

Gulf Ecosystem Monitoring and Research Program Data System

Project Number: 02455

Restoration Category: Monitoring and research

Proposer: Restoration Office, *Exxon Valdez* Oil Spill Trustee Council

Lead Trustee Agency: Restoration Office (ADFG)

Cooperating Agencies: None

Alaska SeaLife Center: No

Duration: 1st year, on going project

Cost FY 02: \$105,000

Geographic Area: All

Injured Resource: All

ABSTRACT

This project will initiate an ongoing data management and information transfer system for GEM (Gulf Ecosystem Monitoring and Research, the Trustee Council's long-term monitoring and research program currently under development). GEM is being designed to monitor the ecosystems of the northern Gulf of Alaska and the adjacent coastal regions for a very long time period. Data collection, archiving, transfer, delivery, and presentation are critical components of GEM. Project funding will be used to hire a data system manager to provide the leadership and expertise necessary for this essential part of the GEM program.

INTRODUCTION

In March of 1999 the Trustee Council decided to devote a large portion of the remaining settlement funds to a long-term monitoring and research program as part of the legacy of the *Exxon Valdez* oil spill. The draft GEM Program Document, which is currently under review by the National Research Council and scheduled for final adoption by the Trustee Council in Summer 2002, calls for clear and effective approaches to gathering information and making it widely available in understandable formats. The data collected with Trustee Council funds must be handled and stored in ways that ensure easy and efficient access by all users both now and in the future.

The GEM data policies incorporate ten broad elements (draft GEM Program Document, Vol. I, p. 71, August 2001):

1. A commitment to the maintenance and long-term availability of data.
2. Full and open sharing of data at low cost, after verification and validation.
3. Timely availability of data, depending on the type of data. Some data will be available almost immediately; other data may be available with 24 months.
4. Availability of data on the GEM public web site.
5. Identification of the origin of all data with a citation.
6. Adherence to data collection and storage standards.
7. Provision of citations to the GEM bibliography.
8. Encouragement of active participation in the GEM web site for all participants.
9. Long-term archiving of all data in a designated storage facility.
10. Acceptance of and adherence to the data policies as a condition for participation in the GEM program and receipt of funding.

Need for the Project

A. Statement of Problem

The Trustee Council established goals for the GEM program (April 2000) that make data management a top priority. The “Inform” goal states that the GEM program will provide integrated and synthesized information to the public, resource managers, industry and policy makers in order for them to respond to changes in natural resources. The “Solve” goal requires developing tools, technologies, and information that can help resource managers and regulators improve management of marine resources and address problems that may arise from human activities. The “Detect” goal also has a data management and communication aspect, as GEM is asked to serve as a sentinel (early warning) system by

detecting annual and long-term changes in the marine ecosystem, from coastal watersheds to the central Gulf of Alaska.

Many issues need resolving during the development stages of any data system, which requires a professional data system manager to provide guidance and direction in developing and implementing a successful system.

B. Rationale/Link to Restoration

In order to accomplish the Trustee Council's goals for the GEM program, management of monitoring and research data is a top priority. The purpose of this project is hire a GEM program data system manager to develop and implement a data system for GEM.

C. Location

The data system manager will work in the *Exxon Valdez* Oil Spill Trustee Council Office in Anchorage. The data manager will generally work under the supervision of the Science Director, although for some projects will work under the supervision of the Executive Director.

Project Design

A. Objectives

The Data Manager will work under the general direction and supervision of the Trustee Council's Science Director to:

- Implement and manage a data and information system consistent with the provisions of the GEM Program Document that provides data, information products (maps, tables, summary reports) and documentation for scientific researchers, resource managers, policy makers, and the public.
- Determine how best to incorporate existing and future data sets identified by the Science Director and other scientists into the data and information system.
- Chair a Data Advisory Group; serve as liaison to federal/state agencies, other research entities, principal investigators, other technical support personnel, as well as stakeholders and the general public.

Specific duties will include:

1. Develop a data policy that specifies how, when, and in what format data collected under the GEM program will be provided to GEM.
2. Develop data archiving policies and procedures.
3. Develop procedures for determining how, where, and for how long different kinds of data and metadata should be stored.
4. Develop GEM data standards that are consistent with federal, state, and industry standards.

molly_mccammon@oilspill.state.ak.us

Dr. Phil Mundy
Science Director
Exxon Valdez Oil Spill Trustee Council
441 West 5th Ave., Suite 500
Anchorage, AK 99501
(907) 278-8012
phil_mundy@oilspill.state.ak.us

PRINCIPAL INVESTIGATOR

Ms. McCammon has 25 years of experience in Alaska in recreation and tourism, journalism, communications, and public policy, emphasizing natural resource issues. She has been Executive Director of the Trustee Council since 1994.

Dr. Phil Mundy holds a Ph.D. in Fishery Science and has been Science Coordinator (now Science Director) for the *Exxon Valdez* Oil Spill Restoration Office since 1999. He brings 28 years of experience in computer science to the Data System project .

FY 02 EXXON VALDEZ TRUSTEE COUNCIL PROJECT BUDGET

October 1, 2001 - September 30, 2002

Budget Category:	Authorized FY 2001	Proposed FY 2002						
Personnel		\$47.5						
Travel		\$16.1						
Contractual		\$20.0						
Commodities		\$2.4						
Equipment		\$10.5						
Subtotal		\$96.5	LONG RANGE FUNDING REQUIREMENTS					
General Administration		\$8.5	Estimated FY 2003					
Project Total	\$0.0	\$105.0						
Full-time Equivalentents (FTE)		0.6						
Other Resources			Dollar amounts are shown in thousands of dollars.					

NOTE: \$105.0 approved by TC 8/6/01 contingent on preparation and review of a Detailed Project Description and budget.

FY02

Prepared: March 15, 2002

Project Number: 02455
 Project Title: GEM Data System
 Agency: Restoration Office (ADF&G)

FY 02 EXXON VALDEZ TRUSTEE COUNCIL PROJECT BUDGET

October 1, 2001 - September 30, 2002

Personnel Costs:		GS/Range/ Step	Months Budgeted	Monthly Costs	Overtime	
Name	Position Description					
Bob Walker	Data Manager	22D	6.5	7.3		
Subtotal			6.5	7.3	0.0	
Personnel Total						
Travel Costs:		Ticket Price	Round Trips	Total Days	Daily Per Diem	
Description						
Travel for applicants' interviews						
Anchorage to Juneau		0.4	2	4	0.2	
Anchorage to Fairbanks		0.3	3	9	0.2	
Travel for Data Advisory Group						
Attendance at professional conference (Anchorage to WDC)		1.4	2	8	0.2	
Travel Total						

FY02

Project Number: 02455
 Project Title: GEM Data System
 Agency: Restoration Office

FY 02 EXXON VALDEZ TRUSTEE COUNCIL PROJECT BUDGET

October 1, 2001 - September 30, 2002

Contractual Costs:	
Description	
Data support services (e.g., digitizing data, etc.) Technical consultant services (web support, database development)	
When a non-trustee organization is used, the form 4A is required.	Contractual Total
Commodities Costs:	
Description	
Software, disks, etc.	
	Commodities Total

FY02

Project Number: 02455
Project Title: GEM Data System
Agency: Restoration Office

FY 02 EXXON VALDEZ TRUSTEE COUNCIL PROJECT BUDGET

October 1, 2001 - September 30, 2002

New Equipment Purchases:		Number of Units	Unit Price	
Description				
	Computer and printer Related computer equipment (e.g., enhanced web server) Scanner			
Those purchases associated with replacement equipment should be indicated by placement of an R.			New Equipment Total	
Existing Equipment Usage:		Number of Units		
Description				

FY02

Project Number: 02455
Project Title: GEM Data System
Agency: Restoration Office