pilot status report on the North Pacific now being developed by PICES.
- Objective 6: Recommendations for further studies on lingering oil effects.

C. Completion Date

This project provides ongoing scientific support and management for the GEM and Lingering Oil Programs.

PUBLICATIONS AND REPORTS

The product of this project will be continued development of Chapter 4 of the GEM Program Document – the Implementation Plan, any STAC related documents, the FY 04 Invitation for Proposals, possible subcommittee/workgroup reports and recommendations, and the beginnings of a State of the Gulf Report.

No additional reports will be required and no additional publications are expected.

PROFESSIONAL CONFERENCES

For the purposes of coordination with, and dissemination of information to, other scientists the GEM Program will use the annual PICES and NPAFC meetings, the U.S. GOOS Steering Committee meetings, GLOBEC principal investigators meetings, the American Fisheries Society National Meeting, and other local and regional scientific meetings. Attendance at additional professional conferences may be required for coordination and integration with other programs.

NORMAL AGENCY MANAGEMENT

A program providing coordinated and integrated long-term monitoring and research is beyond the normal management capacity of federal and state agencies.

COORDINATION AND INTEGRATION OF RESTORATION EFFORT

This project will be fully coordinated with and among Trustee agencies, scientific peer reviewers, the Public Advisory Committee, and other regional monitoring and research efforts.

PROPOSED PRINCIPAL INVESTIGATORS

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Ms. McCammon has 29 years of experience in Alaska in business, journalism, communications, and public policy, emphasizing natural resource issues. She has been Executive Director of the Trustee Council since 1994.

Dr. Mundy has 29 years of experience as a fisheries scientist, including 25 years in Alaskan fisheries research and management. As Science Director, Phil has been key to development of the Gulf Ecosystem Monitoring (GEM) program. He has worked as a reviewer of research on the oil spill since 1989.

Dr. Spies has 35 years of experience as a scientist in marine ecology, marine pollution and toxicology, the effects of petroleum on marine organisms, and benthic ecology. He is president of Applied Marine Sciences, Inc. and has been the Trustee Council's Chief Scientist since 1991.

Ms. Miller has 14 years of experience in natural and marine resource management in various parts of the U.S. and its territories. She has been an employee of the Trustee Council since April 2002.

*Scientific Support Services for the Trustee Council
Travel Schedule
Project 030630*

Task	Chief Scientist				Peer Reviewers				Cost
	number	days @ \$46*	nights@ \$120*	airfare	number	days @ \$46*	nights@ \$120*	airfare	
Reviews/Workshops	1	3	3	\$850	2	8	8	#####	\$4,476
FY03 / 04 Workplan	1	4	4	\$850	5	5	5	#####	\$6,844
Special Projects	1	1	1	\$850					\$1,016
Miscellaneous									
				Sub total				Sub total	Total
Total	3	\$368	\$960	\$3,878	7	\$598	\$1,560	#####	\$12,336