# Planning for Long-term Monitoring and Research Program

Project Number: 01630

Restoration Category: Research/Monitoring

Proposer: Restoration Office, Exxon Valdez Oil Spill Trustee Council

Lead Trustee Agency: Restoration Office (ADFG)

Cooperating Agencies: All

Alaska SeaLife Center: No

Duration: 2nd year of a 3-year project

Cost FY 01: \$136,000 approved August 2000

Additional \$127,400 requested December 2000

TOTAL \$263,400

Cost FY 02: TBD

Geographic Area: Entire oil-spill region

Injured Resource/Service: All injured resources and services

#### **ABSTRACT**

In March 1999 the Trustee Council earmarked a minimum of \$120 million in funds from the Restoration Reserve for a long-term monitoring and research effort in the spill area and adjacent northern Gulf of Alaska. Planning for what is now called the Gulf Ecosystem Monitoring and Research program (GEM) was initiated in FY 99 and will continue through FY 02. In FY 00, a draft GEM Science Program (April 2000) was developed and submitted to the National Research Council (NRC) for review. In FY 01, follow up on the NRC recommendations on the GEM Science Program will occur. In addition, a draft Monitoring and Research Plan will be developed in consultation with spill-area stakeholders, resource managers, and the scientific community. The plan will also be coordinated with such other large-scale programs as the U.S. Global Ocean Ecosystem Dynamics (GLOBEC), the North Pacific Marine Science Organization (PICES), and the Coastal-Global Ocean Observing System (C-GOOS), and then delivered for review to the NRC. This project will also help develop the *FY 02 Invitation* which will request proposals for projects to accomplish the transition to the long-term program. This project will be accomplished through the combined efforts of the Restoration Office and the Chief Scientist.

#### *INTRODUCTION*

In March 1999 the Trustee Council earmarked a minimum of \$120 million in funds from the Restoration Reserve for a long-term monitoring and research effort in the spill area and adjacent northern Gulf of Alaska. The GEM fund will be managed as an endowment, providing annual funding of \$5 to \$10 million depending on investment earnings. Accordingly, Restoration Office staff and representatives of Trustee agencies have begun to develop what is now called the Gulf Ecosystem Monitoring and Research program (GEM). The mission of GEM is to sustain a healthy and biologically diverse marine ecosystem in the northern Gulf of Alaska and the human use of the marine resources in that ecosystem through greater understanding of how its productivity is influenced by natural changes and human activities. The goals of GEM are to: (1) detect: serve as an early warning system by detecting annual and long-term changes in the marine ecosystem; (2) understand: identify causes of change in the marine ecosystem, including natural variation, human influences, and their interaction; (3) predict: develop the capacity to predict the status and trends of natural resources; (4) inform: provide integrated and synthesized information to the public, resource managers, industry and policy makers; and (5) solve: develop 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.

A first draft of the GEM Science Program was made available for public review and comment in 1999; a revised draft was submitted to the National Research Council for review in April 2000 under Project /360. During the years FY 01 and FY 02, the framework for the overall program will be finalized and a monitoring and research plan will be developed. Implementation of GEM is scheduled to begin in FY 03 (October 2002).

#### NEED FOR THE PROJECT

## A. Statement of the Problem

Development of a successful GEM program is a complex undertaking, with a number of aspects and requirements that will go through several iterations. First, it is essential that the program be based on input from scientists and natural resource managers familiar with marine ecosystems, long-term ecological monitoring and research programs, and existing agency and university monitoring and research programs and databases. Second, it is essential that stakeholders and the general public participate in designing the program and have confidence that implementation of GEM will lead to the sustained use and conservation of the northern Gulf of Alaska marine ecosystem. Finally, the GEM program must receive independent peer review during and before implementation so it can be modified and improved in response to review comments and recommendations. In order to meet the FY 03 implementation goal, it is necessary that the progress made toward satisfying these requirements in FY 00 be continued in FY 01.

#### 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

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. Most of the planning activities described in this proposal will take place in Anchorage and in spill-area communities.

### COMMUNITY INVOLVEMENT AND TRADITIONAL ECOLOGICAL KNOWLEDGE

The decision by the Trustee Council to use a significant portion of funds in the Restoration Reserve for long-term monitoring and research was made after extensive public review and comment, including meetings in most spill-area communities, in FY 98 and FY 99. The Council's Community Involvement Coordinator and an expert in traditional ecological knowledge (Project \052) have participated in the discussions that led to the first draft of the GEM program. In FY 00, a series of visits to spill-area communities, public meetings, and presentations to stakeholder groups further involved the public in development of GEM. In addition, one of the explicit goals of GEM is to involve communities in gathering data and other information, including local and traditional knowledge, that contribute to understanding of the spill-area ecosystem.

### **PROJECT DESIGN**

## A. Objectives

The mission of the GEM program is to sustain a healthy and biologically diverse marine ecosystem in the northern Gulf of Alaska and the human use of the marine resources in that ecosystem through greater understanding of how its productivity is influenced by natural changes and human activities. The goal of this project is to design the GEM program and monitoring and research plan.

Specific objectives are to:

- (1) Develop a draft GEM Science Program (accomplished in April 2000) and draft GEM Monitoring and Research Plan. Incorporate feedback from the public, stakeholders, and the scientific community in their development and revision.
- (2) Consult and coordinate with biologists, oceanographers, and other scientists working on other state, national, and international programs. These consultations will focus upon those working with prior or ongoing agency and university monitoring and research programs, plans, projects, and databases in the Gulf of Alaska and north Pacific Ocean. Another key group will be those involved in establishing other large scale marine ecological monitoring programs (i.e., GOOS, GLOBEC, PICES, PISCO, FOCI), including efforts in the Gulf of Mexico and the Gulf of Maine.
- (3) Assist with independent peer review by the National Research Council of the GEM Science Program (April 2000) and draft GEM Monitoring and Research Plan.
- (4) Prepare a final GEM Science Program and final GEM Monitoring and Research Plan, reflecting the comments of the National Research Council. Contribute to development of the FY 02 and FY 03 *Invitations to Submit Proposals* regarding proposals to transition to GEM in FY 02 with implementation starting in FY 03. Plan for projects to obtain information and advice needed to plan for and accomplish the transition to the long-term program.
- (5) Develop the infrastructure in Alaska to develop and implement GEM, including data management and web-based communications (see Project 01455).

## B. Methods

The methods described below are organized by project objective (in parentheses) and only pertain to activities proposed to be carried out in FY 01:

(1) Develop draft Monitoring and Research Plan. A conceptual draft ("straw dog") of the GEM Monitoring and Research Plan was developed at the end of FY 00 and presented for review at the Trustee Council's Annual Workshop, October 12-13, 2000. Development of the "straw dog" presented in October had the benefit of earlier input by numerous stakeholders at small workshops ("focus groups") conducted under Project 00630. The October workshop was organized as an intensive work session and involved the general public, stakeholders, resource agency managers, scientists, and peer reviewers. Input and feedback received from the workshop were analyzed and used for the next revision of the draft plan. A draft conceptual outline of the draft Monitoring and Research Plan is being developed and will be submitted to the Trustee Council and the NRC in early December 2000 for review and discussion. A revised draft, incorporating comments from the Trustee Council and the NRC, will be presented to the Trustee Council by mid-January 2001. From mid-January through March 2001, using a combination of small writing teams, peer reviewers, and experts as needed, the Restoration Office will develop the draft Monitoring and Research Plan based on the conceptual outline. In April 2001 the draft Monitoring and Research Plan will be presented to the Trustee Council for

adoption. From April through May 2001 the final editing of the draft plan will be completed. The final draft will be sent to the NRC for review by early June 2001.

- (2) Consult and coordinate with other state, national and international programs. Additional comments will be obtained from scientists working with other large-scale monitoring and research programs and projects in the northern Gulf of Alaska or the north Pacific Ocean (e.g., GLOBEC, PICES, FOCI, GOOS, PISCO), and with others working on large scale programs in the Gulf of Mexico and Gulf of Maine. The Science Coordinator presented the monitoring plan to PICES scientists at the PICES annual meeting in Hakodate, Japan, in October 2000. Obtaining detailed information about other ongoing data gathering efforts, including ongoing agency and university programs, will allow GEM to be refined to complement and take advantage of ongoing work, thus achieving greater scientific integration, applicability to management needs, cost savings, and efficiency.
- (3) <u>Assist with NRC review</u>. The "straw dog" draft Monitoring and Research Plan was presented to the NRC in October 2000. An outline of a revised draft GEM Monitoring and Research Plan will be presented to the NRC in early December 2000, with a fully developed plan to be finalized by June 2001. Interim recommendations on the draft GEM Science Program (April 2000) are scheduled to be received from the NRC in February 2001, and will be incorporated in a revised Science Program document and revised Monitoring and Research plan. The NRC will be briefed on the draft GEM Monitoring and Research Plan at two meetings in summer 2001.
- (4) <u>Transition Projects.</u> The *FY 02 Invitation to Submit Proposals*, scheduled to be issued in February 2001, will invite proposals to assist in the transition to a long-term monitoring and research program. Development of the appropriate request will require considerable effort, including additional consultation by Restoration Office staff with the Chief Scientist and core peer-reviewers.
- (5) GEM Infrastructure, Data Management, and Web-Based Communication. In order to implement a fully-developed long-term monitoring program, the necessary infrastructure must be in place. A number of issues related to this were identified in the GEM Science Program (April 2000) document: administration, scientific advice, peer review and management, data and information management and transfer, and public advice and involvement. An interim report from the National Research Council is expected in February 2001 to provide some guidance on these issues. Those recommendations, plus others from the Public Advisory Group and the Trustee agencies, will be used to develop a recommended approach for the Trustee Council to take.

## C. Cooperating Agencies, Contracts, and Other Agency Assistance

Representatives of all Trustee agencies are involved in developing the GEM program and Monitoring and Research Plan. In addition to a direct role in developing GEM, agency representatives will be involved in the continuing process of identifying and describing prior and existing monitoring and research programs, plans, projects, and databases relevant to the northern Gulf of Alaska. There may be need for one or more small personal services contracts to

obtain timely information needed in the further development of GEM (e.g., with a statistician in regard to the overall sampling design of the GEM Monitoring and Research Plan).

Beyond the participation of Trustee agencies, there will be consultations with other institutions and programs involved in monitoring and research in the north Pacific Ocean. These include, for example, the North Pacific Marine Science Organization (PICES) and the Global Oceans Ecosystems Dynamics (GLOBEC) Northeast Pacific Project, which is sponsored jointly by the National Science Foundation and National Oceanic and Atmospheric Administration.

#### **SCHEDULE**

# A. Measurable Project Tasks

*FY 01* 

October 2000: Present draft GEM Monitoring and Research Plan at EVOS Annual

Workshop and at PICES annual meeting

October –

December 2000: Analyze input and feedback received from EVOS Annual Workshop;

develop conceptual outline of a revised Draft GEM Monitoring and

Research Plan

December 2000: Outline of Draft GEM Monitoring and research Plan presented to Trustee

Council and National Research Council review committee for discussion

December 2000 -

January 2001: Revise outline of draft to incorporate feedback from Trustee Council and

National Research Council

January 2001: Present outline of draft GEM Monitoring and Research Plan to Trustee

Council for approval; public comment accepted

January-March 2001: Small writing groups, reviewers, and experts (as needed) assist in further

developing draft GEM Monitoring and Research Plan

February 2001: Receive interim report from NRC on draft GEM Science Program (April

2000); respond to recommendations as needed

April 2001: Present draft GEM Monitoring and Research Plan to Trustee Council for

adoption; additional public comment

April - May 2001: Final revision and editing of draft GEM Monitoring and Research Plan

June 2001: Submit draft GEM Monitoring and Research Plan to NRC

June –

September 2001: Brief NRC review committee as needed. Continue work on developing

other aspects of GEM (community involvement, data management, etc.)

*FY 02* 

November 2001: Receive final report from NRC on draft GEM Science Program and

Monitoring and Research Plan (Extension of draft plan schedule could

delay this)

Dec 2001/Jan 2002: Revise GEM Science Program and Monitoring and Research Plan based on NRC review; circulate for public comment; adopt final documents (Extension of draft plan schedule could delay this)

# B. Project Milestones and Endpoints

Progress toward project objectives in FY 01 will be completed according to the schedule above. The following overall milestones are key:

- 1. Assist in developing draft Monitoring and Research Plan; coordinate review and revision with EVOS annual meeting in October 2000, public meetings, the Trustee Council, and the NRC.
- 2. Revise GEM Science Program incorporating NRC comments.
- 3. Contribute to FY 02 Invitation.

# A. Completion Date

The GEM Science Program and Monitoring and Research Plan are scheduled to be approved by the Trustee Council in January 2002. Implementation of GEM will begin with the FY 03 work plan cycle and will be ongoing. These dates are dependent on all the writing and review deadlines and may be adjusted based on actual completion dates.

#### **PUBLICATIONS AND REPORTS**

The products of this project will be the GEM Science Program and the GEM Monitoring and Research Plan. No reports will be required and no additional publications are expected.

#### PROFESSIONAL CONFERENCES

The Science Coordinator presented the draft GEM Monitoring Plan to the PICES Annual Meeting in Hakodate, Japan, October 2000. The Science Coordinator will present the draft GEM monitoring plan at the annual meeting of the American Fisheries Society in Phoenix, AZ in August 2001.

#### NORMAL AGENCY MANAGEMENT

The Trustee Council directed the executive director and chief scientist to develop a plan for long-term monitoring and research (i.e., GEM) in a resolution adopted on March 1, 1999, in regard to the expenditure of Restoration Reserve funds. Thus, this project is something that is appropriately carried out by the Restoration Office.

#### COORDINATION AND INTEGRATION OF RESTORATION EFFORT

This project will be fully coordinated with and among Trustee agencies, scientific peer reviewers, the Public Advisory Group, and others.

#### PROPOSED PRINCIPAL INVESTIGATOR

Molly McCammon, Executive Director Exxon Valdez Oil Spill Trustee Council 645 G Street, Suite 401
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907-278-8012
907-276-7178 (fax)
<molly\_mccammon@oilspill.state.ak.us>

Dr. Robert Spies, Chief Scientist Exxon Valdez Oil Spill Trustee Council Applied Marine Sciences 4749 Bennett Drive, Suite L Livermore, California 94550 925-373-7142 925-373-7834 (fax) spies@amarine.com

Dr. Phil Mundy, Science Coordinator *Exxon Valdez* Oil Spill Trustee Council 645 G Street, Suite 401 Anchorage, Alaska 99501 907-278-8012 907-276-7178 (fax) 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. Spies has 35 years of experience as a scientist in 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.

Dr. Mundy has 27 years of experience as a fisheries scientist, including 24 years in Alaskan fisheries research and management. As Science Coordinator since 1999, Phil has been key to

development of the Gulf Ecosystem Monitoring (GEM) program. research on the oil spill since 1989.	He has worked as a review of

### **MEMORANDUM**

TO: Trustee Council

FROM: Molly McCammon

**Executive Director** 

RE: Supplemental Funds for Project 01630 / Planning for GEM

DATE: July 26, 2001

Project 01630 included funding for contract writers to draft the Scientific Background chapter of the GEM program document. This chapter provides the essential scientific basis for the long-term research and monitoring plan. The use of contract writers proved to be a highly effective technique for ensuring that this chapter includes a current and thorough description of the scientific understanding of the Gulf of Alaska.

Human use is currently described in Chapter 2 of the GEM draft. However, as our work on the draft has continued, we have concluded that a full presentation of the current state of knowledge about human activities and human impacts should be a section of the Scientific Background chapter. We estimate that a contract to research and write this section will cost about \$15,000. Only about \$5,000 of the existing Project 01630 allocation is available for reprogramming to this purpose.

Unspent funds are available within Project 01455/GEM Data System due to a delay in the hiring of a GEM data manager (originally anticipated for late in FY 01; now expected early in FY 02).

Executive Director's Recommendation: Trustee Council approve the transfer of \$10,700 from Project 01455/GEM Data System to Project 01630/Planning for GEM for the purpose of contracting for preparation of a human uses section for the GEM document.

[NOTE: \$10,000 would be for the contract itself; \$700 would be for ADNR general administration costs).

October 1, 2000 - September 30, 2001

	Authorized	Proposed	PROPOSED FY 01 TRUSTEE AGENCIES TOTALS					
Budget Category:	FY 00	FY 01	ADEC	ADF&G	ADNR	USFS	DOI	NC
			\$9.5	\$33.3	\$181.3	\$8.5	\$21.0	\$!
Personnel	\$0.0	\$56.7						
Travel	\$15.0	\$20.0						
Contractual	\$60.0	\$161.5						
Commodities	\$5.5	\$5.5						
Equipment	\$0.0	\$0.0		LONG	RANGE FUND	DING REQUIR	REMENTS	
Subtotal	\$80.5	\$243.7				Estimated		
General Administration	\$4.2	\$19.7				FY 2002		
Project Total	\$84.7	\$263.4						
Full-time Equivalents (FTE)								
		·	Dollar amou	nts are shown	in thousands	of dollars.		
Other Resources								

## Comments:

In August 2000, the Trustee Council approved \$136,000 for this project. The additional request, to be considered by the Council in December 2000, is \$127,400.

PREPARED 11/24/00

FY01

Project Number: 01630

Project Title: Planning for Long-Term Research & Monitoring Program

Lead Agency: ADFG/Restoration Office

October 1, 2000 - September 30, 2001

	Authorized	Proposed						
Budget Category:	FY 00	FY 01						
Personnel		\$6.8						
Travel		\$20.0						
Contractual		\$0.0						
Commodities		\$5.5						
Equipment		\$0.0		LONG	RANGE FUND	ING REQUIR	EMENTS	
Subtotal	\$0.0	\$32.3				Estimated		
General Administration		\$1.0				FY 2002		
Project Total	\$0.0	\$33.3						
Full-time Equivalents (FTE)		0.1						
		Dollar amounts are shown in thousands of dollars.						
Other Resources								

Comments:

FY01

Project Number: 01630

Project Title: Planning for Long-Term Research & Monitoring

Program

October 1, 2000 - September 30, 2001

Personnel Costs:		GS/Range/	Months	Monthly		Propo
Name	Position Description	Step	Budgeted	Costs	Overtime	FY
Claudia Slater	Agency Liaison		1.0	6.8		1
NOTE: This \$6.8 was appro					1	
						1
	Subtotal		1.0	6.8	0.0	1
	Subiolai		1.0	\$		
Travel Costs:		Ticket	Round		rsonnel Total Daily	Propo
Description		Price	Trips		,	FY
Travel for Restoration Office for National Research Coun stakeholder presentation me		·	·		2	
NOTE: \$15.0 of the \$20.0 w	ust 2000.				1	
					Travel Total	\$2

FY01

Project Number: 01630

Project Title: Planning for Long-Term Research & Monitoring

Program

October 1, 2000 - September 30, 2001

Contractual Costs:	Propo
Description	FY
When a non-trustee organization is used, the form 4A is required.  Contractual Total	\$
Commodities Costs:	Propo
Description	FY
Presentation/public education materials for Restoration Office	
NOTE: This \$5.5 was approved by the Trustee Council in August 2000	
NOTE: This \$5.5 was approved by the Trustee Council in August 2000.	
Commodities Total	\$

FY01

Project Number:01630

Project Title: Planning for Long-Term Research & Monitoring Program

October 1, 2000 - September 30, 2001

New Equipment Purchases:	Number	Unit	Propo
Description	of Units		FY
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Those purchases associated with replacement equipment should be indicated by placement of an R	New Fau	ipment Total	<u> </u>
Existing Equipment Usage:		Number	Inven
Description		of Units	Age
			<u>J</u> -

FY01

Project Number: 01630

Project Title: Planning for Long-Term Research & Monitoring

Program

October 1, 2000 - September 30, 2001

	Authorized	Proposed						
Budget Category:	FY 00	FY 01						
Personnel		\$7.4						
Travel		\$0.0						
Contractual	\$60.0	\$161.5						
Commodities		\$0.0						
Equipment		\$0.0		LONG	RANGE FUND	ING REQUIRI	EMENTS	
Subtotal	\$60.0	\$168.9				Estimated		
General Administration	\$4.2	\$12.4				FY 2002		
Project Total	\$64.2	\$181.3						
Full-time Equivalents (FTE)		0.1						
			Dollar amou	ints are showr	n in thousands	of dollars.		
Other Resources								

Comments:

NOTE: \$5.3 of the \$12.4 General Administration was approved by the Trustee Council in August 2000.

**FY01** 

Project Number: 01630

Project Title: Planning for Long-Term Research & Monitoring

Program

October 1, 2000 - September 30, 2001

Personnel Costs:		GS/Range/	Months	Monthly		Propo
Name	Position Description	Step		Costs	Overtime	FY
Carol Fries	Agency Liaison		1.0	7.4		
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NOTE: This \$7.4 was appro	oved by the Trustee Council in August 2000	).				1
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	Subtotal		1.0	7.4	0.0	
	Cubicial		1.0		sonnel Total	\$
Travel Costs:		Ticket	Round	Total	Daily	Propo
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FY01

Project Number: 01630

Project Title: Planning for Long-Term Research & Monitoring

Program

October 1, 2000 - September 30, 2001

Contractual Costs:	Propo
Description	FY
Applied Marine Sciences (Chief Scientist Bob Spies):  Time and travel for Spies to participate in development, presentation, and review of GEM Services of G. Oosterhout on modeling component of GEM Time and travel for lead writers  Time for core peer reviewers	16
NOTE: \$60.0 of the \$161.5 was approved by the Trustee Council in August 2000.	0.10
When a non-trustee organization is used, the form 4A is required.  Contractual Total	•
Commodities Costs: Description	Propo FY
Commodities Total	\$

FY01

Project Number: 01630

Project Title: Planning for Long-Term Research & Monitoring

Program

October 1, 2000 - September 30, 2001

New Equipment Purchases:	Number	Unit	Propo
Description	of Units		FY
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Those purchases associated with replacement equipment should be indicated by placement of an R	New Fau	ipment Total	<u> </u>
Existing Equipment Usage:		Number	Inven
Description		of Units	Age
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FY01

Project Number: 01630

Project Title: Planning for Long-Term Research & Monitoring

Program

October 1, 2000 - September 30, 2001

Personnel Costs:		GS/Range/	Months	Monthly		Propo
Name	Position Description	Step		Costs	Overtime	FY
Ken Holbrook	Agency Liaison		1.0	7.4		•
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Plus \$1.1 GA						
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NOTE: This \$8.5 was appro	oved by the Trustee Council in August 2000	).				1
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	I Subtotal		1.0	7.4	0.0	
	Cubicital		1.0		sonnel Total	\$
Travel Costs:		Ticket	Round			Propo
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					Travel Total	\$

FY01

Project Number: 01630

Project Title: Planning for Long-Term Research & Monitoring

Program

Agency: USFS

October 1, 2000 - September 30, 2001

Personnel Costs:		GS/Range/	Months	Monthly		Propo
Name	Position Description	Step		Costs	Overtime	FY
	Agency Liaison		1.0	6.3		1
Plus \$0.9 GA						1
						1
Dede Bohn	USGS Liaison		2.0	6.0		1:
For work on GEM "gap	analysis"					1
Plus \$1.8 GA						1
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NOTE: The \$7.2 for C. Berg	g was approved by the Trustee Council in A	August 2000.				!
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FY01

Project Number: 01630

Project Title: Planning for Long-Term Research & Monitoring

Program Agency: DOI

October 1, 2000 - September 30, 2001

Personnel Costs:		GS/Range/	Months	Monthly		Propo
Name	Position Description	Step	Budgeted	Costs	Overtime	FY
Bruce Wright	Agency Liaison		1.0	8.5		
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Plus \$1.3 G	A					(
NOTE: This \$9.8 was approved by the Trustee Council in August 2000		).				
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	Subtotal		1.0	8.5	0.0	
Personnel Total						
Travel Costs:		Ticket				
Description		Price	Trips	Days	Per Diem	FY
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Travel Total						

FY01

Project Number: 01630

Project Title: Planning for Long-Term Research & Monitoring

Program

Agency: NOAA

October 1, 2000 - September 30, 2001

Personnel Costs:		GS/Range/	Months	Monthly		Propo
Name	Position Description	Step	Budgeted	Costs	Overtime	FY
Marianne See	Agency Liaison		1.0	8.3		1
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Plus \$1.2 G <i>P</i>	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \					
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	Subtotal		1.0	8.3		\$
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Travel Total						

FY01

Project Number: 01630

Project Title: Planning for Long-Term Research & Monitoring

Program

Agency: ADEC