



FISCAL YEAR 2001

WORK PLAN

JANUARY 2001



Exxon Valdez Oil Spill Trustee Council

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Fiscal Year 2001

Work Plan

January 2001

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Fiscal Year 2001 Work Plan

January 2001

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Dear Reader,

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. This Work Plan describes the research, monitoring, and general restoration projects funded by the Council for federal fiscal year 2001, and touches on the other activities of the Council as well.

FY 01 continues the transition from the current restoration program to a program designed to ensure the long-term health and conservation of resources injured by the spill. In March 1999 the Trustee Council earmarked \$55 million of Restoration Reserve funds for future habitat protection and the remainder in the Reserve, an estimated \$115 million, for long-term research and monitoring in the spill area and adjacent northern Gulf of Alaska. Planning for the research and monitoring program (referred to as GEM, Gulf Ecosystem Monitoring) began in FY 00 and continues in FY 01.

Synthesizing results of EVOS research conducted to date continues to be a priority. As in past years, a number of projects include funding for preparation of manuscripts to be submitted to independent peer-reviewed journals. To date, 401 EVOS manuscripts have been published. In FY 01, the Sound Ecosystem Assessment, one of the three major ecosystem studies, will be the topic of a special volume of the prestigious journal, *Fisheries Oceanography*. Funding is also provided for preparation of the Trustee Council's final report, which will comprehensively describe the Council's activities from the time of the spill through the original 10-year restoration program (FY 02).

The FY 01 Work Plan continues other themes begun in earlier years: monitoring the recovery status of species injured by the oil spill (such as the killer whale survey), researching factors that may be persisting in limiting the recovery of injured resources (such as the effects of oil contamination on pink salmon reproduction), conducting research that should lead to long-term improvements in resource management (such as the herring stock identification project), and direct restoration of injured resources (such as the Solf Lake sockeye salmon enhancement project). Also in FY 01, a follow-up assessment of the amount of oil remaining on shorelines in Prince William Sound will be conducted.

The collection of projects funded in FY 01 continues the Trustee Council's commitment to community involvement in the restoration process. The Youth Area Watch program is now underway in schools in Prince William Sound, lower Cook Inlet, and Kodiak Island. The Community Involvement Project is continuing, with a shift in emphasis in FY 01 to provision of technical assistance to communities to

participate in the development of GEM and to further develop their natural resource programs and stewardship capacity.

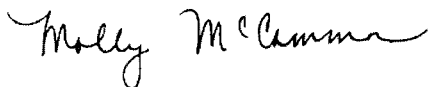
Also of interest, the FY 01 Work Plan includes four projects that will be conducted at the Alaska SeaLife Center in Seward. The SeaLife Center, which was funded in part by the Trustee Council, opened in May 1998. It provides unique, technologically advanced facilities for research on marine mammals, fish and seabirds.

An important continuing trend, integral to transitioning into a program of a size that is sustainable over the long term, is the decrease in the size of the research, monitoring, and general restoration program. Funding for research, monitoring, and general restoration activities is declining in FY 01 (from \$8.3 million in FY 00 to \$6 million in FY 01), as are the administrative costs of the program (from \$2.0 million in FY 00 to \$1.5 million in FY 01). Agency project management costs also are declining accordingly.

A final comment concerns activities that are not funded through the Work Plan, but which help to complete the picture of the Trustee Council's restoration effort. To date, the Council's program to protect habitat important to the recovery of injured resources and services has purchased more than 698,000 acres of land and conservation easements. FY 01 funding will support the final steps of the protection process for several remaining small parcels. In addition, in January 2001 the Council approved \$1 million for the U.S. Department of the Interior to enter into a grant with two non-profits to continue the Council's habitat protection effort through FY 02. The non-profits bring several advantages to the program, particularly in broadening the protection impact of dollars spent through leveraging funds and using tax incentives and estate planning strategies.

Public interest and input are essential to the Trustee Council process. Please feel free to contact me if you would like more information on the activities of the Council or its Public Advisory Group, or if you have comments or suggestions on the Council's restoration efforts.

Sincerely,



Molly McCammon
Executive Director

The Work Plan Process

Table 1 describes milestones in development of the FY 01 Work Plan. The Trustee Council made most of its funding decisions in August so that projects could begin on October 1, 2000, the first day of federal fiscal year 2001. A few funding decisions were deferred until December and January to allow time for review of results from the FY 00 field season or further deliberation on project objectives and work plan priorities.

Table 1. Milestones for FY 01 Work Plan

Feb. 15, 2000	<i>Invitation to Submit Restoration Proposals for Federal Fiscal Year 2001</i> was issued.
April 15, 2000	Restoration Office received 113 research, monitoring, and general restoration proposals requesting \$13.3 million for FY 01.
May 21-24, 2000	Chief Scientist and core reviewers met to discuss the scientific and technical merits of proposals.
June 7, 2000	Executive Director discussed proposals with Chief Scientist, Public Advisory Group representatives, and Trustee agencies and formed preliminary recommendations.
June 15, 2000	<i>FY 01 Draft Work Plan</i> was distributed for public comment.
July 15, 2000	Public hearing was held on <i>FY 01 Draft Work Plan</i> .
July 19-20, 2000	Public Advisory Group met to advise Trustee Council on work plan.
Aug. 3, 2000	Trustee Council approved 46 research, monitoring, and general restoration projects totaling \$4,685,700 for <i>FY 01 Work Plan</i> , and deferred projects that required further review or deliberation.
Oct. 1, 2000	Federal fiscal year 2001 (FY 01) began.
Dec. 5, 2000	Trustee Council approved 9 additional research, monitoring, and general restoration projects for <i>FY 01 Work Plan</i> . This action brought the FY 01 authorization total to \$5,935,600.
Jan. 16, 2001	Trustee Council approved 1 additional research project for <i>FY 01 Work Plan</i> . This action brought the FY 01 authorization total to \$5,945,700.

Summary of Fiscal Year 2001 Projects

For FY 01, the Trustee Council received 113 research, monitoring, and general restoration proposals requesting a total of \$13.3 million. In August and December 2000 and January 2001, the Council authorized 56 projects totaling \$5,945,700. The table on the following page (Table 3) summarizes the Trustee Council's funding decisions by "resource cluster," as well as the expected cost of completing the projects authorized in FY 01. (Note: Regarding future year costs, a blank space means that the estimated funding level is not known or that the Trustee Council has not made a commitment to continue the project in future years because of uncertainty about its scope or its priority in terms of the overall restoration program.)

Many of the projects funded are the continuation of efforts funded in FY 00. As illustrated in Table 2, several new projects also were funded.

Table 2. New and Continuing Projects

	Number of Projects Funded	Total Cost of Projects Funded
New Projects	12	\$1,201,600
Continuing Projects	44	\$4,744,100

In addition to funding research, monitoring, and general restoration projects, the Trustee Council authorized funds for the administrative costs of the restoration program (\$1.5 million for public information, independent scientific review, and administration), funds for habitat protection support (\$268,100, for services such as negotiations, land surveys, and appraisals), and the eighth \$12 million payment to the Restoration Reserve.

Table 3. Summary of Funding by Resource Cluster

Resource Cluster	FY 01 Approved	FY 02 Estimate	Total FY 01-02
Pink Salmon	\$671.7	\$279.0	\$950.7
Pacific Herring	\$101.9	\$47.1	\$149.0
SEA and Related Projects	\$479.8	\$150.6	\$630.4
Cutthroat Trout, Dolly Varden, and Other Fish	\$186.8	\$0.0	\$186.8
Marine Mammals	\$645.9	\$128.4	\$774.3
Nearshore Ecosystem	\$1,181.4	\$130.0	\$1,311.4
Seabird/Forage Fish and Related Projects	\$553.7	\$109.0	\$662.7
Subsistence	\$724.6	\$444.1	\$1,168.7
Ecosystem Synthesis/GEM Transition	\$862.7	\$90.0	\$952.7
Public Information/Science Mgt./Admin.	\$252.9	\$46.8	\$299.7
Project Management	\$284.3	\$200.0	\$484.3
Total Research, Monitoring, and General Restoration Projects:	\$5,945.7	\$1,625.0	\$7,370.7
Habitat Protection/Acquisition Support	\$268.1		\$268.1
Public Information/Science Mgt./ Admin.	\$1,500.0	\$1,500.0	\$3,000.0
Restoration Reserve	\$12,000.0	\$12,000.0	\$24,000.0
Other Projects (Archaeological Repository)	\$64.3		\$64.3
Total All Activities:	\$19,778.1	\$15,125.0	\$34,703.1

Description of Fiscal Year 2001 Projects

This section describes the research, monitoring, and general restoration projects funded by the Trustee Council for FY 01. It also includes a brief description of the Council's other activities.

RESEARCH, MONITORING, AND GENERAL RESTORATION PROJECTS

The research, monitoring, and general restoration projects described on the following pages are arranged by "resource cluster." Each cluster description includes the Trustee Council's restoration strategies (which were established in the *Restoration Plan* and are updated as needed each year through the work plan), the projects authorized to implement those strategies, and the expected cost of completing the projects authorized in FY 01. (Note: Regarding future year costs, "\$0" means that no funding is expected. A blank space means that the estimated funding level is not known or that the Trustee Council has not made a commitment to continue the project in future years because of uncertainty about its scope or its priority in terms of the overall restoration program.)

Appendix A contains a numerical listing of all projects funded by the Trustee Council. It contains the text of the Chief Scientist's technical review of each project and the Council's decision for each project. It also indicates who proposed each project, which Trustee agency is responsible for project management, and whether the project is continuing (i.e., also was funded by the Council in FY 00) or new.

A Detailed Project Description (DPD) and budget are on file at the Anchorage Restoration Office for each of the projects summarized in this section.

Pink Salmon

Restoration Strategies for Fiscal Year 2001

Research and Monitor the Toxic Effect of Oil

- Complete natal habitats project (01454), which is evaluating the recovery status of pink salmon at the stream level.
- Continue gamete viability project (01476), which is validating the effects of oil contamination on pink salmon reproduction.
- Begin embryo survival study (01492), which is addressing critiques of earlier studies of pink salmon embryo mortality by investigating sampling timing as a possible source of bias.

Provide Management Information and Tools

- Continue genetic linkage project (01190), which will apply the newly developed linkage map for the pink salmon genome to questions related to pink salmon growth and survival.
- Complete remote video and time-lapse recording project (01366), which is developing new techniques for estimating spawner abundance.

Funding Approved for Fiscal Year 2001

Project Number and Title		FY 01 Approved	FY 02 Estimate	TOTAL 01-02
01190	Genome Linkage Map	\$400.9	\$240.0	\$640.9
01366	Remote Video and Time-Lapse Recording	\$11.3	\$0.0	\$11.3
01454	Persistent Oil in Natal Habitats	\$103.2	\$0.0	\$103.2
01476	Effects of Oiled Incubation on Reproduction	\$94.2	\$39.0	\$133.2
01492	Were Embryo Studies Biased?	\$62.1		\$62.1
TOTAL		\$671.7	\$279.0	\$950.7

Pacific Herring

Restoration Strategies for Fiscal Year 2001

Investigate Herring Disease as a Cause of the 1993 Crash

- Complete monitoring project (01462), which is assessing whether disease is limiting recovery of the Prince William Sound herring population.

Provide Management Information

- Complete acoustic target strength project (01468), which has defined the acoustic strength of different age classes of herring and sand lance.
- Begin stock identification project (01538), which is performing a comparative investigation of two stock identification techniques – analysis of otoliths and analysis of fatty acid profiles.

Funding Approved for Fiscal Year 2001

Project Number and Title		FY 01 Approved	FY 02 Estimate	TOTAL 01-02
01462	Disease & Recovery	\$86.0	\$0.0	\$86.0
01468	Acoustic Target Strength	\$5.8	\$0.0	\$5.8
01538	Stock Identification Methods	\$10.1	\$47.1	\$57.2
TOTAL		\$101.9	\$47.1	\$149.0

Sound Ecosystem Assessment (SEA) and Related Projects

Restoration Strategies for Fiscal Year 2001

Investigate Ecological Factors that Influence Marine Productivity

- Complete 3-D ocean state simulation project (01389), which will improve understanding of larval herring transport, which is essential for predicting productivity in Prince William Sound.

Develop Monitoring Techniques

- Continue pristane monitoring project (01195), which is developing a relatively inexpensive measure of marine productivity, designed to allow predictions about future fisheries production and harvest levels.
- Complete food web project (01393-BAA), which is using carbon and nitrogen stable isotope ratios to confirm the relative trophic status of species within the Prince William Sound ecosystem.
- Conduct hydroacoustic survey project (01452-BAA), which will provide data on annual and seasonal variation of predators and food availability for juvenile pink salmon.
- Continue oceanographic exchange project (01552-BAA), which is gathering and analyzing data from the Hinchinbrook Entrance buoy.

Funding Approved for Fiscal Year 2001

Project Number and Title		FY 01 Approved	FY 02 Estimate	TOTAL 01-02
01195	Pristane Monitoring	\$55.0	\$50.0	\$105.0
01389	3D Ocean State Simulations	\$142.5	\$0.0	\$142.5
01393	Food Webs	\$119.0	\$0.0	\$119.0
01452	Hydroacoustic Surveys	\$57.6	\$0.0	\$57.6
01552	Oceanographic Exchange	\$105.7	\$100.6	\$206.3
TOTAL		\$479.8	\$150.6	\$630.4

Cutthroat Trout, Dolly Varden, and Other Fish

Restoration Strategies for Fiscal Year 2001

Research and Monitor Populations

- Complete salmon shark assessment project (01396), which is investigating seasonal salmon shark movements and diet in Prince William Sound and the Gulf of Alaska.

Develop Monitoring Techniques and Strategies

- Begin archival tag project (01404), which will test the development and application of archive tag technology, which has great promise for a number of fish species.
- Complete satellite tag project (01478), which is testing satellite tag technology for its utility in defining critical habitat for various fish species.

Funding Approved for Fiscal Year 2001

Project Number and Title		FY 01 Approved	FY 02 Estimate	TOTAL 01-02
01396	Shark Assessment	\$85.0	\$0.0	\$85.0
01404	Testing Archival Tags	\$75.0		\$75.0
01478	Testing Satellite Tags	\$26.8	\$0.0	\$26.8
TOTAL		\$186.8	\$0.0	\$186.8

Marine Mammals

Restoration Strategies for Fiscal Year 2001

Research and Monitor Harbor Seal Populations

- Complete field monitoring project (01064), which in FY 01 will prepare several manuscripts; in general, this project is helping to explain the decline in harbor seals in Prince William Sound and documenting recent trends.
- Continue community-based biosampling project (01245); this project is discussed in the Subsistence cluster.
- Complete diet project (01341), which is studying the effect of diet on the health and body condition of harbor seals under controlled conditions at the Alaska SeaLife Center.
- Complete stable isotope project (01371), which, in collaboration with 01341, is studying how stable isotope ratios change over time in relation to diet.
- Complete lipid metabolism project (01441), which, in collaboration with 01341, is studying how fatty acid profiles change over time in relation to diet.

Research and Monitor Killer Whale Populations

- Continue killer whale investigation (01012-BAA), which is analyzing the long-term effects of the oil spill on resident and transient pods of killer whales.

Develop Monitoring Techniques

- Begin new technologies project (01558), which will investigate the potential for new technologies to assess and monitor the endocrine and immune systems of harbor seals as diagnostic measures of their health.

Funding Approved for Fiscal Year 2001

Project Number and Title		FY 01 Approved	FY 02 Estimate	TOTAL 01-02
01012	Killer Whale Investigation	\$74.5		\$74.5
01064	Harbor Seal Monitoring	\$22.6	\$0.0	\$22.6
01341	Harbor Seal Health and Diet	\$82.2	\$0.0	\$82.2
01371	Harbor Seal Stable Isotopes	\$92.9	\$0.0	\$92.9
01441	Harbor Seal Lipid Metabolism	\$93.5	\$0.0	\$93.5
01558	New Technologies for Monitoring Harbor Seal Recovery	\$280.2	\$128.4	\$408.6
TOTAL		\$645.9	\$128.4	\$774.3

Nearshore Ecosystem

Restoration Strategies for Fiscal Year 2001

Monitor Recovery

- Continue sea otter/harlequin duck project (01423), which is investigating evidence of ongoing injury to these two nearshore species.
- Conduct marine algal species project (01551-BAA), which will prepare a manuscript on the occurrence and distribution of marine macroalgae in the spill area based on data collected under earlier EVOS projects.

Research Mechanisms Limiting Recovery

- Continue harlequin duck monitoring project (01407), which is assessing the recovery of harlequin duck populations inhabiting oiled areas.
- Conduct sea otter oil exposure project (01534), which will relate present levels of CYP1A induction in sea otters with levels immediately following the spill in order to provide a long-term picture of oil exposure in sea otters.
- Complete Yakataga oil seep project (01599), which will refine existing interpretations of hydrocarbon sources in Prince William Sound.

Monitor the Fate and Persistence of Oil

- Continue hydrocarbon database project (01290), which is analyzing hydrocarbon samples collected through other Trustee Council projects.
- Begin evaluation of remaining oil project (01543), which will assess the amount of oil remaining from the oil spill on shorelines within Prince William Sound.

Funding Approved for Fiscal Year 2001

Project Number and Title		FY 01 Approved	FY 02 Estimate	TOTAL 01-02
01290	Hydrocarbon Database	\$35.0	\$35.0	\$70.0
01407	Harlequin Duck Populations	\$67.6		\$67.6
01423	Population Change: Nearshore Vertebrate Predators	\$505.4		\$505.4
01534	Sea Otter Oil Exposure	\$19.9	\$0.0	\$19.9
01543	Oil Remaining in the Intertidal	\$477.2	\$95.0	\$572.2
01551	Marine Algal Species	\$65.8	\$0.0	\$65.8
01599	Yakataga Oil Seeps	\$10.5	\$0.0	\$10.5
TOTAL		\$1,181.4	\$130.0	\$1,311.4

Seabird/Forage Fish and Related Projects

Restoration Strategies for Fiscal Year 2001

Research Mechanisms Limiting Recovery of Seabird Populations

- Continue Alaska Predator Ecosystem Experiment (APEX, 01163), which in FY 01 will analyze data and write up results from this multi-year effort to investigate seabird populations in relation to the availability and quality of forage fish.
- Complete pigeon guillemot project (01327), which is conducting research at the Alaska SeaLife Center on how diet and oil affect the growth and physiology of nestling guillemots, and testing techniques to establish a new guillemot colony.
- Complete murre/kittiwake project (01338), which is exploring whether the availability and quality of forage fish influence the survival of adult murre and kittiwakes.
- Continue food stress project (01479), which is exploring the use of corticosterone, a biochemical indicator of stress, as a tool to monitor seabird populations.
- Conduct stress hormone project (01555), which will investigate in more detail how baseline levels of corticosterone vary with food availability and breeding state.

Research and Monitor Seabird Populations

- Continue common murre project (01144), which in FY 01 will census the common murre colony at the Chiswell Islands.
- Continue marine bird monitoring project (01159), which in FY 01 will analyze results from the seventh biennial boat survey of marine bird abundance in Prince William Sound, which was conducted in FY 00.

Funding Approved for Fiscal Year 2001

Project Number and Title		FY 01 Approved	FY 02 Estimate	TOTAL 01-02
01144	Common Murre Monitoring	\$46.5	\$14.0	\$60.5
01159	Marine Bird Boat Surveys	\$25.0		\$25.0
01163	APEX	\$199.6	\$20.0	\$219.6
01327	Pigeon Guillemot Research	\$86.9	\$0.0	\$86.9
01338	Adult Murre/Kittiwake Survival	\$47.2	\$0.0	\$47.2
01479	Effects of Food Stress	\$129.6	\$75.0	\$204.6
01555	Stress Hormones	\$18.9	\$0.0	\$18.9
TOTAL		\$553.7	\$109.0	\$662.7

Archaeological Resources

Restoration Strategies for Fiscal Year 2001

Protect Artifacts from Further Injury and Store Them in Facilities

- Continue archaeological repository project (99154). In January 1999, the Trustee Council authorized \$2.8 million for a grant to Chugachmiut, Inc. to develop a regional archaeological repository in Seward; local display facilities in Chenega Bay, Tatitlek, Cordova, Valdez, Port Graham, Nanwalek, Seldovia, and Seward; and traveling exhibits. The purpose of this project is to provide appropriate facilities to store artifacts recovered from Prince William Sound and lower Cook Inlet during the spill response, damage assessment, and restoration efforts and to provide opportunities for people to view these articles and other materials with restoration value. Work is expected to continue on the project through FY 02.

This project was funded outside of the regular work plan of research, monitoring, and general restoration projects.

Subsistence

Restoration Strategies for Fiscal Year 2001

Restore Injured Resources Used for Subsistence

In general, all projects which address resources used by subsistence harvesters are subsistence restoration projects in that they restore the injured resources upon which subsistence depends.

Enhance or Replace Injured Resources

- Complete clam restoration project (01131), which in FY 01 will prepare a final report on this multi-year project that has worked to enhance local clam populations.
- Continue Kametlook River project (01247), which is enhancing a coho salmon run near the community of Perryville.
- Continue Solf Lake project (01256B), which is enhancing production of sockeye salmon in Solf Lake near the community of Chenega Bay.

Enhance or Replace Lost or Reduced Services

- Complete surf scoter project (01273), which is studying the life history and ecology of surf scoters in Prince William Sound, which are important to subsistence harvesters.
- Continue spot shrimp project (01401), which is studying the abundance of spot shrimp in Prince William Sound, which are important to subsistence harvesters.

Increase Involvement of Subsistence Users in the Restoration Process

- Continue community involvement project (01052), which in FY 01 will provide technical assistance to Tatitlek, Port Graham, Nanwalek, Ouzinkie, and Cordova/Eyak to participate in the development of GEM (the Trustee Council's long-term monitoring and research program) and to further develop their natural resource programs and stewardship capacity.
- Continue youth area watch project (01210), which is involving junior high and high school students from Chenega Bay, Tatitlek, Cordova, Whittier, Valdez, Seward, Port Graham, Nanwalek, and Seldovia in restoration projects.
- Continue harbor seal biosampling project (01245), which is collecting harbor seal tissue samples for use by ongoing EVOS projects that are seeking to explain why harbor seals are not recovering.
- Complete video project (01481), which is documenting impacts of the oil spill on subsistence use of intertidal resources in the Chenega Bay and Ouzinkie areas.
- Continue Kodiak Island youth area watch project (01610), which extends the Youth Area Watch program to the seven communities on Kodiak Island.

Funding Approved for Fiscal Year 2001

Project Number and Title		FY 01 Approved	FY 02 Estimate	TOTAL 01-02
01052	Community Involvement	\$201.9	\$180.0	\$381.9
01131	Clam Restoration	\$10.5	\$0.0	\$10.5
01210	PWS/Cook Inlet Youth Area Watch	\$107.0	\$96.3	\$203.3
01245	Harbor Seal Biosampling	\$40.0	\$25.0	\$65.0
01247	Kametolook River	\$22.7	\$28.0	\$50.7
01256B	Solf Lake Stocking	\$24.4	\$20.0	\$44.4
01273	Surf Scoter Life History	\$50.1	\$0.0	\$50.1
01401	Spot Shrimp	\$94.4	\$33.0	\$127.4
01481	Intertidal Documentary	\$111.8	\$0.0	\$111.8
01610	Kodiak Youth Area Watch	\$61.8	\$61.8	\$123.6
TOTAL		\$724.6	\$444.1	\$1,168.7

Reduction of Marine Pollution

Restoration Strategies for Fiscal Year 2001

Improve Community Waste Management

- Complete lower Cook Inlet waste management project (99514). In FY 99, the Trustee Council funded this project to develop a plan for reducing marine pollution in Nanwalek, Port Graham, and Seldovia. Completion of this plan is expected in FY 01. Following review of the plan, the Council may consider a proposal in FY 02 for implementation of the plan.

Implementation of the plan would be funded outside of the regular work plan of research, monitoring, and general restoration projects.

Ecosystem Synthesis / GEM Transition

Restoration Strategies for Fiscal Year 2001

Integrate and Synthesize Project Results

- Complete Cook Inlet information management project (01391), which aims to improve management of injured and other marine natural resources by facilitating data sharing, resource management, and planning within the Cook Inlet watershed.

Prepare for GEM (Gulf Ecosystem Monitoring, the Trustee Council's Long-Term Research and Monitoring Program)

- Complete Trustee Council contribution to long-term oceanographic monitoring project (01340), which is gathering temperature and salinity data that will help researchers evaluate changes in the ecosystem.
- Continue National Research Council project (01360-BAA), which is providing external review of GEM.
- Conduct Kachemak Bay monitoring project (01385), which will provide matching funds for the purchase of oceanographic instruments that will enable the Kachemak Bay National Estuarine Research Reserve to begin a long-term monitoring program.
- Continue data system project (01455-BAA), which in FY 01 will fund a data system manager for GEM.
- Continue GEM planning project (01630), which is conducting the planning and public review necessary to develop GEM.

Funding Approved for Fiscal Year 2001

Project Number and Title		FY 01 Approved	FY 02 Estimate	TOTAL 01-02
01340	Oceanographic Monitoring	\$72.0	\$0.0	\$72.0
01360	Guidance for Future Research	\$241.6	\$90.0	\$331.6
01385	Kachemak Bay Monitoring	\$11.0	\$0.0	\$11.0
01391	Cook Inlet Monitoring System	\$239.0	\$0.0	\$239.0
01455	Data System for GEM	\$35.7		\$35.7
01630	Planning for GEM	\$263.4		\$263.4
TOTAL		\$862.7	\$90.0	\$952.7

Public Information, Science Management, and Administration

Restoration Strategies for Fiscal Year 2001

Provide Research Results to the Public and Others

- Conduct exhibit project (01513), which will create a permanent exhibit at the Alaska SeaLife Center on the resources injured by the oil spill.
- Begin Trustee Council final report (01535), which is preparing a publication that will comprehensively describe the Council's activities from the time of the spill through the original 10-year restoration program (FY 02).
- Continue contribution to ARLIS (Alaska Resources Library and Information Services, 01550), which serves as a central access point and repository for information generated as a result of the oil spill.

Funding Approved for Fiscal Year 2001

Project Number and Title		FY 01 Approved	FY 02 Estimate	TOTAL 01-02
01513	Alaska SeaLife Center Exhibit	\$50.3	\$0.0	\$50.3
01535	Trustee Council Final Report	\$73.5	\$46.8	\$120.3
01550	ARLIS	\$129.1		\$129.1
	TOTAL	\$252.9	\$46.8	\$299.7

Project Management

The costs of project management in FY 01 are funded through project 01250. Project management is provided by resource managers in the six Trustee agencies and provides essential accountability to the work plan process. It includes such functions as tracking the progress of restoration projects; ensuring that projects meet their stated goals, objectives, and schedules; monitoring project expenditures; and ensuring that all reports and other contract deliverables are properly performed.

The FY 01 funding level of \$284,300 represents a reduction from the amount approved for FY 00 (\$401,900). The estimate of funding for FY 02 for project management (see below) also represents a reduction, consistent with the reduction in the funding cap for the overall work plan.

Funding Approved for Fiscal Year 2001

Project Number and Title		FY 01 Approved	FY 02 Estimate	TOTAL 01-02
01250	Project Management	\$284.3	\$200.0	\$484.3
	TOTAL	\$284.3	\$200.0	\$484.3

HABITAT PROTECTION AND ACQUISITION

The *Exxon Valdez* Trustee Council funds the acquisition and protection of land in order to protect the habitat of injured resources. Project 01126 continues the support services necessary for these land acquisitions, such as realty staff, appraisals, title reports, on-site inspections, and hazardous materials surveys.

Funding Approved for Fiscal Year 2001

Project Number and Title		FY 01 Approved	FY 02 Estimate	TOTAL 01-02
01126	Habitat Acquisition Support	\$268.1		\$268.1

As of January 2001, the Trustee Council has committed \$372.8 million to protect 691,172 acres of land in large parcels (generally over 1,000 acres each), as follows. Interests in the lands protected by the Council range from acquisition of fee simple title to various forms of conservation easements.

- 23,800 acres within Kachemak Bay State Park, including a highly productive estuary and several miles of anadromous fish streams and intertidal shoreline, from Seldovia Native Association;
- 32,537 acres within the Kenai Fjords National Park and on adjacent islands within the Alaska Maritime National Wildlife Refuge, including valuable coastal habitat, from English Bay Corporation;
- 26,665 acres of prime habitat on Shuyak Island, at the northern tip of the Kodiak archipelago, from the Kodiak Island Borough;
- 41,549 acres of mature spruce forest and highly productive coastal habitat in the Kodiak archipelago, in what has now become Afognak Island State Park, from the Seal Bay Timber Company;
- 41,750 acres of land and conservation easements on northern Afognak Island, including buffers around Paul's and Laura lakes and some of the most highly ranked habitat in terms of restoration value in the spill region, from Afognak Joint Venture;
- 59,674 acres of prime habitat for salmon, bald eagles, bears, and other species in the Kodiak National Wildlife Refuge from Koniag, Inc.;
- 55,402 acres of conservation easements along the Karluk and Sturgeon rivers, from Koniag, Inc.; the Trustee Council's January 2001 offer to extend the existing non-development easement for another ten years was recently accepted by the Koniag Board of Directors;
- 115,973 acres within the Kodiak National Wildlife Refuge from Akhiok-Kaguyak, Inc.;
- 31,609 acres of land and conservation easements within the Kodiak National Wildlife Refuge from Old Harbor Native Corporation;
- 59,520 acres of land and conservation easements in Prince William Sound,

- including parcels at Eshamy Bay and Jackpot Bay, which have some of the highest restoration values in the spill area, from Chenega Corporation;
- 77,477 acres of land, conservation easements, and timber easements, including Port Gravina, Sheep Bay, and Windy Bay, which are considered among the most valuable parcels in Prince William Sound for recovery of species injured by the spill, from Eyak Corporation; and
 - 69,814 acres of land and conservation easements, including Bligh Island and Two Moon Bay, which were the third and fourth highest ranked parcels in terms of restoration value in Prince William Sound, from Tatitlek Corporation.

In total, over 1,400 miles of coastline and more than 300 anadromous rivers, streams, and spawning areas have been protected through the Trustee Council's large parcel program. Once the Karluk and Sturgeon rivers package with Koniag, Inc. is completed, the Council's large parcel program will be essentially complete.

In regard to the small parcel program, the Trustee Council has spent \$20 million to acquire 7,700 acres of habitat in small parcels (generally under 1,000 acres each), and authorized \$2.1 million to purchase an additional 1,350 acres in small parcels. These lands are typically located on coves, along important stretches of river, at the mouths of rivers, or adjacent to valuable tidelands, and are often close to spill area communities. These lands are acquired for their habitat qualities as well as their importance for subsistence and recreational use.

In January 2001 the Council approved \$1 million for the U.S. Department of the Interior to enter into a grant with The Nature Conservancy and The Conservation Fund to continue the Council's habitat protection effort through Fiscal Year 2002. The advantages these two non-profit organizations bring to the program are an ability to respond more quickly than government to opportunities for acquisition of priority lands, to leverage resources by attracting matching funds, and to broaden the protection impact of dollars spent by achieving below-appraised-value purchases through the use of tax incentives and estate planning strategies. During this same period the Trustee agencies will be completing other, already authorized small parcel acquisitions.

Beginning in October 2002, the Trustee Council has designated \$25 million of Restoration Reserve funds for a long-term habitat protection program. The \$25 million would serve as an endowment, with annual earnings (probably more than \$1 million annually) dedicated to habitat protection.

Restoration efforts in the Pacific Northwest have taught us that habitat protection is essential to the health of salmon species. Researchers have concluded that depleted salmon populations cannot rebuild if habitat that is critical during any of their life stages is seriously compromised. This lesson extends as well to the other fish, birds, and mammals injured by the oil spill that nest, feed, molt, winter, and seek shelter in the habitat protected through the Council's habitat protection and acquisition program.

PUBLIC INFORMATION/SCIENCE MANAGEMENT/ADMINISTRATION

The cost of the administrative functions necessary to efficiently implement the restoration program (project 01100) continues to decline, from a high of \$4.1 million in FY 94 to \$1.5 million in FY 01. Project 01100 includes funds for the independent scientific review of project proposals and results, the Trustee Council's 17-member Public Advisory Group (PAG), the Council's Annual Restoration Workshop, public meetings and other communication efforts such as the Council's newsletter, operations and staff support for the Trustee Council itself, an annual financial audit, and a variety of smaller items.

Funding Approved for Fiscal Year 2001

Project Number and Title		FY 01 Approved	FY 02 Estimate	TOTAL 01-02
01100	Public Info/Science Mgt/ Administration	\$1,500.0	\$1,500.0	\$3,000.0

RESTORATION RESERVE

In recognition of the fact that complete recovery from the oil spill may not occur for decades, the Trustee Council established the Restoration Reserve to hold funds to be used for restoration after the last annual payment is received from Exxon Corporation in September 2001. For FY 01, the Council approved deposit of \$12 million into the reserve account. This brings the total approved for the reserve to \$96 million. Together with other, non-earmarked restoration funds, the Council anticipates a reserve fund of \$170 million in October 2002.

In 1999 Congress enacted Public Law 106-113, which allows the Trustee Council to invest its funds, including the funds in the Restoration Reserve, in accounts outside of the US Treasury. The purpose of the law is to allow the Council to gain a higher rate of return on its funds. On October 5, 2000 the Council's funds were transferred to the Alaska Department of Revenue, Division of Treasury, for ongoing investment and management.

In March 1999, the Council determined that the two primary uses of the Restoration Reserve funds will be a long-term research and monitoring program in the spill area and adjacent northern Gulf of Alaska and additional habitat protection, especially for small parcels (under 1,000 acres each). The Council earmarked \$55 million for future habitat protection. The remainder, an estimated \$115 million, was earmarked for research and monitoring. Planning for the long-term research and monitoring program (referred to as GEM, Gulf Ecosystem Monitoring) is currently underway (Project /630). It is intended to ensure the long-term health and conservation of the spill-affected marine ecosystem, as well as the resources injured by the spill.

**How to Read Appendix A –
Description of Projects and Trustee Council Action**

Proposer	The individual, organization, or Trustee agency that submitted the project proposal.
Lead Agency	The Trustee agency (USFS, NOAA, DOI, ADFG, ADEC, or ADNR) to which the project has been assigned for project management purposes.
New or Cont'd	Whether or not the project is the continuation of a project funded by the Trustee Council in FY 00. Also, what year FY 01 is in the Council's funding of the project, followed by the total number of years Council funding is expected to be sought (e.g., 3rd year of a 4-year project).
FY 01 Approved	The amount of funding approved by the Trustee Council for fiscal year 2001 (October 1, 2000 - September 30, 2001).
FY 02 Estimate	The estimated project cost for FY 02.
Total FY 01-02	Sum of the estimated project cost for FY 01 and FY 02.
Abstract	A brief summary of the project.
Chief Scientist's Recommendation	The Chief Scientist's recommendation on the project's technical merit.
Trustee Council Action	The Trustee Council's decision on project funding for FY 01.

APPENDIX A: DESCRIPTION OF PROJECTS AND TRUSTEE COUNCIL ACTION

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 01 Approved	FY 02 Estimate	Total FY 01-02
01012-BAA	Photographic and Acoustic Monitoring of Killer Whales in Prince William Sound and Kenai Fjords	C. Matkin/North Gulf Oceanic Society	NOAA	Cont'd 9th yr.	\$74.5		\$74.5
	<u>Project Abstract</u>	<u>Chief Scientist's Recommendation</u>			<u>Trustee Council Action</u>		
	This project will continue the monitoring of the damaged AB resident pod and the potentially endangered AT1 transient population as well other Prince William Sound/Kenai Fjords killer whales. Monitoring has occurred on a yearly basis since 1984. Methods include the photo-identification of individual whales and acoustic monitoring with remote and vessel-based hydrophone systems. The project continues interpretation of current and previous data as well as data collected with other funds. [NOTE: This project also requested funds for FY 01 (\$72,000), FY 03 (\$75,000), and FY 04 (\$80,000).]	As a sentinel species occupying high trophic levels, killer whales are prime indicators of the health of the food web and the local environment. In FY 01, emphasis on a tighter linkage of the population dynamics to other elements of the ecosystem should be increased, to the extent this can be done. Given that killer whales are very much in the public eye, and the widespread perception that the population has suffered directly from the oil spill, this work is critical and should be continued. Production of publishable manuscripts is improving. Fund.			Fund FY 01 only contingent on submittal of two of the previously promised manuscripts not yet submitted: Mating between acoustic clans (Barrett-Lennard) and niche partitioning (Barrett-Lennard). Future funding will depend on review of the FY 01 results. This project is providing valuable information about the long-term effects of the oil spill on resident and transient pods of killer whales in Prince William Sound.		
01052	Community Involvement Planning for GEM	P. Brown- Schwalenberg/CRRC	ADFG	Cont'd 7th yr. 8 yr. project	\$201.9	\$180.0	\$381.9
	<u>Project Abstract</u>	<u>Chief Scientist's Recommendation</u>			<u>Trustee Council Action</u>		
	In FY 01, this project will continue to actively involve residents of Tatitlek, Chenega Bay, Port Graham, Nanwalek, Cordova/Eyak, Seward, Seldovia, Valdez, Kodiak/Ouzinkie, and Chignik Lake in the restoration program through a network of local facilitators. In addition, the project will work to address the future of community involvement with regard to the Gulf Ecosystem Monitoring (GEM) program, the Trustee Council's long-term research and monitoring program. In FY 01, the Community Natural Resources Coordinator (formerly the Spill Area-Wide Community Involvement Coordinator), the TEK Specialist, a contracted science advisor, and the community facilitators will focus on three objectives: (a) designing a community based monitoring program, (b) identifying specific monitoring activities that may fit within the GEM program, and (c) developing possible pilot projects for FY 02.	This ongoing project is a key component of the Trustee Council's efforts to maintain and enhance the involvement of local communities in the restoration program, and it is expected that this project will coordinate the input of local communities in planning for GEM (Gulf Ecosystem Monitoring, the Trustee Council's long-term research and monitoring program). The involvement of Dr. Cooney (the lead scientist on SEA, Project /320) as a consultant on the project is a positive development, as he can effectively represent the communities' interests in the scientific planning process. The principal investigators should continue to improve and expand efforts to document accomplishments and measure success, so that a comprehensive and meaningful final report can be developed. Fund.			Fund revised proposal, which shifts the emphasis from the original community involvement and facilitation objectives to the new objectives regarding providing technical assistance to the five pilot communities (Tatitlek, Port Graham, Nanwalek, Ouzinkie, Cordova/Eyak) to participate in the development of GEM (Gulf Ecosystem Monitoring, the Trustee Council's long-term research and monitoring program) and to further develop their natural resource programs and stewardship capacity. This project was originally designed to facilitate communication among the Trustee Council, scientists, and residents of the spill area in regard to the restoration effort. It is appropriate, as the Council's efforts shift from restoration to long-term monitoring, that this project also shift its emphasis.		

