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INVITATION TO SUBMIT RESTORATION PROPOSALS FOR FEDERAL FISCAL YEAR 2001

FEBRUARY 2000



Prepared by:

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Invitation to Submit
Restoration Proposals
for Federal Fiscal Year 2001

February 15, 2000

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Exxon Valdez Oil Spill
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DATES TO REMEMBER in 2000

➡ April 14: Proposals and project reports due

If you have questions about the proposal process, or would like help converting a good idea into a proposal, call the Anchorage Restoration Office:

1-907-278-8012

1-800-478-7745 toll free within Alaska

1-800-283-7745 toll free outside Alaska

➡ June 15: Draft Work Plan released

➡ July 19: Comments due on Draft Work Plan

➡ Aug. 3*: Trustee Council decision

*Tentative

Invitation to Submit Restoration Proposals for Federal Fiscal Year 2001

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INTRODUCTION

In 1989, the *T/V Exxon Valdez* spilled 11 million gallons of crude oil into Prince William Sound. In 1991, the U.S. District Court approved a civil settlement that required Exxon Corporation to pay the United States and the State of Alaska \$900 million over ten years to restore the resources injured by the spill, and the reduced or lost services (human uses) the resources provide. Under the court-approved terms of the settlement, a Trustee Council of three federal and three state members administers the restoration fund to restore the resources and services injured by the spill.

The Trustee Council invites individuals, private industry, government agencies, and other interested parties to submit proposals for restoration projects to be included in the annual work plan for federal fiscal year 2001 (FY 01), which is the period October 1, 2000 through September 30, 2001. The annual work plan includes monitoring, research, and general restoration projects. In addition to funding projects through the annual work plan, the Council authorizes funds for habitat protection and acquisition, the Restoration Reserve, and the administrative costs of the restoration program. These other activities, which are not the subject of this invitation, are discussed in Appendix A.

This invitation has three parts:

- **Introduction.** This section describes the work plan process, funding targets, and cost estimates for restoration projects for FY 01. This section also includes a notice for a Broad Agency Announcement (BAA) that is being issued by the National Oceanic and Atmospheric Administration (NOAA) concurrently with this invitation.
- **Invitation and Restoration Strategies.** This section is organized by 14 "resource clusters." It describes the status of injury and recovery for injured resources and services in each cluster, summarizes current strategies for restoring these resources and services, specifies the continuing projects for which proposals are invited, and describes new projects for which proposals are invited.
- **Instructions for Submitting a Proposal.** This section gives detailed instructions for preparing and submitting a proposal. It also describes how proposals will be evaluated.

Please be advised: FY 01 is a transition year to the Gulf Ecosystem Monitoring (GEM) program, the Trustee Council's long-term research and monitoring program. The cluster titled Ecosystem Synthesis/GEM Transition (pp. 31-34) describes the status of GEM and invites some specific proposals necessary to develop GEM. However, it is premature at this time to submit proposals for activities (e.g., long-term monitoring) to be conducted under GEM. Proposals for the implementation of GEM will not be solicited until February 15, 2002 when the FY 03 invitation is issued.

Work Plan Process

Milestones in the development of the FY 01 work plan are described in Table 1. Proposals are due on Friday, April 14. The Trustee Council usually makes funding decisions in August so that projects can begin on October 1.

Table 1. Milestones for FY 01 Work Plan

Jan. 18-19	Annual Restoration Workshop discussed results of FY 99 work and directions for FY 01.
→ Feb. 15, 2000	<i>Invitation to Submit Restoration Proposals for Federal Fiscal Year 2001</i> is issued.
April 14, 2000	Proposals due.
May 21-24, 2000	Chief Scientist and core reviewers meet to discuss the scientific and technical merits of proposals.
June 15, 2000	<i>FY 01 Draft Work Plan</i> is distributed for public comment.
July 19, 2000	Comments due on <i>FY 01 Draft Work Plan</i> .
Aug. 3, 2000*	Trustee Council expected to decide on <i>FY 01 Final Work Plan</i> .
Oct. 1, 2000	Fiscal year 2001 begins.
*Tentative	

Funding Targets

After considering the cash flow for restoration funds, the Trustee Council has tentatively set a funding target of \$6 million for the FY 01 work plan, which includes all research, monitoring, and general restoration projects. As illustrated in Table 2, the target for the annual work plan is lower in FY 01 than in FY 00 and will continue to decline through FY 02, when the final payment from Exxon Corporation will be received. After FY 02, funding for the restoration program will rely solely on the Restoration Reserve.

Table 2. Work Plan Funding History

FY 94	\$14.2 million (actual)
FY 95	\$17.0 million (actual)
FY 96	\$17.9 million (actual)
FY 97	\$15.7 million (actual)
FY 98	\$13.5 million (actual)
FY 99	\$11.6 million (authorized)
FY 00	\$8.3 million (authorized)
→ FY 01	\$6.0 million
FY 02	\$6.0 million or less
FY 03+	Restoration Reserve

Project Cost Estimates for FY 01

The amount of funding allocated to individual projects is determined each year by the Trustee Council through the work plan process. However, each annual work plan includes estimates of future costs for projects currently underway. The FY 00 work plan estimates that the FY 01 cost for 35 projects continuing from FY 00 will be about \$3.86 million (this includes an estimate of bench fees for those projects that will continue at the Alaska SeaLife Center). Three additional projects funded in FY 00 may continue into FY 01, but the Council has not made a long-term funding commitment to them, due to uncertainty about their future scope or their priority in terms of the overall restoration program. Cost of these projects in FY 01, if funded, would be about \$145,000, for a total of roughly \$4 million in continuing projects.

Given a total funding target of \$6 million for FY 01, these estimates suggest that roughly \$2 million will be available for new projects. These estimates are summarized in Table 3. The individual projects which make up these estimates are discussed in the Invitation and Restoration Strategies section of this invitation.

Table 3. Projections of New and Continuing Projects for FY 01

	Number of Projects	Estimated Cost
Continuing Projects	35	\$3,860,900
Potential Continuing Projects	3	\$ 144,100
New Projects	Unknown	\$1,995,000
Funding Target:		\$6,000,000

Notice of Broad Agency Announcement (BAA)

As part of this invitation, the National Oceanic and Atmospheric Administration (NOAA) is issuing a Broad Agency Announcement on behalf of the Trustee Council, requesting proposals for any of the research or monitoring topics identified in this invitation. Proposers representing private organizations and non-profit groups, please see page 38 for information on the BAA process and instructions on submitting a proposal under the BAA.

Please be advised: All proposers are encouraged to familiarize themselves with the *Exxon Valdez* Oil Spill Restoration Plan. The plan contains policies that guide restoration decisions and describes how restoration activities will be implemented. Please call the Anchorage Restoration Office to request a copy of the plan or if you have any questions about the proposal process:

1-907-278-8012
1-800-478-7745 toll free within Alaska
1-800-283-7745 toll free outside Alaska

The Trustee Council's web page also contains useful information: www.oilspill.state.ak.us

INVITATION AND RESTORATION STRATEGIES

This part of the invitation contains an entry that looks like this page for each resource cluster. The opening paragraphs describe the status of injury and recovery for the injured resources and services in each cluster. The description is followed by a section called "Strategies for FY 01 and Beyond" and a section called "Invitation for FY 01."

STRATEGIES FOR FY 01 AND BEYOND

This section summarizes the current strategies for restoring the resources and services in each resource cluster. The Restoration Plan, which established recovery objectives for each of the resources injured by the oil spill and strategies for achieving those objectives, was adopted by the Trustee Council in 1994. The plan was updated in 1996 and again in 1999 to reflect the results of the scientific research and review that have occurred since its adoption. Each year through this invitation and the annual work plan, the Council updates the restoration strategies for achieving the objectives. This section identifies the restoration strategies the Council plans to implement in FY 01, and describes the projects the Council funded in FY 00 and expects to continue funding in FY 01 to implement the strategies.

INVITATION FOR FY 01

For each resource cluster, this section invites a proposal for each of the projects the Trustee Council expects to continue from FY 00. Before making FY 01 funding decisions on continuing projects, the Council will reassess each project's progress, information gained during the year, and restoration needs and project budgets. See Appendix B for the history of funding allocations to each project and resource cluster, and an estimate of future costs for projects expected to continue from FY 00.

Potential Continuing Projects.

Each resource cluster includes, in a shaded box, a description of additional projects funded in FY 00 that may be continued in FY 01. The Trustee Council has not made a commitment to continue these projects because of uncertainty about their future scope or their priority in terms of the overall restoration program.

New Projects.

Also included in the shaded box is text describing new projects for which proposals are invited. In addition to the projects listed here, proposers are welcome to use this invitation to suggest other ideas and proposals to aid the recovery of resources and services injured by the oil spill. Please be informed that, because the final payment from Exxon Corporation will be received in FY 02 and the Trustee Council has not yet finalized its program for research and monitoring in FY 03 and beyond, funding for project activity beyond FY 02 will not be considered at this time.

Pink Salmon

Since the oil spill, total estimated returns of wild pink salmon in Prince William Sound have varied widely, ranging from a low of 1.9 million fish in 1992 to a high of approximately 12 million in 1990. The total wild pink salmon return to the sound in the 1999 season is estimated to have been more than 9.3 million fish. There continues to be localized concern about the sensitivity of early life stages of pink salmon to very low concentrations of crude oil, and on this basis the Trustee Council continues to list the pink salmon as recovering from the effects of the oil spill.

Much of the research sponsored by the Trustee Council has focused on identifying the natural factors that influence returns of adult pink salmon. Most of this work has been accomplished through the Sound Ecosystem Assessment project (/320; this project is described in the Sound Ecosystem Assessment cluster). In addition, studies sponsored by the Council continue to explore the sensitivity of early life stages of pink salmon to very low concentrations of crude oil. Exploring these relationships is an important part of understanding long-term effects of the spill on pink salmon. Finally, the Council continues to invest in the development of information and tools to improve long-term restoration and management of pink salmon for the benefit of commercial and subsistence users and for the conservation of this species as a key part of the ecosystem.

STRATEGIES FOR FY 01 AND BEYOND

Research and Monitor the Toxic Effect of Oil.

Persistent Oil in Natal Habitats (1454). In FY 00, the Trustee Council funded this project to determine the role of persistent oil in embryo mortality at intertidal locations in Prince William Sound. The project has found biologically available EVOS crude oil in salmon spawning habitats in FY 99. Closeout funds (data analysis and report writing) would be provided in FY 01.

Effects of Oiled Incubation on Reproduction (1476). FY 01 would be the final year of a three-year project to determine if oil exposure during incubation could explain reduced gamete viability previously reported for pink salmon in Prince William Sound (Project 191A). During FY 99, fry were exposed, marked, and released. During FY 00, adults will be recovered and their gametes crossed to demonstrate their viability. In FY 01, estimates of viability would be obtained and used to complete a model of life cycle effects resulting from incubation of eggs in oiled gravel.

Provide Management Information and Tools.

Genome Linkage Map (1190). FY 01 would be the sixth year of support for a project that, in FY 99, completed construction of a detailed map of the pink salmon genome. The map now will be applied to the question of what mapped traits or genomic regions confer maximum survival. Fish used in the experiment have been raised at the Alaska SeaLife Center. One cohort was released in May 1999 and a second cohort will be released in May 2000. FY 02 is expected to be the final year of Trustee Council funding for this project.

Remote Video and Time-Lapse Recording (\1366). This project, which is developing and testing the use of remote video and time-lapse recording technology for counting adult sockeye, chum, and pink salmon as they enter their natal streams to spawn, is scheduled to close out in FY 01. If successful, these technologies could provide a cost-effective means to monitor salmon escapements in the spill area, especially at remote sites where the costs of operating weirs or sonar systems can be high.

Supplement Populations.

One Trustee Council-funded project will conclude in FY 00: *Port Dick Spawning Channel* (\139A2).

Investigate Ecological Factors that Influence Adult Pink Salmon Returns.

One Trustee Council-funded project will conclude in FY 00: *Sound Ecosystem Assessment* (\1320). This project is described under the Sound Ecosystem Assessment cluster.

INVITATION FOR FY 01

The Trustee Council expects that the following projects will be continued from FY 00 and invites proposals for work planned in FY 01. Their FY 01 costs are estimated below.

FY 01	\190	Genome Linkage Map	\$240,800	
	\366	Remote Video and Time-Lapse Recording	\$12,300	
	\454	Persistent Oil in Natal Habitats	\$104,000	
	\476	Effects of Oiled Incubation on Reproduction	\$36,000	
Total FY 01:				\$393,100

New Projects.

Alaska SeaLife Center. The Alaska SeaLife Center opened its doors for research in FY 98. This state-of-the-art facility, which includes a fish pass, is appropriate for a variety of studies, including projects on toxicology, genetics (including gene flow), and disease. See page 38 for more information on the Alaska SeaLife Center.

Proposals for additional projects are welcome. Any new supplementation proposal must comply with the Trustee Council's Supplementation Criteria, which are available from the Anchorage Restoration Office.

Pacific Herring

The estimated peak biomass of spawning Pacific herring in Prince William Sound in 1993 was 60 percent less than the record level in 1992. The low biomass levels continued through 1995, but in the spring of 1996 the spawning biomass started to rebound. The spring commercial herring fishery, which had been curtailed in the sound in 1993, reopened in 1997 and was again opened in 1998. However, due to another sharp population decline, possibly due to the viral hemorrhagic septicemia virus (VHSV), the herring fishery was closed in 1999 and is expected to be closed in 2000. Although the Pacific herring appears to be recovering from the effects of the oil spill, the population in the sound has yet to recruit a major new year-class of fish. There also continues to be concern about the role of disease in preventing the recovery of Pacific herring.

Because the Pacific herring is extremely important ecologically and commercially and for subsistence users, the Trustee Council has made a major investment in restoration projects that benefit herring. Research sponsored by the Council has identified bays that are important as herring nursery and overwintering areas. The Sound Ecosystem Assessment project (SEA, \320) has resulted in new understanding of the importance of body condition in determining overwintering survival of herring and in the influences of the Gulf of Alaska in herring productivity within Prince William Sound. Techniques for improving stock and spawning biomass assessments through spawn deposition surveys and hydroacoustic and aerial surveys also have been supported by the Council. Council-funded research on disease in herring is ongoing.

STRATEGIES FOR FY 01 AND BEYOND

Investigate Herring Disease.

Effects of Disease on Population Recovery (\462). Pacific herring have not recruited a large year-class to the Prince William Sound population since before the population crashed in 1993, and there continues to be concern about the presence of disease in the population. The Trustee Council supported continued monitoring of disease in FY 99 and FY 00. FY 01 is expected to be the final year of this three-year project.

Investigate Ecological Factors that Influence Populations of Pacific Herring.

Three Trustee Council-funded projects will conclude in FY 00: *Sound Ecosystem Assessment* (SEA, \320; this project is discussed in the Sound Ecosystem Assessment Cluster), *Coordination and Planning for Herring Research* (\374; see New Projects in the shaded box below), and *Egg Distribution and Ecology* (\375).

Provide Management Information.

See New Projects in the shaded box in the Ecosystem Synthesis/GEM Transition cluster.

INVITATION FOR FY 01

The Trustee Council expects that the following project will be continued from FY 00 and invites a proposal for work planned in FY 01. Its FY 01 cost is estimated below:

FY 01	\462 Effects of Disease on Population Recovery	\$81,700
Total FY 01:		\$81,700

New Projects.

Additional Herring Work. Pacific herring have not recovered from the effects of the oil spill. Disease studies are expected to continue into FY 01, but no other work on herring is scheduled at this time pending the results of a synthesis and planning effort underway in FY 00 (Project \374). The project includes an evaluation of all aspects of past herring research and a workshop (tentatively scheduled for late February 2000) to identify important questions that remain about herring. Recommendations from the project leader on what additional research should be conducted are due in September 2000. The Council will likely invite study proposals on herring after that time.

Alaska SeaLife Center. The Alaska SeaLife Center opened its doors for research in FY 98. This state-of-the-art facility is appropriate for a variety of studies, including, for example, studies on herring disease and physiological ecology. See page 38 for more information on the Alaska SeaLife Center.

Proposals for additional projects are welcome.

Sound Ecosystem Assessment (SEA) and Related Projects

Poor returns of pink salmon in 1992 and 1993 in Prince William Sound, the collapse of the sound's Pacific herring population in 1993, and long-term declines of several seabird and marine mammal populations led the Trustee Council in FY 94 to initiate the Sound Ecosystem Assessment (SEA, Project \320). This project, which is identifying factors and developing models of the processes that influence the productivity of pink salmon and Pacific herring in Prince William Sound, involves the University of Alaska, Prince William Sound Science Center, Alaska Department of Fish and Game, and other institutions. Field work in the SEA project was concluded in FY 98. The final report is being completed in FY 00 and a special issue of *Fisheries Oceanography* dedicated to SEA results is being prepared. The information and models derived from SEA should directly benefit recovery and management of salmon and herring in the sound and, more broadly, the marine ecosystem injured by the oil spill.

Results from the pioneering ecosystem-scale work in the SEA project have led to additional projects that extend and supplement SEA findings. For example, Project \393 further explores important physical and biological linkages between the Gulf of Alaska and Prince William Sound. It is evident that physical and biological processes and environmental change in the spill-affected ecosystem have a direct bearing on biological productivity and, therefore, recovery and management of marine resources. Also, more work is going into refining the herring survival, sound circulation, and pink salmon fry models, which are important products of the SEA project. The Council expects to continue projects that explore these relationships in FY 01 and FY 02 and possibly beyond.

STRATEGIES FOR FY 01 AND BEYOND

Investigate and Monitor Ecological Factors that Influence Marine Productivity.

Two Trustee Council-funded projects will conclude in FY 00: *Sound Ecosystem Assessment (SEA, \320)* and *Prince William Sound Isotope Ecology (\541)*. The following projects are ongoing:

3D Ocean State Simulations (\389). FY 01 would be the second year of a two-year project to simulate larval transport of herring in Prince William Sound, which is essential for predicting herring productivity. The simulation will be achieved through further application and testing of the circulation model developed under SEA (\320).

Food Webs: Structure and Change (\393). Research carried out as part of SEA (\320) has shown that there are important physical and biological linkages between the Gulf of Alaska and Prince William Sound and that these linkages may be critical for biological productivity in the sound. This project involves the use of stable isotope ratios of carbon and nitrogen in a retrospective analysis of Gulf of Alaska contributions to productivity in the sound. The project is scheduled to close out in FY 01.

Exchange Between Prince William Sound and the Gulf of Alaska (\552). FY 01 would be the second year of a three-year project that is deploying an upward looking ADCP mooring

in Hinchinbrook Entrance. The project is documenting the interannual variability in water mass exchange between Prince William Sound and the adjacent northern Gulf of Alaska, and identifying mechanisms governing this exchange. This information is important to development and implementation of the Trustee Council's long term research and monitoring program (GEM, Gulf Ecosystem Monitoring).

Develop Monitoring Techniques and Strategies.

One Trustee Council-funded project will conclude in FY 00: *Sampling Strategies for Gulf of Alaska Ecosystem Trawl Survey Monitoring* (\493). The following project is ongoing:

Pristane Monitoring in Mussels (\195). FY 01 would be the sixth year of a project to develop the tracking of pristane concentrations in mussels as a measure of marine productivity. Analyses in FY 99 revealed a relationship between pristane concentrations in mussels near hatcheries and survival of hatchery-released pink salmon (as returning adults). Beginning in FY 00, marine survival forecasts will be compared with actual survivals of hatchery-released pink salmon to evaluate the reliability of these forecasts as a salmon management tool. Work is scheduled to continue on the project through FY 02.

INVITATION FOR FY 01

The Trustee Council expects that the following projects will be continued from FY 00 and invites proposals for work planned in FY 01. Their FY 01 costs are estimated below:

FY 01	\195 Pristane Monitoring in Mussels	\$55,000	
	\389 3D Ocean State Simulations	\$72,200	
	\393 Food Webs: Structure and Change	\$127,700	
	\552 Exchange Between PWS and GOA	\$107,600	
Total FY 01:			\$362,500

New Projects.

Develop Models of Production for Pink Salmon, Herring and Other Species. In FY 01, the Trustee Council will consider proposals to continue development of a series of interacting numerical models that simulate the dynamic processes limiting survival of juvenile pink salmon, herring, and ecologically related species within Prince William Sound. SEA (\320) was conducted to improve understanding of the biological and physical processes that limit production of pink salmon and herring in the sound in order to enable the Alaska Department of Fish and Game to better enhance, manage or otherwise restore pink salmon and herring production in the region. Now that the initial SEA project has been completed, the Council wishes to build upon past efforts by continuing to develop and refine mathematical and conceptual models of production of pink salmon, herring, plankton, and other species and physical processes. The models should incorporate food web dynamics and atmospheric-ocean physics in order to permit understanding of historical time series of abundance ("hindcasting"), present abundance and distribution of juveniles ("now-casting"), and forecasting of recruitment

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of adult pink salmon and herring to fisheries. The models would advise development of the Council's long-term monitoring program (GEM, Gulf Ecosystem Monitoring). Proposals should be presented in a time step-wise fashion that identifies costs for each step to permit budgetary flexibility.

Proposals for additional projects are welcome.

Sockeye Salmon

Commercial fishing for sockeye salmon in 1989 was curtailed in many locations throughout the spill area. Research indicated that the resulting escapements reduced the nursery capability of Kenai and Skilak lakes on the Kenai Peninsula and affected the productivity of the Red and Akalura lake systems in the Kodiak Archipelago. There also was concern about possible overescapement effects at Chignik Lake on the Alaska Peninsula.

Beginning in FY 93, the Trustee Council sponsored a series of projects (e.g., Project \258) to study the mechanisms and monitor the effects of overescapement in these river-lake systems. The Council also sponsored a retrospective analysis of freshwater growth rates in juvenile sockeye as an independent means of assessing injury due to overescapement (Project \048). These projects described the mechanism of injury due to overescapement in glacial-lake systems and demonstrated that recovery has been achieved or is underway in the Kenai River system and at Red and Akalura lakes. Assessment of juvenile growth rates in freshwater at Chignik Lake did not identify any impacts associated with a 1989 overescapement event.

The Trustee Council supported development of new stock assessment and genetic separation techniques (e.g., Project \255), which now are used by the Alaska Department of Fish and Game in managing the Kenai River sockeye fishery. The Council also funded fertilization of Coghill Lake in Prince William Sound (Project \259). Finally, the Council has made a major investment in habitat protection and restoration along the Kenai River through acquisition of small parcels for addition to the Kenai National Wildlife Refuge and several state parks and through restoration of degraded streambank habitats (Project \180).

No work on sockeye salmon is planned in FY 01. In future years, the Trustee Council will rely on catch and escapement data collected by the Alaska Department of Fish and Game to determine when sockeye have recovered (i.e., when productivities are within normal bounds).

STRATEGIES FOR FY 01 AND BEYOND

Research Effects of Overescapement.

One Council-funded project will conclude in FY 00: *Historical Sockeye Growth* (\048).

Supplement Populations.

Solf Lake Stocking (\256B). This project is described under the Subsistence cluster.

Restore Habitats.

One Trustee Council-funded project will conclude in FY 00: *Kenai River Habitat Restoration and Recreation Enhancement* (\180). Also see discussion of Habitat Protection and Acquisition in Appendix A.

INVITATION FOR FY 01

New Projects. No new projects have been identified, but project proposals are welcome.

Cutthroat Trout, Dolly Varden, and Other Fish

Prince William Sound is the northern and western limit of the cutthroat trout's range; this species does not exist elsewhere in the spill area. Cutthroat stocks known to exist within the sound are small and geographically isolated. Studies conducted from 1989 to 1991 indicate that cutthroat trout and Dolly Varden grow more slowly in oiled than in unoiled parts of Prince William Sound. In addition, concentrations of hydrocarbons in the bile of Dolly Varden were some of the highest of any fish sampled in 1989.

Past restoration projects for cutthroat trout and Dolly Varden (e.g., projects \043B, \302) have inventoried streams to identify the presence or absence of populations of these fish species and have implemented small-scale habitat improvements. Results of genetic analyses from a Trustee Council-sponsored project (\145) on resident and anadromous forms of cutthroat trout and Dolly Varden are consistent with the hypothesis that cutthroat trout exist in small, isolated populations but that Dolly Varden are more widely and continuously distributed.

A small number of dead adult rockfish were recovered following the oil spill, and autopsies of some specimens indicated oil ingestion as the cause of death. Rockfish are designated as an injured resource by the Trustee Council, but very little is known about these populations in the northern Gulf of Alaska and a recovery objective for rockfish has not been identified.

STRATEGIES FOR FY 01 AND BEYOND

Research and Monitor Populations.

See New Projects in the shaded box below.

INVITATION FOR FY 01

New Projects.

Cutthroat Trout and Dolly Varden Growth Rates. In FY 01, the Trustee Council will consider cost-effective proposals to measure and analyze geographic variability in growth rates of cutthroat trout and Dolly Varden in Prince William Sound. Proposals should be designed to account for differences due to habitat, life history characteristics such as anadromy, and other factors known to influence growth rates and to address the question of whether, after adjusting for all currently known factors influencing growth rates in these species, there are geographic differences in growth rates that may be significant of continuing oil-related injury.

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Alaska SeaLife Center. The Alaska SeaLife Center opened its doors for research in FY 98. This state-of-the-art facility, which includes a fish pass, is appropriate for a variety of studies, including projects on toxicology, genetics (including gene flow), and disease. See page 38 for more information on the Alaska SeaLife Center.

Proposals for additional projects are welcome. Any new supplementation proposal must comply with the Trustee Council's Supplementation Criteria, which are available from the Anchorage Restoration Office.

Marine Mammals (harbor seals and killer whales)

More than 300 harbor seals are estimated to have died in Prince William Sound as a result of the oil spill. From 1984-98 harbor seals in Prince William Sound declined about eight percent per year, based on aerial surveys of molting seals in the west-central sound. From 1990-98 the decline was about 2.5 percent per year, suggesting the decline has slowed. There was a corresponding decline of harbor seals in the Kodiak Archipelago, but recent data suggest that this population has stabilized, although at a level lower than reported in the 1970s. The results of Trustee Council-sponsored research on harbor seal health (Project \001) do not indicate biologically significant differences in the condition of seals from Prince William Sound and Southeast Alaska, where the harbor seal population is increasing.

The leading hypothesis about the decline of harbor seals in the Gulf of Alaska is that changes in the availability of high quality forage fish reduced the ecosystem's carrying capacity, meaning that it can sustain fewer seals. Young seals have very good condition indices and food does not appear to be limiting this life stage.

There were 24 whales in the AB pod of killer whales in Prince William Sound in 1999, compared to 36 before the oil spill. During the period 1996-99, six calves were recruited and only four adults were lost. This is a positive sign, but it is too soon to establish that recovery is underway. In addition, 11 individuals in the genetically distinct AT1 "transient" pod have not been seen in ten years, and there has been no recruitment of calves in this group of whales. Concern continues about the long-term health and survival of both the resident AB pod and the transient AT1 pod, although the linkage to the oil spill, especially in the case of the AT1 pod, is circumstantial. Overall numbers within the major resident killer whale pods in Prince William Sound are at or exceed prespill levels.

Sea otters also were injured by the oil spill. This species is discussed under the Nearshore Ecosystem cluster.

STRATEGIES FOR FY 01 AND BEYOND

Monitor Populations and Research Declines or Lack of Recovery.

One Trustee Council-funded project will conclude in FY 00: *Harbor Seal Monitoring and Field Research* (\064). Plans for future monitoring are currently under development (see below). The following projects are ongoing:

Harbor Seal Health and Diet (\341). In FY 98, after an extended field study comparing the condition and health status of harbor seals in Prince William Sound and Southeast Alaska (Project \001), the focus of research on harbor seal health shifted to the Alaska SeaLife Center, where it is possible to compare health indicators among seals with known diets and life histories. This project is using health status biomarkers to quantify the relative nutritional importance to harbor seals of different forage fish species in order to better

understand the effect on harbor seals of periodic changes in forage fish populations. FY 01 would be the final year of this project.

Harbor Seal Metabolism/Stable Isotopes (\371). This project, which is being carried out at the Alaska SeaLife Center, is a companion to Project \341. Ratios of stable isotopes are conservative tracers of energy supply among trophic levels (for example, zooplankton to fish to harbor seals). They are an excellent tool for tracking changes in diet over time and space, but in order to fully interpret these data it is important to know whether and how the isotopes are transformed during periods when seals are fasting or subsisting on low quality diets. This project is testing change and variability in isotopes in seals on controlled diets. These data will bear directly on the interpretation of historical and current work on the diet and ecology of wild harbor seals. FY 01 would be the final year of Trustee Council contribution to this project.

Harbor Seal Diet: Lipid Metabolism and Health (\441). This project is also a companion to Project \341 and is also being carried out at the Alaska SeaLife Center. Recently, field research on the diet and ecology of harbor seals (e.g., Project \064) has made extensive use of fatty-acid signatures to determine their diets, but there is need to evaluate changes in fatty acids from seals on known diets in order to better interpret the field data. This project is studying changes in fatty acids, as well as looking at the metabolic functioning of muscles in seals on different diets. This latter aspect, the metabolic functioning of muscles, addresses questions about whether diet affects the physical performance of seals in the wild. FY 01 would be the final year of Trustee Council contribution to this project.

Develop Monitoring Techniques and Strategies.

One Trustee Council-funded project will conclude in FY 00: *Experimental Design for Monitoring Harbor Seals (\509).*

INVITATION FOR FY 01

The Trustee Council expects that the following projects will be continued from FY 00 and invites proposals for work planned for FY 01. Their FY 01 costs are estimated below:

FY 01	\341	Harbor Seal Health and Diet	\$90,100	
	\371	Harbor Seal Metabolism/Stable Isotopes	\$96,300	
	\441	Harbor Seal Diet: Lipid Metabolism and Health	\$78,100	
Total FY 01:				\$264,500

Potential Continuing Projects. The following projects were funded in FY 00. The Trustee Council has not made a commitment to continue them in FY 01 because of uncertainty about their future scope or their priority in terms of the overall restoration program. The Council expects to receive proposals to fund these projects in FY 01.

Monitor Killer Whales (\012A). Since FY 93, the Trustee Council has supported annual monitoring of resident (AB) and transient (AT1) killer whales in Prince William Sound. The

(box continued on next page)

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AB pod has shown a net gain in individuals since 1994, when it reached its lowest level, but its recovery, as well as the status of the AT1 pod, continues to be of concern. The Council may consider a proposal to continue monitoring in FY 01, depending on the results of the FY 00 work.

Harbor Seal Biological Sampling (245). This project is described under the Subsistence cluster.

New Projects.

Alaska SeaLife Center. The Alaska SeaLife Center opened its doors for research in FY 98. This state-of-the-art facility is appropriate for a variety of studies, including, for example, effects of nutrition, oil, or other variables on the fatty acids, blood chemistry, physiology, behavior, and productivity of marine mammals. Work on population genetics also may be appropriate. See page 38 for more information on the Alaska SeaLife Center.

Proposals for additional projects are welcome.

Nearshore Ecosystem

(sea otters, river otters, harlequin ducks, pigeon guillemots, black oystercatchers, mussels, clams, intertidal/subtidal communities)

The nearshore ecosystem includes the community of plants and animals that inhabit the intertidal and shallow subtidal waters and shorelines. Much of the spilled oil was deposited in this zone, and there was additional disturbance during cleanup. Although it is evident that there is progress in the recovery of the nearshore ecosystem, it also is evident that full recovery has not been achieved. The primary Trustee Council-sponsored project for tracking injury and recovery in the nearshore ecosystem is the Nearshore Vertebrate Predator project (A025), which looks at two fish-eating species, river otters and pigeon guillemots, and two invertebrate-eating species, sea otters and harlequin ducks. Field work on this project was completed in FY 98. Completion of the final report and preparation of manuscripts for publication in the peer reviewed literature are underway in FY 00.

Although sea otters are abundant in much of Prince William Sound, there has been no significant increase in their numbers in the oiled bays of northern Knight Island. This lack of recovery may reflect the extended time required for population growth for a long-lived mammal with a low reproductive rate and slow dispersal rate, but it also could reflect the effects of continuing exposure to hydrocarbons or a combination of both factors. There is evidence of possible continued exposure to hydrocarbons at least as recently as 1998. Regarding river otters, previously documented differences in the biochemistry and behavior of otters from oiled and unoled areas largely disappeared by 1997. Based on the lack of differences in 1997 and 1998, there are no longer indications of lingering injury from the oil spill, and in 1999 the Trustee Council listed the river otter as having recovered from the effects of the spill.

Trustee Council-funded studies on harlequin ducks indicate that Prince William Sound is most important to this species as molting and wintering habitat rather than as breeding habitat. Based on radio telemetry data, adult females are highly faithful to molting sites and experienced lower survival at oiled versus unoled areas in 1996-98. The cause and significance of these differences have not been determined, but there is possible evidence of continued exposure to hydrocarbons in 1999 harlequins wintering in the sound. Boat surveys consistently show different or lower trends for harlequin ducks in oiled parts of the sound. Regarding pigeon guillemots, boat surveys have not shown any statistically significant evidence of a post-spill population increase; numbers of guillemots remain depressed along oiled shorelines in the sound through 1998. Recent data do not indicate that guillemot chicks are being exposed to hydrocarbons; food availability may play a role in the lack of recovery of this species.

In FY 98, the Trustee Council funded a field study on black oystercatchers to reassess their status at previous study sites in Prince William Sound. Results from this study suggest that there are no oil-related differences in the productivity of black oystercatchers and survival to fledging of their chicks. In FY 99, field teams revisited a series of oiled mussel beds to monitor hydrocarbon concentrations and to assess the results at several beds that were cleaned on an experimental basis in FY 94. The data indicate almost no change in hydrocarbon

concentrations from 1995 to 1999 in the mussel beds sampled and partial but not full recovery of sediments as a result of the cleaning process.

In FY 97, the Trustee Council funded additional cleanup of selected beaches near the village of Chenega Bay (Project \291). However, a survey of residual oil on Prince William Sound shorelines has not been undertaken since 1993. Given questions and concerns about oil remaining on beaches in the sound, evidence of possible hydrocarbon exposure in sea otters, pigeon guillemots, and harlequin ducks, and the need to document decreases in residual oil over time, the Council intends to conduct another survey in the sound (see New Projects in the shaded box below).

STRATEGIES FOR FY 01 AND BEYOND

Monitor Recovery.

Two Trustee Council-funded projects will conclude in FY 00: *Oiled Mussel Bed Monitoring* (\090) and *Barrow's Goldeneye Recovery Status* (\466). The following project is ongoing:

Population Change in Nearshore Vertebrate Predators (\423). FY 01 would be the third year of a four-year project to investigate evidence of ongoing injury to harlequin ducks and sea otters. This work follows directly on the results of the Nearshore Vertebrate Predator project (\025), which concluded its field studies in FY 98. Sea otter abundance and the abundance and distribution of preferred sea otter prey are continuing to be monitored. A portion of the harlequin duck work is being carried out at the Alaska SeaLife Center.

Research Mechanisms Limiting Recovery.

Four Trustee Council-funded projects will conclude in FY 00: *Nearshore Vertebrate Predators* (\025), *Responses of River Otters to Oil Contamination* (\348), *Assessment of Risk to Residual Oil Using P450* (\379), and *Resolution of Mixtures Containing Exxon Valdez Oil and Background Hydrocarbons* (\598). The following projects are ongoing:

Harlequin Duck Population Dynamics (\407). The harlequin duck is one of the species that clearly has not recovered, based both on exposure to hydrocarbons and differences in body condition and population trends in oiled and unoiled areas. This project is conducting March population surveys, which provide the most relevant population data for over-winter survival. FY 01 would be the second year of support for what is expected to be a three-year project.

Evaluation of Yakataga Oil Seeps as Regional Background Hydrocarbon Sources (\599). This project, which is studying whether fauna showing induction of cytochrome-P450 in the spill area are responding to natural oil pollution rather than to residual *Exxon Valdez* oil, is designed to improve existing interpretations of hydrocarbon sources. Sample collection and analysis are being conducted in FY 00. Funding in FY 01 would be for final report and manuscript preparation.

Monitor the Fate and Persistence of Oil.

One Trustee Council-funded project will conclude in FY 00: *Residual Oiling of Armored Beaches* (\459). The following project is ongoing:

Hydrocarbon Database (\290). Residual oil and the extent and significance of any biological exposure to hydrocarbons continues to be an important concern, directly relevant to the recovery status of injured resources and services. The Council has supported a hydrocarbon database since FY 93 as a way to compile and integrate data on hydrocarbon concentrations and biological exposure from thousands of sediment, tissue, and other samples. Funding for this project is expected to continue at least through FY 02.

Develop Monitoring Techniques and Strategies.

One Trustee Council-funded project will conclude in FY 00: *Recommendations for Future Monitoring of Intertidal Communities* (\510).

INVITATION FOR FY 01

The Trustee Council expects that the following projects will be continued from FY 00 and invites proposals for work planned for FY 01. Their FY 01 costs are estimated below.

FY 01	\290 Hydrocarbon Database	\$35,000
	\407 Harlequin Duck Population Dynamics	\$71,000
	\423 Population Change: Nearshore Vertebrate Predators	\$265,000
	\599 Evaluation of Yakataga Oil Seep as Background Source	\$10,000
Total FY 01:		\$381,000

New Projects.

Prince William Sound Shoreline Survey. In FY 01, the Trustee Council will consider proposals for a final assessment of the location, state, and amount of oil remaining on the shorelines of Prince William Sound. This information is important both for scientists who are studying the effects of residual oil on injured resources, and for the public's knowledge of recovery. Monitoring of residual oil in Prince William Sound occurred annually from 1989 through 1993, but has not occurred since. Survey sites should be selected in consultation with the Council's Science Coordinator. Site selection must consider the interests of local residents, take into account lingering injury to resources injured by the oil spill, include sites previously found to have significant residual oil, and weigh cost effectiveness. It is expected that the proposal would span two years, with field work in the summer of FY 01 and analysis, report writing, and communication of results in FY 02. The survey is directed at Prince William Sound only because the Council funded a final comprehensive assessment of oil in the Kodiak area in FY 95 (Project 95027) and along the Kenai and Alaska peninsulas in FY 99 (Project 99459).

Alaska SeaLife Center. The Alaska SeaLife Center opened its doors for research in FY 98. This state-of-the-art facility is appropriate for a variety of studies; for example, the effects of nutrition or oil on the blood chemistry, physiology, behavior, and productivity of nearshore vertebrate predators. See page 38 for more information on the SeaLife Center.

Proposals for additional projects are welcome.

Seabird/Forage Fish & Related Projects (common loons, common murres, cormorants, Kittlitz's and marbled murrelets, pigeon guillemots)

Boat surveys last conducted in Prince William Sound in FY 98 do not provide statistically significant evidence of recovery of common murre, marbled murrelet, pigeon guillemot, common loon, and cormorant (three species) populations. These boat surveys are being repeated in FY 00. Seventy-two carcasses of Kittlitz's murrelets were recovered after the spill, which probably represents a total mortality of 1,000 or more individuals. The Trustee Council has supported studies of this species but no recovery objective has been established and statements cannot be made reliably about whether this species has recovered. No projects focusing specifically on common loons or cormorants have been undertaken.

Populations of several fish-eating marine birds and mammals, including pigeon guillemots, had declined in Prince William Sound and the Gulf of Alaska before the oil spill. The oil-related injuries to these species added to the earlier declines, but the underlying causes of the pre-spill declines may now be limiting recovery from the spill. The causes of the pre-spill declines are not known, although the leading hypothesis is changes in the availability of energy-rich forage fish, such as sand lance and capelin. Very little is known about the natural history, ecology, and population dynamics of these ecologically important forage fish species. The Alaska Predator Ecosystem Experiment (APEX, Project \163) is the primary Trustee Council-sponsored project exploring the relationship between seabirds and forage fish. A final report and some manuscripts are being prepared on this project in FY 00.

Most of the injury to common murres occurred along the outer Kenai coast and around the Barren Islands in lower Cook Inlet. Common murre productivity at the Barren Islands has been within normal bounds since 1993. By 1997, numbers of murres at the Barren Islands had increased, probably because 3- and 4-year-old nonbreeding subadult birds that were hatched in 1993 and 1994 had returned to their natal colony. In 1998, however, the strong El Niño event apparently disrupted timing and synchrony of nesting at the Barren and Chiswell islands and may, to some extent, have affected reproductive success. In 1999, it appears that murre populations at the Barren Islands continued to recover.

STRATEGIES FOR FY 01 AND BEYOND

Research Mechanisms Limiting Recovery of Seabird Populations.

Five Trustee Council-funded projects will conclude in FY 00: *Genetics of Murres, Guillemots, Murrelets* (\169), *Seabird-Oceanographic Relationships in the Northern Gulf of Alaska* (\287), *Sand Lance Ecology and Demographics* (\306), *Fatty Acid/Lipid Analysis* (\347), and *Comparative Habitat Use by Kittlitz's and Marbled Murrelets* (\516). The following projects are ongoing:

Alaska Predator Ecosystem Experiment (APEX, \163). Following preliminary work in FY 94, APEX was initiated to test the link between the distribution of forage fish and the behavior, distribution, and productivity of seabirds in Prince William Sound and lower Cook Inlet. This study focuses on common murres, pigeon guillemots, and black-legged

kittiwakes. (Kittiwakes were chosen for study because of their dependence on schooling fishes at the surface and easy access to their colonies.) Results to date show that the availability and quality of forage fish are correlated with seabird productivity, and there is evidence that in the late 1970s there was a sharp reduction in the availability of energy-rich forage fish in the northern Gulf of Alaska ecosystem. Field studies concluded in FY 99. Funds provided in FY 00 are for final data analysis and preparation of a final report and some manuscripts for publication in the peer reviewed literature. FY 01 would fund preparation of additional important manuscripts.

Pigeon Guillemot Research (1327). This project, initiated in FY 98, has two components: (1) conducting research on the effects of nutrition and oil on the growth and physiology of nestling guillemots and (2) testing the use of artificial nest sites as a means of establishing a colony of wild guillemots. The first component will lead to development of nondestructive biochemical markers of oil contamination. This work is being carried out at the Alaska SeaLife Center. Funding in FY 01 would be for project closeout.

Adult Murre and Kittiwake Survival (1338). The APEX project (163) emphasizes the link between the availability of forage fish and annual productivity of young seabirds, but it is possible that the population-level effects of changes in availability of forage fish are also manifested through the overwinter survival of adult seabirds. This project is using conventional leg bands to track survival of adult common murres and black-legged kittiwakes at two colonies (Chisik and Gull islands) with contrasting forage fish resources and different trends in common murre and kittiwake populations. FY 01 is expected to be the final year of the project.

Effects of Food Stress on Survival and Reproduction (1479). Recent work in avian endocrinology suggests that measurement of the hormone corticosterone in the blood of seabirds can reflect food stress and provide a basis for determining the likelihood of reproductive success. Validation of this technique could provide a cost-effective means of monitoring reproductive success at seabird colonies. FY 01 would be the third year of support for what is expected to be a four-year project.

Monitor Marine Bird Populations.

One Trustee Council-funded project will conclude in FY 00: *Common Murre Population Monitoring* (144A). The following project is ongoing:

Marine Bird Boat Surveys (1159). In FY 00, this project is conducting the seventh biennial survey of marine bird population trends in Prince William Sound. These surveys, conducted by small boat, are a primary means of monitoring the recovery of more than 65 seabird species and eight marine mammal species in Prince William Sound. Funds in FY 01 would be for preparation of a report on the FY 00 survey.

Develop Monitoring Techniques and Strategies.

Protocols for Long-Term Monitoring of Seabirds (1501). FY 01 would be the final year of this two-year project which is reviewing and testing protocols and strategies to increase the efficiency and effectiveness of monitoring seabird productivity and populations.

INVITATION FOR FY 01

The Trustee Council expects that the following projects will be continued from FY 00 and invites proposals for work planned in FY 01. Their FY 01 costs are estimated below.

FY 01	\159	Marine Bird Boat Surveys	\$37,000	
	\163	Alaska Predator Ecosystem Experiment (APEX)	\$200,000	
	\327	Pigeon Guillemot Research	\$93,000	
	\338	Adult Murre and Kittiwake Survival	\$46,400	
	\479	Effects of Food Stress on Survival and Reproduction	\$129,600	
	\501	Protocols for Long-Term Monitoring of Seabirds	\$14,000	
Total FY 01:				\$520,000

New Projects.

Alaska SeaLife Center. The Alaska SeaLife Center opened its doors for research in FY 98. This state-of-the-art facility is appropriate for a variety of studies, including, for example, studies on prey selection and the effects of nutrition, oil, or other variables on the blood chemistry, physiology, behavior, and productivity of marine birds. See page 38 for more information on the Alaska SeaLife Center.

Proposals for additional projects are welcome.

Archaeological Resources

Twenty-four archaeological sites on public land are known to have been adversely affected by cleanup activities, or by looting and vandalism linked to the spill. Additional sites on private land may have been injured, but, in the civil settlement, the state and federal governments agreed to use funds received from Exxon Corporation for the restoration of public resources only.

Documented injuries to archaeological resources include the theft of artifacts, disturbance that masked clues used to identify and classify sites, violation of ancient burial sites, and destruction of evidence in layered sediments. At some sites, vegetation was disturbed, which exposed the sites to accelerated erosion. In addition, the effect of oil on soil chemistry and organic remains may reduce or eliminate the utility of radiocarbon dating in some sites.

Most of the vandalism linked to the spill occurred in 1989 before adequate constraints were put in place over the activities of oil spill cleanup personnel. Archaeological site monitoring in 1994 and 1995 revealed no new disturbance or vandalism. In 1996, there was evidence of new vandalism at five sites. In 1997, archaeologists revisited two of the sites vandalized in 1996 and several additional sites and found no evidence of new or continued vandalism. In 1998, archaeologists visited 20 sites throughout the spill area and found evidence of recent vandal activity at only two sites on Afognak Island. A final year of monitoring was conducted in FY 99, but results have not yet been reported. Natural erosion is the major agent of degradation at the sites, and erosion draws the attention of looters to exposed artifacts. Eleven years after the oil spill it is difficult to attribute the recent cases of vandalism to discovery of these sites at the time of the spill. No further monitoring of these sites is planned at this time.

STRATEGIES FOR FY 01 AND BEYOND

Monitor Archaeological Sites.

One Trustee Council-funded project will conclude in FY 00: *Index Site Monitoring* (1007).

Protect Sites and Artifacts from Further Injury and Store Them in Facilities.

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, and Seldovia, 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. The Council approved full funding for the project in FY 99. Work is expected to continue on the project through FY 02.

INVITATION FOR FY 01

New Projects. No new projects have been identified but project proposals are welcome.
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Subsistence

Household interviews conducted in 1989 indicated that subsistence harvests of fish and wildlife in most of the communities in the spill area declined substantially following the spill. Interviews were repeated each year 1990-93 and again in 1998. By 1993, the estimated size of the subsistence harvest and participation in subsistence activities appeared to have returned to prespill levels in some communities. By 1998, harvest levels in all communities interviewed were at or approaching prespill levels, but concerns about resource availability remain. According to those interviewed, the 1998 increase in pounds harvested at a time of continued reduced resource availability reflects greater harvest effort than would have been required before the spill to achieve a similar harvest. It also reflects increased reliance on fish in the subsistence diet and decreased reliance on marine mammals and shellfish.

Subsistence users continue to emphasize that the value of subsistence cannot be measured in pounds alone. Harvest levels do not reflect the cultural value of traditional and customary use of natural resources. Following the oil spill, there was concern that the spill disrupted opportunities for young people to learn subsistence culture, and that this knowledge may be lost to them in the future. In 1998, as compared to earlier interviews, fewer subsistence users reported a decline in the influence of elders in teaching subsistence skills, and the number reporting that young adults are learning enough subsistence skills increased. However, a majority of those interviewed reported that the traditional way of life has not recovered since the spill.

STRATEGIES FOR FY 01 AND BEYOND

Restore Injured Resources Used for Subsistence.

The most important strategy for subsistence is restoration of the injured resources that are important to subsistence. In this sense, all projects that address resources used by subsistence harvesters are subsistence restoration projects.

Enhance/Replace Subsistence Resources.

Four Trustee Council-funded projects will conclude in FY 00: *Tatitlek Coho Salmon Release* (\127), *Port Graham Pink Salmon* (\225), *Port Graham Stream Enhancement* (\263), and *Optimization of Test Kit for PSP* (\482). The following projects are ongoing:

Kametolook River Coho Salmon (\247). This project, first funded by the Trustee Council in FY 97, is working to enhance the coho salmon run in the Kametolook River near Perryville through the installation of instream incubation boxes. The project has a strong community involvement component. Locally hired technicians assist Alaska Department of Fish and Game personnel with fieldwork and local students participate in incubating eggs and releasing fry into the river. Council funding is anticipated through FY 02.

Solf Lake Sockeye Salmon Stocking (\256B). A feasibility study funded by the Trustee Council in FY 96-97 verified that Solf Lake, near the village of Chenega Bay, can support a population of sockeye salmon. Stocking began in FY 98 and is expected to continue with Council support through FY 02. In FY 00, improvements will be completed to the channel

that provides access to Solf Lake for returning adult sockeye. The project is designed to benefit subsistence, recreation, and commercial users of western Prince William Sound.

Enhance or Replace Lost or Reduced Services.

One Trustee Council-funded project will conclude in FY 00: *Surf Scoter Life History and Ecology* (\273). The following project is ongoing:

Spot Shrimp Abundance (\401). Concerns over the declining number of shrimp have been raised repeatedly by subsistence users. This project is studying the abundance, population structure, and reproductive potential of spot shrimp in Prince William Sound to determine whether the population can sustain seasonal openings for subsistence, personal use, or commercial fishing. FY 01 would be the third year of what is expected to be a four-year project. The project is a joint effort of the Valdez Native Tribe and the National Oceanic and Atmospheric Administration's Auke Bay Lab.

Increase Involvement of Subsistence Users in the Restoration Process.

Community Involvement & Traditional Ecological Knowledge (1052). Since FY 96, the Trustee Council has funded a spill-area-wide community coordinator, as well as community facilitators in Tatitlek, Chenega Bay, Cordova, Valdez, Port Graham, Nanwalek, Seldovia, Seward, Kodiak region (Ouzinkie), and Alaska Peninsula region (Chignik Lake), to facilitate communication and interaction among the Council, scientists, and residents of communities impacted by the oil spill. An important aspect of this project is promoting and facilitating the use of traditional ecological knowledge (TEK) in the restoration of injured resources and services. In FY 00, objectives related to long-term stewardship of resources are added. These new objectives are designed with the Council's long-term research and monitoring program (GEM, Gulf Ecosystem Monitoring) in mind. The Council anticipates funding this project, although probably at a reduced level and with different objectives, through FY 02.

Youth Area Watch (\210 & \610). First funded in FY 96, the Youth Area Watch project involves students from Chenega Bay, Tatitlek, Cordova, Valdez, Whittier, and Seward in ongoing restoration projects. In FY 99, students from Port Graham, Nanwalek, and Seldovia began participating in the program. In FY 00, the program was expanded to the Kodiak Island communities (Project \610). Students are trained by scientists in data collection protocol and procedures. Students then collect data on a regular basis depending on the needs of the scientists. The Trustee Council anticipates supporting Youth Area Watch through FY 02, although on a declining schedule as the project makes a transition to other funding sources.

Documentary: Spill Impacts on Subsistence Use of Intertidal Resources (\481). This project, which is patterned after two previous video projects funded by the Trustee Council (Project \214, Harbor Seals and Project \274, Herring), is designed to contribute to the restoration of intertidal resources and subsistence uses by transmitting local knowledge about these resources to the scientific community and others. Residents of two predominantly Alaska Native communities, Chenega Bay in Prince William Sound and Ouzinkie on Kodiak Island, are participating in the documentary. A small amount of start-

up funding was provided in FY 00. Funding in FY 01 would be for actual production of the film.

INVITATION FOR FY 01

The Trustee Council expects that the following projects will be continued from FY 00 and invites proposals for work planned in FY 01. Their FY 01 costs are estimated below.

FY 01	\052	Community Involvement & TEK	\$200,000	
	\210	PWS/Cook Inlet Youth Area Watch	\$107,000	
	\247	Kametolook River Coho Salmon Project	\$20,000	
	\256	Solf Lake Sockeye Salmon Stocking	\$40,000	
	\401	Spot Shrimp Abundance	\$95,000	
	\481	Documentary: Spill Impacts on Use of Intertidal	\$111,800	
	\610	Kodiak Youth Area Watch	\$61,800	
Total FY 01:				\$635,600

Potential Continuing Projects. The following project was funded in FY 00. The Trustee Council has not made a commitment to continue it in FY 01 because of uncertainty about its scope or its priority in terms of the overall restoration program. The Council expects to receive a proposal to fund this project in FY 01.

Community-Based Harbor Seal Biosampling (\245). FY 00 is the fifth year of funding for the Alaska Native Harbor Seal Commission's biological sample collection program for harbor seals in Prince William Sound, lower Cook Inlet, and the Kodiak area. The samples are provided to ongoing EVOS studies on why harbor seals are not recovering. Because FY 00 will be the final year of sampling for these studies, funding in FY 01 will be contingent on review of this project's relevance to future harbor seal restoration projects.

New Projects. No new projects have been identified but proposals for additional projects are welcome. The Trustee Council anticipates submittal of additional projects from spill area communities as a result of community outreach underway through Project \052. To be considered by the Council, proposals must be designed to restore the resources or services listed on page 43 of this invitation. Proposals to restore the service of subsistence must aim to restore the natural resources (that is, the fish and wildlife) upon which subsistence depends.

Project proposals should follow the guidelines that begin on page 41. If you would like help in preparing your proposal, please contact Hugh Short, the Trustee Council's Community Involvement Coordinator, at the Anchorage Restoration Office (phone 907-278-8012 or 800-478-7745; e-mail hugh_short@oilspill.state.ak.us).

Reduction of Marine Pollution

Most coastal communities in the spill area have a limited ability to collect and properly dispose of wastes, such as oily bilge water, used engine oil, paints, solvents, and lead-acid batteries. Improper disposal of these wastes in community landfills adversely affects the quality of nearby marine waters through runoff and leaching. In some cases, these wastes are discharged directly into marine waters. Chronic marine pollution places stress on fish and wildlife resources, possibly delaying recovery of resources injured by the oil spill. In fact, with regard to the worldwide mortality of seabirds, the effects of chronic marine pollution are believed to be at least as important as those of large-scale spills.

In FY 95, the Trustee Council funded development of the Sound Waste Management Plan for Prince William Sound (Project \115). In FY 97, the Council provided funds to implement the plan, including the acquisition of waste oil management equipment and the construction of environmental operating stations (centralized drop-off locations for used oil, household hazardous waste, and recyclable solid waste) in Cordova, Valdez, Chenega Bay, Tatitlek, and Whittier. The waste oil equipment and the environmental operating stations are now open in all five communities.

In FY 97, the Trustee Council funded development of the Kodiak Island Borough Master Waste Management Plan (Project \304) and in FY 98 provided funds to implement the plan. Because of turnover in borough staff, implementation of the Kodiak plan has been delayed and now is expected to be completed in FY 01. In FY 98, the Council funded development of a Lower Cook Inlet Waste Management Plan (Project \514), which involves the communities of Port Graham, Nanwalek, and Seldovia.

In FY 97, the Trustee Council funded additional cleanup of selected beaches near the village of Chenega Bay. The effects of the cleanup effort were monitored in FY 98, and a final project report has been submitted for peer review. No additional cleanup is planned at this time.

STRATEGIES FOR FY 01 AND BEYOND

Develop Plans for Waste Reduction in Communities.

Lower Cook Inlet Waste Management Plan (\514). 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 the plan is expected in FY 00. Following review of the plan, the Council will likely consider a proposal later in FY 00 for implementation of the plan. No additional funding is expected in FY 01. Funds for this type of capital project are considered outside of the funding target for the annual work plan.

INVITATION FOR FY 01

New Projects. No new projects have been identified, but project proposals are welcome.

Habitat Improvement

The Trustee Council protects the habitat of injured resources and services primarily by acquiring land that would otherwise be used in ways that might hinder recovery. The Council also supports the active restoration of habitats, which, in turn, restores or enhances injured resources and lost or reduced services.

Projects in this cluster protect or restore habitats by means other than acquiring land. For example, fish spawning habitat has been restored by diverting foot traffic along streams and by revegetating trampled shorelines along the Kenai River (Project \180). In the case of Mariner Park in Homer, the Trustee Council funded a study to develop a means of restoring an intertidal area which suffered damage as a result of the oil spill (Project \314).

Habitat also can be protected and restored through better understanding and management of human uses. The Trustee Council has sponsored the development of a model to help plan for and mitigate the effects of increasing recreation and others uses in western Prince William Sound (Project \339).

STRATEGIES FOR FY 01 AND BEYOND

Restore Habitat.

One Trustee Council-funded project will conclude in FY 00: *Kenai River Habitat Restoration* (\180).

INVITATION FOR FY 01

Potential Continuing Projects. The following project was funded in FY 00. The Trustee Council has not made a commitment to continue it in FY 01 because of uncertainty about its future scope or its priority in terms of the overall restoration program. The Council expects to receive a proposal to fund this project in FY 01.

Human Use Model in Western Prince William Sound (\339). This project is developing a model for projecting future impacts of human use (e.g., increased access) on resources injured by the oil spill in western Prince William Sound. The model is to be completed and a final report written in FY 00. In FY 01, the Trustee Council may consider funding preparation of one or more manuscripts for publication in the peer reviewed literature.

New Projects. No new projects have been identified, but project proposals are welcome.

Ecosystem Synthesis / GEM Transition

Eleven years after the oil spill, the Trustee Council is placing a strong emphasis on the integration and synthesis of what has been and is being learned from various restoration projects and the earlier work conducted during the damage assessment phase. The integration and synthesis of project results enable the Council, scientific community, and public to view the effects of the oil spill and the long-term restoration and management of injured resources and services in broad, ecological contexts. Having the benefit of these perspectives not only aids interpretation of past results in regard to injury and recovery, but also provides an improved framework for development of long-term restoration, research, monitoring, and management plans.

Synthesis within and among the three large-scale ecosystem projects sponsored by the Trustee Council -- SEA (\320), NVP (\025), and APEX (\163) -- is taking place in FY 00 and will continue in FY 01. Concurrent with this interest in synthesis is a continued emphasis on publication of results in open, peer-reviewed journals. Although not described in this cluster, many of the projects in other clusters include funds for synthesis and publication of project results (e.g., projects \048, \516, \541, \590, and \591).

In FY 99 and FY 00, the Trustee Council funded two projects that compile existing information and datasets, including EVOS results, in the Cook Inlet watershed (Project \391) and in Kachemak Bay-lower Cook Inlet (Project \278). Both projects aim to integrate ecological and environmental data to aid natural resource managers and the public, and these efforts should benefit long-term management and conservation of injured resources and lost or reduced services. Some of this same information will also be depicted on a series of four maps summarizing environmentally sensitive areas in the sound (Project 99368, scheduled for completion in summer 2000).

Also in FY 99 and FY 00, the Trustee Council has begun work on a long-term research and monitoring program intended to ensure the long-term health and conservation of the spill-affected marine ecosystem and the resources injured by the spill. Planning for the program, referred to as GEM (Gulf Ecosystem Monitoring), is currently underway (Project \630). Several projects necessary to transition to GEM are also underway in FY 00, such as projects \501 and \509, which are developing experimental designs for long-term monitoring of seabirds and harbor seals respectively, and Project \455, which is evaluating a future data system for GEM. See New Projects in the shaded box below for specific proposals related to GEM that are being invited for FY 01. Proposals for the implementation of GEM will not be solicited until FY 03.

STRATEGIES FOR FY 01 AND BEYOND

Integrate and Synthesize Project Results.

Two Trustee Council-funded projects will conclude in FY 00: *Kachemak Bay Ecological Characterization* (\278) and *Evaluating Scientific Sampling of Oil Spill Effects* (\530). The following project is ongoing:

Cook Inlet Information Management/Monitoring System (CIIMMS, \391). This project, initiated in FY 99, is developing a Cook Inlet database which uses a web harvest approach and a searchable metadata archive to index distributed data resources. Its purpose is to improve management of injured and other marine natural resources by facilitating data sharing, resource management, and planning within the Cook Inlet watershed. A prototype of the database was developed in FY 99. In FY 00, primary tasks are development of final system specifications, including a strategic plan for the long-term operation and maintenance of CIIMMS, and expansion of the system to include access to more datasets. The initial production phase of CIIMMS will be completed in FY 01, the final year of Council contribution to this project.

Develop Models of Research Results.

One Trustee Council-funded project will conclude in FY 00: *Mass-Balance Model of Trophic Fluxes (\330)*.

Transition to GEM.

Three Trustee Council-funded projects will conclude in FY 00: *Evaluation of Data System for GEM (\455)*, *Testing Satellite Tags as a Tool for Identifying Critical Habitat (\478)*, and *Monitoring Environmental Contaminants (\567)*. The following projects are ongoing:

Long-Term Oceanographic Monitoring (\340). This project upgrades and continues a 29-year time series of temperature and salinity data from a marine buoy (GAK1) in Resurrection Bay near Seward. Understanding year-to-year and long-term variations in physical factors that influence productivity is essential in order to distinguish between natural ecological change and human-related changes, such as oil spills. Data gathered at GAK1 will assist in the interpretation of other data from the Trustee Council-sponsored ecosystem projects (especially SEA, Project \320 and APEX, Project \163) and aid in the design of GEM, the Council's long-term research and monitoring program. FY 01 is expected to be the final year of Council contribution to this project.

Guidance for Future Research Activities (\360). In FY 00, the Trustee Council provided funding for the National Research Council (NRC) Polar Research Board and Board on Environmental Science and Toxicology to review the draft plan the Council is developing to guide GEM, its long-term research and monitoring program. An external review of the plan should improve its scope, content, and structure, as well as increase the profile and credibility of the plan nationally. The NRC will begin its review in FY 00 and complete it, along with a written report and recommendations, in FY 01.

Planning for Long-Term Research and Monitoring (\630). In March 1999, the Trustee Council earmarked \$115 million of Restoration Reserve funds for a long-term monitoring and research program in the spill area and adjacent northern Gulf of Alaska. Development of a draft program, tentatively named GEM (Gulf Ecosystem Monitoring), was initiated in FY 99 and will continue through FY 02. This project is being accomplished through the combined efforts of the Restoration Office and Chief Scientist. In FY 01, GEM transition activities will consist of workshops and other consultations to develop advice in specific subject areas. Subject areas include development of a monitoring plan or components of a plan, information and data management strategies, public communication strategies, sentinel

species, and other topics. A new draft of the GEM program should be available on the Council's web site in March 2000.

INVITATION FOR FY 01

The Trustee Council expects that the following projects will be continued from FY 00 and invites proposals for work planned in FY 01. Their FY 01 costs are estimated below.

FY 01	\340 Long-Term Oceanographic Monitoring	\$72,000	
	\360 Guidance for Future Research Activities	\$131,500	
	\391 Cook Inlet Information Management & Monitoring	\$239,000	
	\630 Planning for Long-Term Research & Monitoring	\$50,000	
Total FY 01:			\$492,500

New Projects.

Innovative Tools and Strategies to Improve Monitoring. In FY 01, the Trustee Council will consider proposals to develop cost-effective data acquisition technologies, systems, and sampling strategies for resource managers to use in counting and understanding the biology and habitat of fish and animals of interest to the Council. Specific subject areas and technologies of interest are remote sensing including visible light video and photographic imaging, transmission of digital images, automated processing of information from digital images, hydroacoustics, archival tags, oceanographic moorings, plankton counters, and statistical design of surveys. Significant cost sharing with other funding sources, such as the Alaska Science and Technology Foundation, will increase prospects for a successful proposal.

Development of Community-Based Marine Monitoring Programs. In FY 01, the Trustee Council will consider proposals to develop conceptual prototypes of community-based programs for citizen monitoring of biological and physical conditions of the coastal marine environment. The Council would like to work with communities or groups such as tribes, commercial fishermen, or school districts within the spill area to conduct monitoring programs to meet information needs identified by the restoration process and the GEM program, as well as to meet local needs and interests. Potential programs should be compatible with the needs of the communities, the Council's future long-term monitoring plans, and ongoing government programs, such as the National Status and Trends Program for Marine Environmental Quality (NOAA) and the Environmental Monitoring and Assessment Program (EPA). Proposals should address how a monitoring program would work with funding and management agencies to develop a shared vision of resource management outcomes, as well as ways to achieve those outcomes. Proposals should also address data collection and training issues. Significant cost sharing with other funding sources and collaboration with multiple partners will increase prospects for a successful proposal.

Additional GEM Transition Work. A separate request for proposals may be issued later this year for projects that would follow up on GEM transition projects underway in FY 00 (e.g., Project \455, which is evaluating a data system for GEM).

(box continued on next page)

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Proposals for additional projects are welcome. However, please be aware that proposals for implementation of GEM will not be solicited until February 15, 2002 when the FY 03 invitation is issued. As discussed above, some projects designed to support the transition from direct oil spill restoration to long-term research and monitoring are currently underway and others are being solicited for FY 01. The solicitation for transition projects should not be mistaken for initiation of the GEM program itself.

Project Management

Each project funded by the Trustee Council is administered by one of the six Trustee agencies. Toward this end, funds are included each year in the annual work plan for project management (Project \250).

Project management, provided by resource managers in the Trustee agencies, 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.

For FY 00, the Council authorized \$401,900 for project management, which amounts to roughly five percent of overall project costs and represents a reduction from the amount approved for FY 99 (\$454,200). The estimate of FY 01 funding for project management is \$320,000, a decrease which is consistent with the decrease in the funding target for the overall work plan.

INVITATION FOR FY 01

As in FY 00, each Trustee agency will be asked to develop a budget for its project management costs following the receipt of project proposals on April 14, 2000. The timeline for submittal of these budgets to the Anchorage Restoration Office will be announced soon after April 14.

GENERAL INSTRUCTIONS FOR SUBMITTING A PROPOSAL

- All proposals must be received in the Anchorage Restoration Office by **Friday, April 14, 2000**. Proposals are required for all continuing projects, as well as for new projects.
- All proposals should be for federal fiscal year 2001 (FY 01), which is the period October 1, 2000 through September 30, 2001.
- Three paper copies and one electronic copy of a Detailed Project Description (DPD), prepared per the format and content instructions (pages 42-51), must be submitted. Electronic copies must be on an IBM-compatible disk in WordPerfect 9.0 or lower, or Microsoft Word 97 for Windows or lower.
- Three paper copies and one electronic copy of a Detailed Budget, prepared per the format and content instructions (pages 52-65), must be submitted. An IBM-formatted disk containing the Excel budget form is available from the Anchorage Restoration Office.
- Send your proposal by mail to:
Exxon Valdez Oil Spill Trustee Council
Anchorage Restoration Office
645 G Street, Suite 401
Anchorage, AK 99501

Electronic copies may be sent by e-mail to Sandra Schubert at:
sandra_schubert@oilspill.state.ak.us

No faxes, please.

- All proposals and budgets submitted to the Trustee Council are considered public documents and will be available for public review.
- If you have questions about submitting a proposal, or would like help converting a good idea into a proposal, call the Anchorage Restoration Office:
907-278-8012
1-800-478-7745 toll free within Alaska
1-800-283-7745 toll free outside Alaska

Please be advised: If you received funding from the Trustee Council in FY 99, by **Friday, April 14, 2000** you must submit an annual or final report for peer review unless other arrangements have been made with the Anchorage Restoration Office. Work with your lead agency to submit your report or to request an extended due date. *FY 01 projects will not be authorized for any investigator who has an overdue report.* (See page 41 for information on report writing procedures.)

ADDITIONAL INSTRUCTIONS FOR CERTAIN PROPOSERS

➔ **If you represent a private organization, a non-profit group, or a university from a state other than Alaska...**

and your proposal is for a research or monitoring project, you may want to submit your proposal through the Broad Agency Announcement (BAA) process, as well as to the Anchorage Restoration Office.

In most instances, requirements of state and federal law preclude Trustee Council funds from being awarded directly to private organizations, including non-profit groups, and to universities from states other than Alaska. Rather, a competitive solicitation process is required. This solicitation can occur after the Council approves funding for a project, through issuance of a Request for Proposals (RFP). Under the RFP approach, you would compete against other bidders for the funds to implement your proposal. Or this solicitation can occur before the Council approves funding for a project, through issuance of a Broad Agency Announcement (BAA) by the National Oceanic and Atmospheric Administration (NOAA). Under the BAA approach, if the Council approves funding for your project, you can begin contract negotiations with NOAA without a further competitive solicitation.

As part of this invitation, NOAA is issuing a BAA on behalf of the Trustee Council, requesting proposals for any of the research or monitoring topics identified in this invitation. To submit your proposal through the BAA process, submit a paper copy of your Detailed Project Description and budget to NOAA at the address below by 2:00 p.m. Pacific Daylight (Seattle) time on Friday, April 14, 2000. (This is in addition to the three copies of the Detailed Project Description and budget that must be submitted to the Anchorage Restoration Office.) Include the words "submitted under the BAA" as part of your project's title.

More information, including proposal evaluation criteria, is contained in the Broad Agency Announcement itself (BAA #52ABNF000039), which is available from NOAA:

Ms. Sharon Kent
NOAA, WASC, Acquisition Management Division, WC31
7600 Sand Point Way NE, Bin C15700
Seattle, WA 98115
Telephone (206) 526-6262
Fax (206) 526-6025

Research or monitoring proposals submitted to NOAA under the BAA will be evaluated by the Trustee Council at the same time as other proposals submitted to the Council.

Please note: State and federal agencies, including the University of Alaska, can receive Trustee Council funds directly and should not submit proposals through the BAA process.

➔ **If you would like to conduct your work at the Alaska SeaLife Center...**

indicate this in the designated place on the first page of your Detailed Project Description. In order to ensure that space at the Center is available and appropriate, proposals that indicate use

of the Center in FY 01 or future years will be forwarded to the Center's scientific director for screening before the Trustee Council makes its funding decisions.

The Alaska SeaLife Center is a non-profit research center located in Seward, about 120 miles south of Anchorage. The site is on the Gulf of Alaska at the head of Resurrection Bay on the Kenai Peninsula coast, west of Prince William Sound. The Center is connected with Anchorage by road and air. It is owned by the City of Seward and operated as a non-profit corporation with an independent board and management staff. The Trustee Council contributed \$25 million toward its construction.

The Alaska SeaLife Center is dedicated to the study of the marine ecosystems of Alaskan waters through a combined program of research, rehabilitation, and public education. The focus is on Alaskan marine mammals, marine birds, and fish, and especially on species injured by the *Exxon Valdez* oil spill. The Center has three major components: (1) a section dedicated to research, that includes wet and dry laboratories, holding tanks, and animal handling, food preparation, quarantine, and necropsy areas, (2) a large and integrated rehabilitation section, where critically injured or sick animals can be treated and health data collected for study, and (3) a visitor section where the public can view the Center's scientific program, see the species involved, and learn about the marine environment and research in Alaska.

The Alaska SeaLife Center is designed to simultaneously support multiple research projects. The Center itself does not at this time fund research projects, but makes facilities available to scientific investigators for a reasonable bench fee. (Bench fees will be calculated later and need not be included in your proposal at this time.) The Center also has office, conference, and library space available for resident and visiting scientists.

Proposers interested in using the Alaska SeaLife Center are encouraged to discuss their proposals with its scientific director, Dr. Shannon Atkinson, before submitting a proposal to the Trustee Council.

Dr. Shannon Atkinson
Alaska SeaLife Center
301 Railway Avenue
Box 1329
Seward, AK 99664
Phone: 1-907-224-6346
e-mail: shannon_atkinson@alaskasealife.org

→ If you are an employee of a Trustee Council agency...

your agency may have additional, internal requirements related to the preparation and submittal of proposals. Contact your agency liaison about internal requirements.

EVALUATION OF PROPOSALS

- **Policy and Legal Review...**

To be eligible for funding, proposals must be designed to restore, replace, enhance, or acquire the equivalent of natural resources injured as a result of the oil spill or the reduced or lost services provided by such resources. In addition, proposals must be consistent with the policies contained in the Restoration Plan adopted by the Trustee Council in November 1994 (available upon request from the Anchorage Restoration Office). Trustee Council staff will also review each proposal for completeness and for adherence to the format and content instructions contained in pages 42-51 of this document.

- **Scientific Review...**

All proposals are subject to independent scientific review, conducted by the Trustee Council's Chief Scientist and nationally recognized scientific reviewers who are familiar with past restoration work and are experts in their fields. The scientific reviewers evaluate proposals according to the following criteria.

1. The scientific merits of the proposal as demonstrated through (a) understanding of the problem, (b) soundness of the technical approach, (c) innovation and uniqueness of the proposal, and (d) feasibility (i.e., prospects for the proposal's success).
2. The extent to which the proposal will help achieve the restoration objectives identified for a given resource.
3. The proposer's capabilities, experience, and record of past performance, as well as the experience and qualifications of key personnel, and whether facilities or other factors integral to the proposal's success are available to support the proposal.
4. The cost effectiveness of the proposal.

You may be asked to respond to scientific review comments on your proposal, or to revise your proposal to address concerns of the scientific reviewers.

- **Budget Review...**

Trustee Council staff will examine each proposal's budget for consistency with its proposed research/restoration objectives, and for adherence to the budget instructions contained in pages 52-65 of this document. You may be asked to respond to budget review questions, or to revise your budget to address budgetary concerns.

- **Public Advisory Group Review...**

Proposals will also be reviewed by the Trustee Council's Public Advisory Group, a 17-member group representing a cross-section of interest groups affected by the oil spill.

- **Public Comment and Funding Decision...**

The Council's Executive Director will use the recommendations of the Chief Scientist, the Public Advisory Group, and staff to compile a draft work plan that recommends which proposals should be funded in FY 01. The draft work plan will be circulated for public comment in June 2000. The Council is expected to decide on the final work plan in August 2000. Unanimous agreement of all six Council members is required to fund a proposal.

IF YOUR PROPOSAL IS FUNDED BY THE TRUSTEE COUNCIL

Funds approved by the Trustee Council in August 2000 should be available for expenditure on October 1, 2000 (the beginning of federal fiscal year 2001). Authorization to spend will be provided by the Council's Executive Director on a project-by-project basis after a project's compliance with the National Environmental Policy Act (NEPA) is documented, any project-specific conditions spelled out by the Council in their approval motion are addressed, and the principal investigator is current on the Council's reporting requirements. During project implementation, principal investigators (PIs) will be required to do the following:

- **Provide a quarterly report on your project's progress** to the Anchorage Restoration Office. The report must indicate whether your project's major tasks (as identified in the Detailed Project Description) are being accomplished according to schedule and flag any significant problems being encountered. The report typically consists of a few sentences on a form supplied by the Anchorage Restoration Office through the Lead Trustee Agency.
- **Attend the Annual Restoration Workshop.** In FY 01, the Trustee Council's annual workshop will be held in Anchorage, for two days during the period January 16-26 (actual dates to be announced later). For the workshop, all PIs must submit an abstract describing their most recent year's work. All PIs are expected to attend the workshop, and some will be asked to present a poster or a talk.
- **Possibly attend a technical workshop.** Each year, the Trustee Council's Chief Scientist schedules intensive workshops on specific areas of research. These workshops are usually held in the fall or early winter in Anchorage, but may occur at other times and locations. Selection of the dates of the technical workshops takes into account PIs' schedules.
- **By April 15 of each year, submit for peer review an annual or final report.** Annual reports are required on multi-year projects. Final reports are required upon project completion. Reports on projects funded for FY 01 will be due April 15, 2002. PIs must revise all final reports to respond to peer review comments, if any; revision of annual reports is generally not required. All reports are made available to the public through the Alaska Resources Library and Information Services. (For more information, see *Procedures for the Preparation and Distribution of Reports* available from the Anchorage Restoration Office). PIs are also encouraged to publish results of their work in the peer reviewed literature.
- **Maintain samples and data taken during the course of the project.** By court order, all EVOS-related samples and documents must be retained, with some exceptions. (For more information, see *Procedures for Destroying Documents or Physical Evidence Related to EVOS* available from the Anchorage Restoration Office.) In addition, because Trustee Council funds are public funds, all data collected must be accessible to the public.

Each project's funds are administered by one of the six Trustee agencies. PIs will be notified of which agency will administer their project (who will be the Lead Trustee Agency) after all proposals have been reviewed.

FORMAT AND CONTENT: DETAILED PROJECT DESCRIPTION (DPD)

This section contains instructions for preparing Detailed Project Descriptions (DPDs). As discussed earlier, DPDs will be reviewed for consistency with Trustee Council legal requirements and policies, scientific merit, and adherence to the content and format instructions that follow. Following these instructions carefully will facilitate proposal review.

General Formatting Instructions

- **Program.** WordPerfect 9.0 or lower, or Microsoft Word 97 for Windows or lower, IBM compatible
- **Font.** Times Roman 12 point, or similar
- **Margins.** Top and bottom 0.75"; left and right 1.0"
- **Justification.** Left
- **Header.** None
- **Footer.** On each page -- date prepared, page number, project number
- **First page.** Must be a stand-alone page. The information on the first page will be entered into the Restoration Office database and be revised as needed by Trustee Council staff -- for example, when a number is assigned to a new project, when a Lead Trustee Agency is assigned to a new project, or when budget numbers are revised. This will enable staff to produce an up-to-date first page when needed.
- **Personnel information and literature citations.** Use a separate page at the conclusion of the DPD.
- **Copies.** Copies should be submitted single-sided. Color figures or photographs will be reproduced in black and white.
- **Cover letters.** Will be accepted, but will not be published.

The following pages contain additional formatting instructions and content requirements.

Project Title (Descriptive; Maximum 80 Characters); if the Project is Submitted Under the Broad Agency Announcement, add "Submitted Under the BAA" to the Title (see page 38 for a discussion of the BAA)

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Project Number: (For continuing projects, the last three digits of the 2000 project number preceded by "01" -- for example, 00163 would become 01163; for new projects, leave blank)

Restoration Category: (Research, Monitoring, or General Restoration if known; otherwise, leave blank)

Proposer: (Name of individual, government agency, or other organization -- University, etc.)

Lead Trustee Agency: (If known -- ADEC, ADFG, ADNR, DOI, NOAA, USFS)

Cooperating Agencies: (Trustee agencies in addition to the lead agency, if any, that are requesting funding under the project in FY 01)

Alaska SeaLife Center: ("Yes" if this project intends to use the Alaska SeaLife Center in FY 01 or future years; "no" if it doesn't)

Duration: (What year in the project's life FY 01 is, and the number of federal fiscal years -- October 1st to September 30th -- during which funding has been received or will be requested from the Trustee Council: for example, "2nd year, 3-year project" or "1st year, 1-year project")

Cost FY 01: (The amount of funding requested for expenditure in FY 01; show all dollar amounts in \$000,000 format)

Cost FY 02: (An estimate of the amount of funding, if any, that will be requested for expenditure in FY 02)

Geographic Area: (Locations where field work will be conducted: e.g., Prince William Sound, Kodiak, Kenai Peninsula)

Injured Resource/Service: (The resource -- or related service, if applicable -- injured by the oil spill that the project is designed to restore; see Table 4 on the next page for a list of injured resources and services)

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all caps;
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ABSTRACT

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Provide a brief (8 lines or less) abstract of the project -- basically, what the project will do. If the project is simply a closeout of previous years' work, say so. The abstract may be edited for clarity, brevity and readability by Trustee Council staff.

Please start a new page after the abstract.

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Please make sure this is the beginning of a new page.

INTRODUCTION

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What is the restoration effort being proposed? If the proposal is a continuation of a previous project, include a description of past efforts and results (reference projects funded in previous fiscal years and describe what has been done and what has been learned and accomplished to date), a description of the work being undertaken in FY 00, a description of the work proposed for FY 01, and the work planned for future years (each year until project completion). Also identify any other restoration projects to which the proposal is linked. Provide other background necessary to understanding the proposal.

NEED FOR THE PROJECT

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A. Statement of Problem > subheadings in bold

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What is the problem the project is designed to address? Discuss which injured resource or service the project is designed to restore. Only projects that are designed to restore the resources or services identified in Table 4 will be evaluated for FY 01 unless new scientific or local knowledge shows that other resources experienced a population-level injury or continuing sublethal effect. However, a project may address resources not listed in Table 4 if it will benefit an injured resource or service. For example, it may be permissible to focus activities on a resource not listed in Table 4 if the activities will help subsistence or commercial fishing.

Table 4. Resources and Services Injured by the Spill

INJURED RESOURCES			LOST or REDUCED HUMAN SERVICES
Recovered Bald eagle River otter	Recovering Archaeological resources Black oystercatcher Clams Common murre Intertidal communities Marbled murrelet Mussels Pacific herring Pink salmon Sea otter Sediments Sockeye salmon Subtidal communities	Not Recovering Common loon Cormorants (3 species) Harbor seal Harlequin duck Killer whale (AB pod) Pigeon guillemot Recovery Unknown Cutthroat trout Designated wilderness areas Dolly Varden Kittlitz's murrelet Rockfish	Recovering Commercial fishing Passive uses Recreation and tourism including sport fishing, sport hunting, and other recreational uses Subsistence

B. Rationale/Link to Restoration

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Why should the work be done? Discuss how the project will address the problem -- that is, help recovery. The Trustee Council's comprehensive approach to the restoration of injured resources and services, as outlined in the Restoration Plan, includes research, monitoring, general restoration, habitat protection/acquisition, and establishment of a restoration reserve. This invitation invites proposals for research projects (which provide information needed to restore an injured resource or service), monitoring projects (which gather information about how resources and services are recovering or whether restoration activities are successful), and general restoration projects (which improve the rate of natural recovery by directly manipulating the environment, managing human uses, or reducing pollution).

leave a space between paragraphs

If your proposal is for a research project, describe how the information developed by the proposal will contribute to achieving recovery objectives. Give specific examples whenever possible. For monitoring projects, explain why monitoring needs to be done this year or on the schedule being proposed. For general restoration projects, describe what will be produced or accomplished that will contribute to achieving recovery objectives.

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C. Location

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Where will the project be undertaken? Where will the project's benefits be realized? List communities that may be affected by the project.

↓ 2

COMMUNITY INVOLVEMENT AND TRADITIONAL KNOWLEDGE

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How will affected communities be informed about the project and provide their input? How will research findings and other project information be communicated in non-technical language to local communities? To what extent will local hire and expertise be used for the acquisition of vessels, technicians, equipment, and other locally available resources? To what extent will traditional and local knowledge be incorporated into the project?

In response to concerns expressed by residents of spill-area communities, particularly subsistence users, the Trustee Council is making a concerted effort to increase communication with spill-area residents about restoration efforts and to encourage principal investigators to incorporate and involve traditional and local knowledge in the development and implementation of restoration projects. Principal investigators, particularly those whose projects involve work in or near a community or resources and services which are of particular interest to local residents, are asked to assist the Council in this effort.

If you would like assistance in developing a community involvement component for your proposal, contact:

Hugh Short
Spill Area-Wide Coordinator
Anchorage Restoration Office
Telephone (907) 278-8012; toll-free (800) 478-7745
e-mail: hugh_short@oilspill.state.ak.us

Mr. Short has been hired under contract to the Chugach Regional Resources Commission as the Spill Area-Wide Coordinator for the Trustee Council. He works with a network of community facilitators hired to serve as local contacts for EVOS activities:

Alaska Peninsula	Virginia Aleck	907-845-2233
Chenega Bay	Pete Kompkoff, Jr.	907-573-5132
Cordova	Bob Henrichs	907-424-7738
Nanwalek	Nancy Yeaton	907-281-2253
Ouzinkie (Kodiak)	Paul Panamarioff	907-680-2259
Port Graham	Walter Meganack, Jr.	907-284-2227
Seldovia	Lillian Elvsas	907-234-7898
Seward	Carl Wassilie	907-224-3118
Tatitlek	Gary Kompkoff	907-325-2311
Valdez	Charles Hughey	907-835-4951

If you would like assistance in developing a traditional and local knowledge component for your proposal, contact:

Dr. Henry P. Huntington
P.O. Box 773564
Eagle River, AK 99577
Telephone: (907) 696-3564
e-mail: hph@alaska.net

Dr. Huntington has been hired under contract to the Chugach Regional Resources Commission as the Traditional Ecological Knowledge (TEK) Specialist for the Trustee Council. One of his tasks is to assist project proposers in developing and implementing traditional and local knowledge components for their projects.

Protocols for including traditional knowledge in the restoration process were adopted by the Trustee Council in December 1996. These protocols are appended to this invitation as Appendix C. In addition to the proposal evaluation process outlined on page 40 of this invitation, the protocols call for all research proposals involving traditional knowledge to be reviewed by the TEK Specialist and the community facilitators.

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PROJECT DESIGN

↓ 1

A. Objectives

↓ 1

What are the project's research/restoration objectives, both for FY 01 and throughout the life of the project?

If your project has multiple objectives, please format them like the example below. Use this same format any time you include a list in your DPD.

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1. Determine the foraging range of common murres.
2. Measure abundance and distribution of intertidal invertebrates that prey on herring eggs.
3. Determine the age and sex distribution of harlequin ducks.

↓ ↓

B. Methods

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For research and monitoring projects, what specific hypotheses will be tested and what data do you need to test these hypotheses? For hypotheses that will be tested in FY 01, what methods will be used to generate the data? Please begin this section with a brief (3 lines or less) summary of the methodology to be used. Then provide a more detailed description of scientific methods, field sites, data sets to be generated, and statistical procedures to be used to test hypotheses. To the extent that the variation to be expected in the response variable(s) is known or can be approximated, proposals should demonstrate that the sample sizes and sampling times (for dynamic processes) are of sufficient power or robustness to adequately test the hypotheses.

For monitoring projects, what is the statistical power of the proposed sampling program for detecting a significant change in numbers?

For general restoration projects, what specific actions will be taken to restore the injured resource/service? For actions that will be undertaken in FY 01, include a description of scientific methods, field sites, data sets to be generated, the statistical procedures that will be used to test performance, and the time over which results will be measured.

For projects that will supplement wild fishery stocks, what are the benefits and risks of the proposed supplementation effort? The criteria and guidelines used by the Trustee Council when evaluating supplementation proposals are available from the Anchorage Restoration Office.

For projects that will involve the lethal collection of birds or mammals, contact the Anchorage Restoration Office for a copy of the Trustee Council's policy on collections. Your project's compliance with the collections policy should be addressed in a memo submitted with your DPD.

For all projects, if applicable, discuss alternative methodologies considered, and explain why the proposed methods were chosen.

↓ ↓

C. Cooperating Agencies, Contracts, and Other Agency Assistance

↓ ↓

If more than one Trustee agency is requesting funds for a project, describe each agency's duties and responsibilities under the project. Also explain why more than one agency is involved.

Which components of the project will be contracted to the private sector? Describe each contract, including which tasks will be contracted and why.

Which components of the project will be contracted to other governmental agencies, including state universities? Describe each contract, including which tasks will be contracted and why.

↓ 2

SCHEDULE

↓ 1

A. Measurable Project Tasks for FY 01 (October 1, 2000 - September 30, 2001)

↓ 1

When in FY 01 will major project tasks (for example, sample collection, data analysis, manuscript submittal, etc.) be completed? Include a schedule of work for FY 01 that specifies the dates for major tasks. This information will be the basis for the quarterly project progress reports which are submitted to the Anchorage Restoration Office.

Please format your schedule (here, and in part B below) like the following example.

↓ 1

December 31	Complete analysis of data from FY 00 field season
January 14-16:	Present project results: American Society of Limnology and Oceanography
January 16-26 (2 of these days):	Attend Annual Restoration Workshop
February 1-March 15:	Arrange logistics (boats, equipment, contracts, etc.)
April 1- 10:	Consult with subsistence harvesters
April 15:	Submit annual report (FY 00 findings)
May 14 - 20:	Conduct initial surveys
June 5 - 16:	Consult with experts and conduct second survey
September 15:	Submit manuscript to peer reviewed journal

remember the color
indent over so in alignment

B. Project Milestones and Endpoints

When will each project objective be addressed and met? (Objectives listed here should be the objectives already listed under PROJECT DESIGN, Part A.) Include a schedule, covering the entire life of the project (through FY 02, if applicable). This information will be used by project reviewers to assess whether projects are meeting their objectives and are suitable for continued funding.

C. Completion Date

When will the work be completed? That is, during which fiscal year will all of the project's objectives have been met?

PUBLICATIONS AND REPORTS

What manuscripts do you plan to submit for publication in FY 01, if any? Provide the subject/title of each manuscript, the name of the peer-reviewed journal(s) to which you plan

to submit it, and when the manuscript will be submitted.

The Trustee Council strongly encourages publication of project results in peer-reviewed journals as soon as scientifically appropriate and logistically possible. Toward this end, in FY 01 the Council will support page costs of publications anticipated to appear in print during FY 01. For closeout projects, the Council will consider funding a portion of a principal investigator's time specifically for preparation of a manuscript for publication. (See page 54 of the budget instructions for more information.) Please note that the Council has adopted a policy regarding an acknowledgment and disclaimer to be used in publishing results of restoration projects. Contact the Anchorage Restoration Office for more information.

In addition to publications, the Trustee Council requires that an annual report be prepared for each continuing project, and that a final report be prepared for each project upon completion. These reports are due on April 15 of the year following the year in which the research project or restoration activity takes place (for example, reports on projects funded for FY 01 are due April 15, 2002.) With approval of the Chief Scientist and the Executive Director, on a project-by-project basis, the publications discussed above may satisfy a portion of the report requirements. (For a copy of the Council's *Procedures for the Preparation and Distribution of Reports, October 1998*, contact the Anchorage Restoration Office.)

↓ 2

PROFESSIONAL CONFERENCES

↓ 1

The Trustee Council encourages presentation of project results at professional conferences, and may provide limited travel support for particularly important opportunities. If you are requesting travel funds for conference attendance in FY 01 (see page 53 of the budget instructions for more information), provide in this section the name and sponsor of the conference, when and where the conference will be held, and your anticipated role in the conference. If you plan to present a paper at the conference, what will be the topic?

↓ 2

NORMAL AGENCY MANAGEMENT (NOTE: Proposers who are not employees of government agencies should skip this section. However, the issue of normal agency management will be evaluated for all proposals during the proposal review process.)

↓ 1

Why should the Trustee Council, rather than the agency proposing the project, be the source of funds for this project? It is the policy of the Council to fund government agencies only for restoration projects that they would not have conducted had the spill not occurred. In addressing the above question, briefly discuss the following: Is the project something the agency is required to do by statute or regulation regardless of whether the oil spill had occurred? What, if any, similar projects have been conducted by the agency in the past without funds from the Council?

COORDINATION AND INTEGRATION OF RESTORATION EFFORT

↓ 1

How will the project be coordinated and integrated with other restoration efforts? Describe with whom coordination has taken or will take place (other Trustee Council funded projects, ongoing agency operations, etc.) and what form the coordination will take (shared field sites, research platforms, sample collection, data management, equipment purchases, etc.). Also describe efforts to obtain funds from non-Council sources, and related or complementary work being undertaken by other entities.

↓ 2

EXPLANATION OF CHANGES IN CONTINUING PROJECTS (NOTE: Proposers of projects that were not funded in FY 00 should skip this section)

↓ 1

How does the proposal described in this DPD differ from the DPD approved by the Trustee Council for FY 00? Briefly summarize major changes in objectives or methods, and any changes in the project's milestones, endpoints, or completion date. Explain why these changes were made (for example, in response to peer reviewer comments, based on prior year results, etc.).

↓ 2

PROPOSED PRINCIPAL INVESTIGATOR, IF KNOWN

Name

Affiliation

Mailing address

Phone number

Fax number

E-mail address

Please start a new page here.

Please make sure this is the beginning of a new page.

PRINCIPAL INVESTIGATOR

↓ 1

What are the qualifications of the proposed principal investigator? For projects with more than one PI, identify which PI will be responsible for which project objectives and tasks.

↓ 2

OTHER KEY PERSONNEL

↓ 1

Provide a list of key personnel who will be working on the project in FY 01 and describe what their responsibilities will be.

↓ 2

LITERATURE CITED

↓ 1

If appropriate, include literature citations here.

FORMAT AND CONTENT: DETAILED BUDGET

This section contains instructions for preparing Detailed Budgets.

- Part I. Instructions for all Proposers: Pages 52-54
- Part II. Additional Instructions for Trustee Agencies: Pages 55-60
- Part III. Additional Instructions for Non-Trustee Organizations: Pages 61-65

Part I. Instructions for All Proposers

The Detailed Budget should outline probable expenditures to implement the objectives described in your Detailed Project Description (DPD). The Detailed Budget should clearly communicate how much funding is needed to implement the project in FY 01, and should contain an estimate of future years' costs through FY 02 or the end of the project, whichever comes first.

It is the responsibility of the proposer to submit a budget that is both reasonable and justified. In an effort to ensure wise and proper use of *Exxon Valdez* oil spill trust funds, each proposal's budget will be reviewed by Trustee Council staff for consistency with the objectives contained in the DPD and for adherence to the budget instructions that follow. In regard to continuing projects, particular scrutiny will be given to funding requests that exceed what was approved for FY 00 or what was projected in FY 00 for FY 01. Each budget form contains a comment or description field. Using this field to explain the proposed budget and justify any increases will enable staff to understand how the budget was developed and why. Proposers may be asked to respond to budget review questions, or to revise their budgets to address budgetary concerns.

- **Fiscal Year...**
The Trustee Council operates on the federal fiscal year (FY). The FY 01 budget is for the period October 1, 2000 through September 30, 2001.
- **Project Number...**
For continuing projects, use the last three digits of the 2000 project number preceded by "01" (for example, project 00163 would become 01163). For new projects, leave the number blank.
- **Rules for Numbers...**
 1. Unless otherwise noted, show all costs in thousands of dollars. For example, show \$86,423 as \$86.4.
 2. When the number "5" follows the digit to be rounded, round to the higher amount. For example, round \$26,752 to \$26.8.
 3. Report number of positions as full-time equivalent positions (FTE), by converting the number of months to a decimal. For example, show six months (half of a year) as .5 FTE.

- **Indirect Costs...**

Indirect costs are those costs that are incurred for common or joint purposes and therefore cannot be identified readily and specifically with a particular project. Trustee agencies should cover these costs through the general administration formula (see page 55). Non-Trustee organizations should cover these costs through their indirect rate.

Examples of indirect costs are maintenance and operation of space (i.e., lease costs), office supplies, copying, phones, faxes, equipment maintenance and repair, vehicle leasing, software, and training. Additional examples are the costs of payroll and personnel functions, data processing, clerical support, various levels of administrative supervision, administrative contract monitoring, accounting, budgeting, auditing, and mail and messenger services. These items should be budgeted for separately only if they are incurred because of a specific project and documentation of the expense is maintained. The documentation must demonstrate to a financial auditor that the expense was directly attributable to the project, and was necessary and reasonable.

- **Direct Project Costs...**

Direct costs are those costs that are identified with or linked to a specific project. Examples of direct costs are compensation of employees for the time spent executing the project, acquisition of materials or equipment for purposes outlined in the DPD, project-specific travel, and contractual services specified in the DPD. For most projects, the following direct costs should be included:

1. **NEPA (National Environmental Policy Act) Compliance.** All projects funded by the Trustee Council must comply with NEPA. Due to their research nature, many projects receive a categorical exclusion (CE) from NEPA. However, for a few projects, an environmental assessment (EA) may be required. If a project will likely require an EA, include the costs for preparing it in the project budget. Identify on the appropriate budget forms how much funding has been included for this purpose.
2. **Workshop Attendance.** All principal investigators are required to attend the Trustee Council's Annual Restoration Workshop. The 2001 workshop will be held in Anchorage, for two days during the period January 16-26 (actual dates to be announced later). Unless you reside in Anchorage, include funds in your budget for travel and two days per diem for the PI (and co-PI, if appropriate) to attend this workshop. Identify on the appropriate budget forms how much funding has been included for this purpose.
3. **Report Writing.** Principal investigators are required to prepare a report on their project by April 15 of each year. Reports are due on April 15 of the year following the year in which the research project or restoration activity takes place; reports on projects funded for FY 01 are due April 15, 2002. If you represent a state or federal agency, the costs of preparing a report on your FY 01 activity should be included in your FY 02 budget. If you represent another type of organization, the costs of performing the project and preparing a report both should be included in your FY 01 budget. Describe on the appropriate budget

forms how much funding has been included for report writing. (For further information, see *Procedures for the Preparation and Distribution of Reports, October 1998* available from the Anchorage Restoration Office.)

4. **Manuscript Preparation and Publication.** The Trustee Council may contribute a maximum of \$1,000 in page costs per project and 1.5 months of personnel time per manuscript toward publication of study results in the peer reviewed literature. Funds budgeted for this purpose in FY 01 must be for manuscripts that will be published (i.e., appear in print) in FY 01. Identify on the appropriate budget forms how much funding has been included for manuscript preparation and publication. Include in your DPD the subject/title of each manuscript, the name of the peer reviewed journal(s) to which you plan to submit it, and when the manuscript will be submitted.
 5. **Professional Conferences.** If a PI will be presenting results of his or her restoration project at a professional conference, or if attendance at a conference is integral to the project, the Trustee Council may fund attendance at one professional conference in FY 01 for each PI (and co-PI, if appropriate). Identify on the appropriate budget forms how much funding has been included for this purpose. Include in your DPD the name and sponsor of the conference, when and where the conference will be held, and your anticipated role in the conference.
 6. **Community Involvement and Traditional Knowledge.** Identify on the appropriate budget forms any funds included to involve local communities in your project, or to collect traditional or local knowledge.
- **Future Year Budget Estimates...**
The estimated future year costs (FY 02 only) should be as reliable as possible in order to enable the Trustee Council to conduct long-range planning. The estimate of FY 02 funding that you make this year will be used by Council staff as a benchmark for reviewing your FY 02 budget when it is submitted in April 2001. Trustee agencies should include general administration costs in future year estimates.
 - **IBM Disks Available...**
An IBM-formatted disk containing the budget forms (created in Excel 4.0) is available from the Anchorage Restoration Office.

Part II. Additional Instructions for Trustee Agencies

This section provides additional instructions for Trustee Agencies (listed below). Non-Trustee organizations should skip this section and continue on to page 61.

•Agency Abbreviations...

Use the following agency abbreviations:

Alaska Department of Environmental Conservation	ADEC
Alaska Department of Fish and Game	ADFG
Alaska Department of Natural Resources	ADNR
Department of Agriculture, U.S. Forest Service	USFS
Department of Interior, Fish and Wildlife Service	DOI-FWS
Department of Interior, U.S. Geological Survey	DOI-USGS
Department of Interior, National Park Service	DOI-NPS
National Oceanic and Atmospheric Administration	NOAA

• General Administration...

The general administration (GA) formula, established in the Trustee Council's financial operating procedures, reimburses government agencies for indirect costs (see page 53) incurred in implementing the restoration program. The formula consists of 15% of each project's personnel costs, plus 7% of the first \$250,000 of each project's contractual costs, plus 2% of contractual costs in excess of \$250,000. The Excel budget forms automatically calculate GA for FY 01. In estimating future costs (FY 02), remember to include the appropriate amount of GA.

• Project Management...

Project management represents the costs required to manage individual projects consistent with Trustee Council procedures. As in FY 00, project management costs for each Trustee agency will be compiled into a separate budget, to be submitted at a later date. Do not include project management costs in the individual project budgets.

• Equipment...

Equipment previously purchased by the Trustee Council should be used to the maximum extent possible. Before requesting funds for new equipment, contact your agency liaison to determine if suitable equipment is already available.

• Budget Forms...

Instructions for completing the budget forms follow:

Multi-Trustee Agency Summary (Form 2A) summarizes the total funds requested for a project when multiple Trustee agencies are cooperating on a project.

Trustee Agency Summary (Form 3A) summarizes each agency's proposed expenditures from the Detail forms.

Trustee Agency Detail (Form 3B) provides detailed expenditure information on personnel, travel, contractual, commodities, and equipment for each agency.

Multi-Trustee Agency Summary (Form 2A)

How the Form will be Used...

This form is used when multiple Trustee agencies are cooperating on a project. If only one Trustee agency is involved, this form is not required.

How to Complete the Form...

1. *Authorized FY 2000* - No input required. All the information is linked to individual agency forms.
2. *Proposed FY 2001* - No input required. All the information is linked to individual agency forms.
3. *Other Funds* - No input required. All the information is linked to individual agency forms.
4. *Proposed FY 2001 Trustee Agency Totals* - Total requested by each cooperating agency. Agencies must link the 3A forms.
5. *Long Range Funding Requirements* - No input required. All the information is linked to individual agency forms.
6. *Comments* - Use this space to explain the proposed budget. For continuing projects, explain any increases over projections made in FY 00.
7. *Project Identification Field* - Enter the project number (if known), title, and lead agency.
8. *Prepared* - Enter the date this budget was prepared.

Budget Category:	Authorized FY 2000	Proposed FY 2001	PROPOSED FY 2001 TRUSTEE AGENCY TOTALS -4-					
			ADEC	ADFG	ADNR	USFS	DOI	NOAA
Personnel								
Travel								
Contractual								
Commodities								
Equipment	- 1 -	- 2 -	LONG RANGE FUNDING REQUIREMENTS - 5 -					
Subtotal			Estimated FY 2002					
General Administration								
Project Total								
Full-time Equivalents (FTE)								
Other Funds - 3 -								
Comments: - 6 -								
<div style="border: 1px solid black; padding: 5px; display: inline-block;"> FY 01 </div>			Project Number: Project Title: Lead Agency:			- 7 -		
<div style="border: 1px solid black; padding: 5px; display: inline-block;"> FORM 2A MULTI-TRUSTEE AGENCY SUMMARY </div>								
Prepared: - 8 -								

Trustee Agency Summary (Form 3A)

How the Form will be Used...

This form summarizes the proposed expenditures contained on the Trustee Agency Detail forms.

How to Complete the Form...

1. *Authorized FY 2000* - If the project was funded in FY 00, enter the total authorized by line-item. Otherwise, leave blank.
2. *Proposed FY 2001* - No input required. All the information is linked to the Detail forms.
3. *Other Funds* - Enter the amount of funds from other sources that the project leverages and any agency contribution.
4. *Long Range Funding Requirements* - Estimate future year costs through FY 02 or the end of the project, whichever comes first. Remember to include funding for general administration costs.
5. *Comments* - At a minimum:
 - Identify what portion of the project cost, if any, is for NEPA compliance, annual restoration workshop attendance, report writing, publications, professional conferences, and community involvement;
 - If other funds are anticipated, explain the source of the funding, any matching requirement, and any conditions tied to those funds;
 - For continuing projects, explain any increases over projections made in FY 00.
6. *Project Identification Field* - Enter the project number, title, and your agency's name.
7. *Prepared* - Enter the date this budget was prepared.

Budget Category:	Authorized FY 2000	Proposed FY 2001						
Personnel								
Travel								
Contractual								
Commodities								
Equipment	- 1 -	- 2 -						
Subtotal			Estimated FY 2002					
General Administration								
Project Total								
Full-time Equivalents (FTE)								
Dollar amounts are shown in thousands of dollars.								
Other Funds - 3 -								
Comments: <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="border: 1px solid black; padding: 5px; width: 15%;">FY 01</div> <div style="width: 60%;"> Project Number: Project Title: Agency: </div> <div style="width: 20%; text-align: center;"> - 6 - </div> </div>								
<div style="border: 1px solid black; padding: 5px; display: inline-block;"> FORM 3A TRUSTEE AGENCY SUMMARY </div>								
Prepared: - 7 -								

Trustee Agency Detail (Form 3B)

Personnel & Travel

How the Form will be Used...

This form documents the personnel and travel costs of the proposed project. "Personnel" means compensation of employees, including benefits, for the time and effort devoted to the execution of the project. "Travel" means the cost of transportation by public conveyance and per diem.

How to Complete the Form...

1. *Name* - Enter the first initial and last name of each person budgeted. If the name is unknown, enter vacant.
2. *Position Description* - Enter the position title.
3. *GS/Range/Step* - Enter the appropriate general schedule (GS) and step, or range and step.
4. *Months Budgeted* - Enter the number of months for each position.
5. *Monthly Costs* - Enter the monthly sum of salary and benefits for each position.
6. *Overtime* - Enter the estimated overtime cost for each position.
7. *Proposed FY 2001 Personnel Costs* - No input necessary. The form automatically calculates: (Months Budgeted x Monthly Costs) + Overtime
8. *Travel Description* - Include name of traveler, destination, and purpose of any trips.
9. *Ticket Price* - Enter the round trip ticket price.
10. *Round Trips* - Enter the number of round trips. Use whole numbers.
11. *Total Days* - Enter the total number of days in travel status. Use whole numbers.
12. *Daily Per Diem* - Enter the daily per diem rate.
13. *Proposed FY 2001 Travel Costs* - No input necessary. The form automatically calculates: (Ticket Price x Round Trips) + (Total Days x Daily Per Diem)
14. *Project Identification Field* - Enter the project number, title, and your agency's name.
15. *Prepared* - Enter the date this budget was prepared.

Personnel Costs:		GS/Range/Step	Months Budgeted	Monthly Costs	Overtime	Proposed FY 2001
Name	Position Description					
- 1 -	- 2 -	- 3 -	- 4 -	- 5 -	- 6 -	- 7 -
Subtotal						
Personnel Total						
Travel Costs:		Ticket Price	Round Trips	Total Days	Daily Per Diem	Proposed FY 2001
Description						
- 8 -		- 9 -	- 10 -	- 11 -	- 12 -	- 13 -
Travel Total						
FY 01	Project Number: Project Title: - 14 - Agency:					FORM 3B Personnel & Travel DETAIL
Prepared: - 15 -						

Trustee Agency Detail (Form 3B) Contractual & Commodities

How the Form will be Used...

This form documents the contractual and commodities costs of the proposed project. "Contractual" covers such items as vessel charters, equipment rental or lease, professional services, communications, and printing. "Commodities" are consumable supplies with an estimated life of less than one year and a unit value of less than \$500.

How to Complete the Form...

1. *Contractual Description* - Describe what is being purchased and its purpose. If a significant portion of the project will be performed under contract, and the likely contractor is known, the Non-Trustee Organization forms are also required.
2. *Proposed FY 2001* - Enter the proposed FY 2001 contractual cost.
3. *Commodities Description* - Describe what is being purchased and its purpose.
4. *Proposed FY 2001* - Enter the proposed FY 2001 commodities cost.
5. *Project Identification Field* - Enter the project number, title, and your agency's name.
6. *Prepared* - Enter the date this budget was prepared.

Contractual Costs:		Proposed
Description		FY 2001
- 1 -		- 2 -
When a non-trustee organization is used, the form 4A is required.		Contractual Total
Commodities Costs:		Proposed
Description		FY 2001
- 3 -		- 4 -
		Commodities Total
FY 01	Project Number: Project Title: - 5 - Agency:	FORM 3B Contractual & Commodities DETAIL
Prepared: - 6 -		

Trustee Agency Detail (Form 3B)

Equipment

How the Form will be Used...

This form documents the equipment costs of the proposed project. "Equipment" means non-consumable items having an estimated life of more than one year and a unit value greater than \$500. Equipment previously purchased by the Trustee Council should be used to the maximum extent possible.

How to Complete the Form...

1. *Replacement Equipment* - Put an R in this column if the request replaces equipment previously purchased by the Trustee Council.
2. *New Equipment Description* - Describe the equipment and how the cost estimate was obtained.
3. *Number of Units* - Enter the number of units to be purchased. Use whole numbers.
4. *Unit Price* - Enter the unit price.
5. *Proposed FY 2001 New Equipment* - No input necessary. The form automatically calculates: Number of Units x Unit Price
6. *Existing Equipment Description* - Describe existing equipment which will be used.
7. *Number of Units* - Enter the number of existing units which will be used. Use whole numbers.
8. *Inventory Agency* - Enter the agency which currently has the equipment on inventory.
9. *Project Identification Field* - Enter the project number, title, and your agency's name.
10. *Prepared* - Enter the date this budget was prepared.

New Equipment Purchases:		Number of Units	Unit Price	Proposed FY 2001
Description				
- 1 -	- 2 -	- 3 -	- 4 -	- 5 -
Indicate replacement equipment purchases with an R.		New Equipment Total		
Existing Equipment Usage:		Number of Units	Inventory Agency	
Description				
	- 6 -	- 7 -	- 8 -	
FY 01		Project Number: Project Title: - 9 - Agency:		FORM 3B Equipment DETAIL
Prepared: - 10 -				

Part III. Additional Instructions for Non-Trustee Organizations

A non-Trustee organization is any organization (state, federal, private, or non-profit) other than the Alaska Department of Environmental Conservation, the Alaska Department of Fish and Game, the Alaska Department of Natural Resources, the National Oceanic and Atmospheric Administration, the U.S. Forest Service, and the U. S. Department of Interior. The University of Alaska is considered a non-Trustee organization.

- **Lead Trustee Agency...**

The Trustee Council does not have the authority to administer project funds directly. Rather, all project funds are administered by one of the six Trustee agencies listed above. Proposers will be notified of which agency will administer their project (who will be the Lead Trustee Agency) after all proposals have been reviewed. Do not include any Lead Trustee Agency costs in your budget.

- **Indirect Cost Rate...**

Proposers' indirect cost rates will be reviewed on a project-by-project basis. However, proposers affiliated with the University of Alaska must use the indirect rate agreed to by the University for *Exxon Valdez* oil spill restoration projects. The agreement provides for an indirect cost rate of 25 percent of total direct costs (TDC). TDC includes all direct costs except (1) equipment for which ownership resides with the University and (2) subcontract costs in excess of \$25,000. Regarding subcontracts, the indirect rate is 25 percent on the first \$25,000 of each subcontract, plus 5 percent of each subcontract's costs in excess of \$25,000 and less than \$250,000, plus 2 percent of each subcontract's costs in excess of \$250,000. Each University proposer is responsible for accurately calculating this indirect rate for his or her project.

- **Equipment...**

All equipment purchased remains the property of the Lead Trustee Agency and must be returned to the agency upon completion of the project.

- **Budget Forms...**

Instructions for completing the individual budget forms follow:

Non-Trustee Organization Summary (Form 4A) summarizes the proposed expenditures from the Detail forms.

Non-Trustee Organization Detail (Form 4B) provides detailed expenditure information on personnel, travel, contractual, commodities, and equipment.

Non-Trustee Organization Summary (Form 4A)

How the Form will be Used...

This form summarizes the proposed expenditures contained on the Non-Trustee Organization Detail forms.

How to Complete the Form...

1. *Authorized FY 2000* - If the project was funded in FY 00, enter the total authorized by line-item. Otherwise, leave blank.
2. *Proposed FY 2001* - No input required. All the information is linked to the Detail forms.
3. *Indirect* - Enter the proposed indirect project costs. Specify and explain the rate in the comments field.
4. *Other Funds* - Enter the amount of funds from other sources that the project leverages.
5. *Long Range Funding Requirements* - Estimate future year costs through FY 02 or the end of the project, whichever comes first.
6. *Comments* - At a minimum:
 - Specify and explain your indirect rate;
 - Identify what portion of the project cost, if any, is for NEPA compliance, annual restoration workshop attendance, report writing, publications, professional conferences, and community involvement;
 - If other funds are anticipated, explain the source of the funding, any matching requirement, and any conditions tied to those funds;
 - For continuing projects, explain any increases over projections made in FY 00.
7. *Project Identification Field* - Enter the project number, title, and your organization's name.
8. *Prepared* - Enter the date this budget was prepared.

Budget Category:	Authorized FY 2000	Proposed FY 2001						
Personnel								
Travel								
Contractual								
Commodities	- 1 -	- 2 -						
Equipment			LONG RANGE FUNDING REQUIREMENTS - 5 -					
Subtotal			Estimated FY 2002					
Indirect		- 3 -						
Project Total								
Full-time Equivalents (FTE)								
Dollar amounts are shown in thousands of dollars.								
Other Funds - 4 -								
Comments: - 6 -								
FY 01	Project Number: Project Title: - 7 - Name:						FORM 4A Non-Trustee SUMMARY	
Prepared: - 8 -								

Non-Trustee Organization Detail (Form 4B) Personnel & Travel

How the Form will be Used...

This form documents the personnel and travel costs of the proposed project. "Personnel" means the compensation of employees, including benefits, for the time and effort devoted to the execution of the project and includes tuition for students. "Travel" means the cost of transportation by public conveyance and per diem.

How to Complete the Form...

1. *Name* - Enter the first initial and last name of each person budgeted. If the name is unknown, enter vacant.
2. *Position Description* - Enter the position title.
3. *Months Budgeted* - Enter the number of months for each position.
4. *Monthly Costs* - Enter the monthly sum of salary and benefits for each position.
5. *Overtime* - Enter the estimated overtime cost for each position.
6. *Proposed FY 2001 Personnel Costs* - No input necessary. The form automatically calculates: (Months Budgeted x Monthly Costs) + Overtime
7. *Travel Description* - Include name of traveler, destination, and purpose of any trips.
8. *Ticket Price* - Enter the round trip ticket price.
9. *Round Trips* - Enter the number of round trips. Use whole numbers.
10. *Total Days* - Enter the total number of days in travel status. Use whole numbers.
11. *Daily Per Diem* - Enter the daily per diem rate.
12. *Proposed FY 2001 Travel Costs* - No input necessary. The form automatically calculates: (Ticket Price x Round Trips) + (Total Days x Daily Per Diem)
13. *Project Identification Field* - Enter the project number, title, and your organization's name.
14. *Prepared* - Enter the date this budget was prepared.

Personnel Costs:			Months Budgeted	Monthly Costs	Overtime	Proposed FY 2001	
Name	Position Description						
- 1 -	- 2 -		- 3 -	- 4 -	- 5 -	- 6 -	
Subtotal							
			Personnel Total				
Travel Costs:			Ticket Price	Round Trips	Total Days	Daily Per Diem	Proposed FY 2001
Description							
- 7 -			- 8 -	- 9 -	- 10 -	- 11 -	- 12 -
			Travel Total				
FY 01		Project Number: Project Title: - 13 - Name:			FORM 4B Personnel & Travel DETAIL		
Prepared: - 14 -							

Non-Trustee Organization Detail (Form 4B) Contractual & Commodities

How the Form will be Used...

This form documents the contractual and commodities costs of the proposed project. "Contractual" covers such items as vessel charters, equipment rental or lease, professional services, communications, and printing. "Commodities" are consumable supplies with an estimated life of less than one year and a unit value of less than \$500.

How to Complete the Form...

1. *Contractual Description* - Describe what is being purchased and its purpose.
2. *Proposed FY 2001* - Enter the proposed FY 2001 contractual cost.
3. *Commodities Description* - Describe what is being purchased and its purpose.
4. *Proposed FY 2001* - Enter the proposed FY 2001 commodities cost.
5. *Project Identification Field* - Enter the project number, title, and your organization's name.
6. *Prepared* - Enter the date this budget was prepared.

Contractual Costs:		Proposed
Description		FY 2001
- 1 -		- 2 -
Contractual Total		
Commodities Costs:		Proposed
Description		FY 2001
- 3 -		- 4 -
Commodities Total		
<div style="border: 1px solid black; padding: 5px; display: inline-block;"> FY 01 </div>	Project Number: Project Title: - 5 - Name:	<div style="border: 1px solid black; padding: 5px; display: inline-block;"> FORM 4B Contractual & Commodities DETAIL </div>
Prepared: - 6 -		

Non-Trustee Organization Detail (Form 4B) Equipment

How the Form will be Used...

This form documents the equipment costs of the proposed project. "Equipment" means non-consumable items having an estimated life of more than one year and a unit value greater than \$500. All equipment purchased remains the property of the Lead Trustee Agency and must be returned to the agency upon completion of the project.

How to Complete the Form...

1. *Replacement Equipment* - Put an R in this column if the request replaces equipment previously purchased by the Trustee Council.
2. *New Equipment Description* - Describe the equipment and how the cost estimate was obtained.
3. *Number of Units* - Enter the number of units to be purchased. Use whole numbers.
4. *Unit Price* - Enter the unit price.
5. *Proposed FY 2001 New Equipment* - No input necessary. The form automatically calculates: Number of Units x Unit Price
6. *Existing Equipment Description* - Describe existing equipment which will be used.
7. *Number of Units* - Enter the number of existing units which will be used. Use whole numbers.
8. *Project Identification Field* - Enter the project number, title, and your organization's name.
9. *Prepared* - Enter the date this budget was prepared.

New Equipment Purchases:		Number of Units	Unit Price	Proposed FY 2001
Description				
- 1 -	- 2 -	- 3 -	- 4 -	- 5 -
Indicate replacement equipment purchases with an R.		New Equipment Total		
Existing Equipment Usage:		Number of Units		
Description				
- 6 -		- 7 -		
<div style="border: 1px solid black; padding: 5px; display: inline-block;">FY 01</div>		Project Number: Project Title: - 8 - Name:		<div style="border: 1px solid black; padding: 5px; text-align: center;">FORM 4B Equipment DETAIL</div>
Prepared: - 9 -				

APPENDIX A

OTHER TRUSTEE COUNCIL ACTIVITIES

In addition to funding monitoring, research, and general restoration projects through the annual work plan, the Trustee Council authorizes funds for habitat protection and acquisition, public information/science management/administration, and the Restoration Reserve.

Habitat Protection and Acquisition

The Trustee Council funds the acquisition of land, or interests in land, in order to protect the habitat of injured resources. The goals of habitat protection are to prevent additional injury to resources and services while recovery is taking place and to provide a long-term safety net for these resources. For example, 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.

As of January 2000, the Trustee Council has committed \$343 million to protect 635,770 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 private inholders;
- 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.; negotiations continue with Koniag, Inc. to permanently protect an additional 55,402 acres of habitat along the Karluk and Sturgeon rivers that is currently protected through 2001 by a temporary nondevelopment easement;
- 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 Tātīlek Corporation.

In total, approximately 1,419 miles of coastline and 305 anadromous rivers, streams, and spawning areas have been protected.

The Trustee Council has also spent \$19 million to acquire 7,200 acres of habitat in small parcels (generally under 1,000 acres each), and authorized \$3.1 million to purchase an additional 1,446 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.

The Trustee Council's large parcel program is now essentially complete and most activity under the small parcel program is related to completing acquisition of parcels nominated some time ago. In March 1999 the Council designated \$55 million of Restoration Reserve funds for a long-term habitat protection program, to begin in October 2002. A decision on just what that program will look like has not yet been made.

Support activities for the habitat protection program include negotiating, surveying, appraising, clearing title, conducting hazardous materials surveys, and recording court documents. The amount of funding needed for these activities in FY 01 has not yet been determined. Decisions about habitat protection—which lands to purchase and funding for acquisition support activities—are being addressed through a separate process and are not the subject of this invitation.

For more information on the Trustee Council's habitat protection program, contact the Anchorage Restoration Office.

Public Information/Science Management/Administration

This project (\100) provides the public outreach, science management, and administration necessary to efficiently implement the Trustee Council's restoration program. Project \100 includes funding for:

- Operations and staff support for the Trustee Council, including the Anchorage Restoration Office and Trustee agency liaisons;
- Operations and staff support for the 17-member Public Advisory Group, which was established in the civil settlement between Exxon Corporation and the state and federal governments;
- Independent scientific review of project proposals and reports, including the Chief Scientist and peer reviewers;
- EVOS participation in the Alaska Resource Library and Information Services (ARLIS); ARLIS's combined collection, which includes 150,000 books and journals plus electronic databases, videotapes, maps, and photographic slides, is cataloged on OCLC, a global online library database searchable at www.arlis.org;
- Publications, including this invitation; annual work plans; the *Restoration Update*, a quarterly newsletter distributed to approximately 3,000 people; and the *Annual Status Report*, which reports to the public on the progress of restoration;
- Workshops, including the Annual Restoration Workshop (which is attended by all Trustee Council researchers and the public) and more intensive technical workshops;
- Public meetings, including meetings in communities in the spill area and elsewhere, on the restoration program;
- Additional communication efforts, such as the Trustee Council's restoration notebook series, which tells the story of injury and recovery from the spill for a number of injured resources; and a web page, which includes the status of injured resources and services as well as descriptions of past and ongoing restoration projects and habitat protection efforts;
- An annual financial audit of expenditures from the trust fund.

For the most part, this work effort is conducted by Trustee Council staff. However, the Council contracts with the private sector for some of these services and products. For example, the services of the Chief Scientist and the financial auditor are obtained through competitive contracts. Printing of publications, graphics work, and space for the Annual Restoration Workshop are put out to bid when needed. Contracts are advertised and awarded in accordance with State of Alaska procurement laws.

It is anticipated that most of the activities described above will continue at some level throughout the life of the restoration effort. In FY 00, the Council authorized \$2,033,900 for public information/science management/administration, which represents a reduction from the amount approved for FY 99 (\$2,495,700). The estimate of FY 01 funding for these activities is \$1.5 million.

Restoration Reserve

Complete recovery from the *Exxon Valdez* oil spill may not occur for many years, yet annual payments by Exxon Corporation end September 2001. To ensure that there are funds for restoration activities needed after that time, the Trustee Council places a portion of the annual payments into the Restoration Reserve.

The exact amount placed into the Reserve each year is determined by the Trustee Council after considering the funding needs for restoration for that year. Twelve million dollars were allocated to the Reserve in each of the last seven years (FY 94-00). Annual deposits of \$12 million in each of the next two years (FY 01 and FY 02) would provide a reserve of \$108 million plus interest. Together with other, non-earmarked restoration funds, the Council anticipates a reserve fund of \$170 million in October 2002.

In March 1999, the Trustee Council determined that the two primary uses of the Restoration Reserve 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). The Council earmarked \$55 million for future habitat protection. The remainder, an estimated \$115 million, is earmarked for research and monitoring. Planning for the long-term research and monitoring program (referred to as GEM, Gulf Ecosystem Monitoring) is currently underway. GEM 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.

	<i>Allocations through FY 00 (excluding interest):</i>	\$84,000,000
FY 01	\424 <i>Exxon Valdez</i> Restoration Reserve Fund	\$12,000,000
FY 02	\424 <i>Exxon Valdez</i> Restoration Reserve Fund	\$12,000,000
	Subtotal FY 01-02 (excluding interest):	\$24,000,000
	Total FY 94-02 (excluding interest):	\$108,000,000

APPENDIX B

HISTORY OF PROJECT COSTS

This appendix consists of two tables that summarize the cost of restoration projects undertaken since the civil settlement. Table B-1 presents actual and projected costs for monitoring, research, and general restoration projects that have been funded in the past. This table does not list new projects that may be proposed for FY 01. Table B-2 presents costs for projects outside of the annual work plan and, therefore, over and above the target spending level. For FY 01, this table includes a deposit into the Restoration Reserve and funding needed for public information/science management/administration. The amount of funds for habitat protection and acquisition support in FY 01 has not yet been determined.

These tables record the history of funding allocations to each project and each resource cluster. For example, Table B-1 shows that the Sound Ecosystem Assessment (SEA) project began in FY 94 and has spent or been authorized to spend roughly \$22 million between FY 94 and FY 00.

The tables in this appendix also estimate future costs for projects. Table B-1 projects the FY 01 cost for 35 continuing projects to be about \$3.46 million. The FY 01 cost for three additional projects funded in FY 00 is left blank because of uncertainty about the projects' future scope or their priority in terms of the overall restoration program. The amount of funding actually allocated to individual projects will be determined each year by the Trustee Council through the invitation/work plan process.

Fiscal Years. The first year of funding by the Trustee Council was FY 92, which spanned the period March 1, 1992, through February 28, 1993. The second year of funding was FY 93, a seven-month transition period between February 28, 1993, and the end of the federal fiscal year on September 30, 1993. Thereafter, the funding cycle for restoration activities has been the federal fiscal year which begins on October 1 and ends on September 30.

FY 92-98: Expenditures and Obligations. Costs shown for FY 92-98 are expenditures and obligations on restoration projects. Expenditures and obligations for FY 95-98 have been audited. Expenditures reported for FY 92 in Table B-1 do not include \$6.8 million that was spent that year to conclude damage assessment studies.

FY 99-00: Authorized Amounts. The figures for FY 99-00 are the amounts authorized by the Trustee Council.

FY 01-02: Estimated Costs. The figures for FY 01-02 are estimates of future costs of continuing projects. A blank space means that the Trustee Council has not made a long-term funding commitment because of uncertainty about the project's future scope or its priority in terms of the overall restoration program.

Table B-1. History of Project Costs / FY 01 Work Plan

<u>Project</u>	<u>FY 92</u>	<u>FY 93</u>	<u>FY 94</u>	<u>FY 95</u>	<u>FY 96</u>	<u>FY 97</u>	<u>FY 98</u>	<u>FY 99</u>	<u>FY 00</u>	<u>FY 01</u>	<u>FY 02</u>	<u>Total FY92-02</u>
Pink Salmon	\$2,507.9	\$906.6	\$1,512.6	\$2,316.8	\$1,902.6	\$1,809.8	\$1,177.3	\$917.5	\$833.0	\$403.1	\$240.8	\$14,528.0
063 / Anadromous Stream Surveys	\$0.0	\$59.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$59.0
076 / Effect of Oil on Straying and Survival	\$0.0	\$0.0	\$0.0	\$184.1	\$377.6	\$577.0	\$274.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1,412.7
093 / Diversion of Harvest Effort	\$0.0	\$0.0	\$0.0	\$57.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$57.8
139 / Salmon Instream Habitat & Stock Restoration	\$0.0	\$0.0	\$222.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$222.1
139A1 / Little Waterfall Barrier Bypass Improvement	\$0.0	\$0.0	\$0.0	\$83.8	\$33.1	\$26.4	\$13.3	\$0.0	\$0.0	\$0.0	\$0.0	\$156.6
139A2 / Port Dick Spawning Channel	\$0.0	\$0.0	\$0.0	\$41.0	\$219.2	\$75.4	\$83.8	\$85.8	\$46.6	\$10.0	\$0.0	\$561.8
139B / Shrode and Otter Creek	\$0.0	\$0.0	\$0.0	\$4.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$4.8
139C1 / Montague Riparian Rehabilitation Monitoring	\$0.0	\$0.0	\$0.0	\$49.3	\$8.4	\$8.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$66.1
139C2 / Lowe River	\$0.0	\$0.0	\$0.0	\$20.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$20.5
186 / Pink Salmon Coded-wire Tagging and Recovery in PWS	\$1,545.4	\$148.6	\$237.7	\$253.9	\$239.8	\$244.4	\$119.9	\$0.0	\$0.0	\$0.0	\$0.0	\$2,789.7

NOTES:

1. Costs are shown in thousands of dollars.
2. Figures for FY 92-98 are expenditures or obligations on restoration projects. Expenditures and obligations for FY 95-98 have been audited.
3. Figures for FY 99 and FY 00 are amounts authorized by the Trustee Council.
4. Costs projected for FY 01-02 are for planning purposes and have not yet been approved by the Trustee Council.
5. A blank space means the Trustee Council has not made a long-term funding commitment due to uncertainty about a project's future cost or scope.
6. \$675,000 recently lapsed from FY 92 authorizations are not reflected in these figures because lapsed funds have not yet been allocated to specific projects.

<u>Project</u>	<u>FY92</u>	<u>FY93</u>	<u>FY94</u>	<u>FY95</u>	<u>FY96</u>	<u>FY97</u>	<u>FY98</u>	<u>FY99</u>	<u>FY00</u>	<u>FY 01</u>	<u>FY 02</u>	Total <u>FY92-02</u>
188 / Otolith Thermal Mass Marking	\$0.0	\$0.0	\$48.9	\$636.7	\$85.2	\$120.0	\$141.2	\$185.2	\$0.0	\$0.0	\$0.0	\$1,217.2
190 / Linkage Map for the Pink Salmon Genome	\$0.0	\$0.0	\$0.0	\$0.0	\$163.0	\$254.5	\$217.8	\$270.0	\$331.0	\$240.8	\$240.8	\$1,717.9
191 / Oil-Related Embryo Mortalities	\$412.9	\$699.0	\$823.5	\$758.2	\$603.2	\$168.2	\$149.1	\$58.4	\$0.0	\$0.0	\$0.0	\$3,672.5
194 / Spawning Habitat Recovery	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$140.2	\$23.8	\$0.0	\$0.0	\$0.0	\$0.0	\$164.0
196 / Genetic Structure	\$0.0	\$0.0	\$180.4	\$226.7	\$173.1	\$195.3	\$129.1	\$50.0	\$0.0	\$0.0	\$0.0	\$954.6
329 / Synthesis of Toxicological Impacts	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$25.3	\$68.9	\$0.0	\$0.0	\$0.0	\$94.2
366 / Remote Video and Time-Lapse Recording	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$52.0	\$46.5	\$12.3	\$0.0	\$110.8
367 / Synthesis and Publication of Fisheries Research	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$73.1	\$0.0	\$0.0	\$0.0	\$73.1
454 / Persistent Oil Contamination in Natal Habitats	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$334.1	\$104.0	\$0.0	\$438.1
476 / Effects of Oiled Incubation on Reproduction	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$74.1	\$74.8	\$36.0	\$0.0	\$184.9
FS01 / Spawning Area Injury	\$35.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$35.4
FS02 / Pre-emergent Fry	\$23.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$23.3
FS04A / Early Marine Salmon Damage Assessment	\$150.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$150.9

NOTES:

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4. Costs projected for FY 01-02 are for planning purposes and have not yet been approved by the Trustee Council.
5. A blank space means the Trustee Council has not made a long-term funding commitment due to uncertainty about a project's future cost or scope.
6. \$675,000 recently lapsed from FY 92 authorizations are not reflected in these figures because lapsed funds have not yet been allocated to specific projects.

<u>Project</u>	<u>FY92</u>	<u>FY93</u>	<u>FY94</u>	<u>FY95</u>	<u>FY96</u>	<u>FY97</u>	<u>FY98</u>	<u>FY99</u>	<u>FY00</u>	<u>FY 01</u>	<u>FY 02</u>	Total <u>FY92-02</u>
FS04B / Juvenile Pinks	\$121.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$121.2
FS28 / Run Reconstruction	\$218.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$218.8
Herring	\$291.4	\$0.0	\$511.2	\$1,301.5	\$1,238.5	\$924.0	\$724.6	\$506.3	\$158.1	\$81.7	\$0.0	\$5,737.3
074 / Herring Reproductive Impairment	\$0.0	\$0.0	\$0.0	\$418.6	\$146.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$565.5
162 / Disease Affecting Declines	\$0.0	\$0.0	\$85.5	\$389.9	\$609.1	\$550.2	\$488.7	\$72.0	\$0.0	\$0.0	\$0.0	\$2,195.4
165 / Herring Genetic Discrimination	\$0.0	\$0.0	\$6.4	\$98.3	\$94.4	\$37.7	\$55.9	\$0.0	\$0.0	\$0.0	\$0.0	\$292.7
166 / Herring Natal Habitats	\$0.0	\$0.0	\$419.3	\$394.7	\$388.1	\$336.1	\$41.9	\$0.0	\$0.0	\$0.0	\$0.0	\$1,580.1
311 / Productivity Dependencies: Stable Isotopes	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$119.3	\$90.0	\$0.0	\$0.0	\$0.0	\$209.3
328 / Synthesis of Impacts on Pacific Herring	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$46.1	\$0.0	\$0.0	\$0.0	\$46.1
374 / Regional Analysis of Juvenile Herring in PWS	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$35.5	\$0.0	\$0.0	\$35.5
375 / Effects of Egg Distribution and Ecology	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$76.5	\$48.0	\$0.0	\$0.0	\$124.5
462 / Effects of Disease on Population Recovery	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$75.1	\$74.6	\$81.7	\$0.0	\$231.4
468-BAA / Estimations of Acoustic Target Strength	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$18.8	\$146.6	\$0.0	\$0.0	\$0.0	\$165.4

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4. Costs projected for FY 01-02 are for planning purposes and have not yet been approved by the Trustee Council.
5. A blank space means the Trustee Council has not made a long-term funding commitment due to uncertainty about a project's future cost or scope.
6. \$675,000 recently lapsed from FY 92 authorizations are not reflected in these figures because lapsed funds have not yet been allocated to specific projects.

<u>Project</u>	<u>FY92</u>	<u>FY93</u>	<u>FY94</u>	<u>FY95</u>	<u>FY96</u>	<u>FY97</u>	<u>FY98</u>	<u>FY99</u>	<u>FY00</u>	<u>FY 01</u>	<u>FY 02</u>	Total <u>FY92-02</u>
FS11 / Herring Injury	\$291.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$291.4
SEA and Related Projects	\$75.7	\$0.0	\$5,604.6	\$4,403.9	\$5,120.3	\$3,766.1	\$2,576.7	\$1,099.2	\$617.8	\$362.5	\$150.9	\$23,777.7
195 / Pristine Monitoring in Mussels	\$0.0	\$0.0	\$0.0	\$0.0	\$110.3	\$114.5	\$111.0	\$96.7	\$54.9	\$55.0	\$55.0	\$597.4
297-BAA / Oceanography of PWS Bays and Fjords	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$92.9	\$0.0	\$0.0	\$0.0	\$0.0	\$92.9
320 / Sound Ecosystem Assessment (SEA)	\$0.0	\$0.0	\$5,604.6	\$4,403.9	\$5,010.0	\$3,651.6	\$2,372.8	\$851.9	\$120.0	\$0.0	\$0.0	\$22,014.8
361-BAA / Graphical Techniques for Synthesis / Communication	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$25.6	\$0.0	\$0.0	\$0.0	\$25.6
389 / 3-D Ocean State Simulations	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$125.3	\$72.2	\$0.0	\$197.5
393-BAA / Food Webs: Structure and Change	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$125.0	\$153.7	\$127.7	\$0.0	\$406.4
493 / Sampling Strategies for GOA Ecosystem Trawl Survey Monitoring	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$34.5	\$0.0	\$0.0	\$34.5
541-BAA / Publication: PWS Isotope Ecology	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$15.0	\$0.0	\$0.0	\$15.0
552-BAA / Exchange between PWS and GOA	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$114.4	\$107.6	\$95.9	\$317.9
B03 / Murres Damage Assessment	\$75.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$75.7

NOTES:

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3. Figures for FY 99 and FY 00 are amounts authorized by the Trustee Council.
4. Costs projected for FY 01-02 are for planning purposes and have not yet been approved by the Trustee Council.
5. A blank space means the Trustee Council has not made a long-term funding commitment due to uncertainty about a project's future cost or scope.
6. \$675,000 recently lapsed from FY 92 authorizations are not reflected in these figures because lapsed funds have not yet been allocated to specific projects.

<u>Project</u>	<u>FY92</u>	<u>FY93</u>	<u>FY94</u>	<u>FY95</u>	<u>FY96</u>	<u>FY97</u>	<u>FY98</u>	<u>FY99</u>	<u>FY00</u>	<u>FY 01</u>	<u>FY 02</u>	Total <u>FY92-02</u>
Sockeye Salmon	\$1,653.5	\$1,552.3	\$1,803.1	\$1,497.3	\$1,139.4	\$555.5	\$11.7	\$0.0	\$10.3	\$0.0	\$0.0	\$8,223.1
048-BAA / Historical Analysis of Sockeye Salmon Growth	\$0.0	\$0.0	\$0.0	\$0.0	\$106.3	\$0.0	\$0.0	\$0.0	\$10.3	\$0.0	\$0.0	\$116.6
137 / Stock ID of Chum, Sockeye, Chinook and Coho in PWS	\$0.0	\$86.0	\$188.4	\$54.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$328.4
251 / Akalura Lake Restoration	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$43.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$43.7
254 / Delight and Desire Lakes Restoration	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$115.7	\$11.7	\$0.0	\$0.0	\$0.0	\$0.0	\$127.4
255 / Kenai River Sockeye Salmon Restoration	\$687.4	\$405.2	\$348.7	\$451.2	\$296.6	\$157.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$2,346.2
258 / Sockeye Salmon Overescapement	\$600.9	\$621.9	\$762.3	\$724.6	\$539.1	\$192.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$3,441.0
259 / Restoration of Coghill Lake Sockeye Salmon	\$0.0	\$145.1	\$240.8	\$267.5	\$197.4	\$46.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$897.6
504 / Genetic Stock ID of Kenai River Sockeye	\$310.9	\$294.1	\$262.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$867.9
R113 / Red Lake Sockeye Salmon Restoration	\$54.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$54.3

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<u>Project</u>	<u>FY92</u>	<u>FY93</u>	<u>FY94</u>	<u>FY95</u>	<u>FY96</u>	<u>FY97</u>	<u>FY98</u>	<u>FY99</u>	<u>FY00</u>	<u>FY 01</u>	<u>FY 02</u>	Total <u>FY92-02</u>
Other Fish	\$227.0	\$0.0	\$0.0	\$147.5	\$222.3	\$261.6	\$352.5	\$367.9	\$106.1	\$0.0	\$0.0	\$1,684.9
043B / Cutthroat and Dolly Varden Habitat Improvement Monitoring	\$0.0	\$0.0	\$0.0	\$147.5	\$22.3	\$24.0	\$26.4	\$9.5	\$0.0	\$0.0	\$0.0	\$229.7
145 / Anadromous and Resident Forms	\$0.0	\$0.0	\$0.0	\$0.0	\$200.0	\$229.7	\$120.7	\$50.1	\$0.0	\$0.0	\$0.0	\$600.5
252 / Genetic Investigations of Rockfish and Pollock	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$201.4	\$308.3	\$0.0	\$0.0	\$0.0	\$509.7
302 / PWS Cutthroat Trout / Dolly Varden Inventory	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$7.9	\$4.0	\$0.0	\$0.0	\$0.0	\$0.0	\$11.9
396 / Salmon Shark, Sleeper Shark, Spiny Dogfish	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0			\$0.0	\$0.0
478 / Testing Satellite Tags	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$106.1	\$0.0	\$0.0	\$106.1
FS05 / Dolly Varden Damage Assessment	\$22.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$22.0
R090 / Dolly Varden Char Monitoring	\$94.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$94.2
R106 / Dolly Varden Restoration	\$37.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$37.9
ST06 / Rockfish Damage Assessment	\$17.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$17.8

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<u>Project</u>	<u>FY92</u>	<u>FY93</u>	<u>FY94</u>	<u>FY95</u>	<u>FY96</u>	<u>FY97</u>	<u>FY98</u>	<u>FY99</u>	<u>FY00</u>	<u>FY 01</u>	<u>FY 02</u>	Total <u>FY92-02</u>
ST07 / Demersal Fishes Damage Assessment	\$55.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$55.1
Marine Mammals	\$62.2	\$332.8	\$293.6	\$839.6	\$704.9	\$776.3	\$724.8	\$983.9	\$834.9	\$264.5	\$0.0	\$5,817.5
001 / Harbor Seal Condition and Health Status	\$0.0	\$0.0	\$0.0	\$105.4	\$135.6	\$188.5	\$51.1	\$0.0	\$0.0	\$0.0	\$0.0	\$480.6
012-BAA / Killer Whale Investigation	\$0.0	\$113.5	\$30.8	\$296.1	\$98.9	\$156.6	\$152.6	\$85.4	\$82.9		\$0.0	\$1,016.8
064 / Harbor Seal Monitoring, Habitat Use, Trophic Interactions	\$24.7	\$219.3	\$262.3	\$343.0	\$332.0	\$304.6	\$268.9	\$263.3	\$129.4	\$0.0	\$0.0	\$2,147.5
117-BAA / Harbor Seal Blubber and Lipids	\$0.0	\$0.0	\$0.0	\$95.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$95.1
170 / Isotope Ratio Studies of Marine Mammals	\$0.0	\$0.0	\$0.0	\$0.0	\$138.4	\$126.6	\$106.3	\$0.0	\$0.0	\$0.0	\$0.0	\$371.3
341 / Harbor Seals: Health and Diet	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$145.9	\$356.8	\$216.1	\$90.1	\$0.0	\$808.9
371 / Harbor Seal Metabolism/Stable Isotopes	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$120.0	\$163.1	\$96.3	\$0.0	\$379.4
425 / Marine Mammal Book Publication	\$0.0	\$0.0	\$0.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.5
441 / Harbor Seal Diet: Lipid Metabolism and Health	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$158.4	\$191.6	\$78.1	\$0.0	\$428.1

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<u>Project</u>	<u>FY92</u>	<u>FY93</u>	<u>FY94</u>	<u>FY95</u>	<u>FY96</u>	<u>FY97</u>	<u>FY98</u>	<u>FY99</u>	<u>FY00</u>	<u>FY 01</u>	<u>FY 02</u>	Total <u>FY92-02</u>
509 / Experimental Design for Monitoring Harbor Seals	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$51.8	\$0.0	\$0.0	\$51.8
MM01 / Humpback Whales Damage Assessment	\$13.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$13.6
MM02 / Killer Whales Damage Assessment	\$23.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$23.9
Nearshore Ecosystem	\$5,081.0	\$2,751.6	\$2,338.0	\$2,882.2	\$2,865.8	\$2,223.0	\$2,152.9	\$1,387.8	\$840.1	\$381.0	\$371.0	\$23,274.4
025 / Nearshore Vertebrate Predators (NVP)	\$0.0	\$0.0	\$0.0	\$680.8	\$1,751.1	\$1,747.3	\$1,595.6	\$500.0	\$196.0	\$0.0	\$0.0	\$6,470.8
026 / Hydrocarbon Monitoring	\$0.0	\$0.0	\$0.0	\$116.5	\$0.0	\$15.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$131.6
027 / Kodiak Shoreline Assessment	\$0.0	\$0.0	\$0.0	\$174.5	\$42.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$216.7
034 / Pigeon Guillemot Recovery Monitoring	\$0.0	\$161.4	\$13.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$174.6
035 / Black Oystercatcher Recovery Monitoring	\$0.0	\$108.0	\$17.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$125.0
038 / PWS Shoreline Assessment	\$0.0	\$316.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$316.9
043 / Sea Otter Demographics and Habitat	\$0.0	\$132.5	\$123.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$256.4
086C / Herring Bay Experimental and Monitoring Studies	\$0.0	\$504.6	\$697.9	\$703.1	\$169.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$2,075.2

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090 / Mussel Bed Restoration	\$768.3	\$331.0	\$433.6	\$455.0	\$198.0	\$8.0	\$0.0	\$150.0	\$64.0	\$0.0	\$0.0	\$2,407.9
106 / Eelgrass Monitoring	\$0.0	\$0.0	\$0.0	\$181.6	\$246.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$428.2
161 / Differentiation/Interchange of Harlequins	\$0.0	\$0.0	\$0.0	\$0.0	\$79.4	\$87.0	\$11.0	\$0.0	\$0.0	\$0.0	\$0.0	\$177.4
223-BAA / Publication of Sea Otter Data	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$42.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$42.8
266 / Shoreline Restoration	\$0.0	\$0.0	\$185.8	\$143.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$329.7
285 / Subtidal Monitoring	\$0.0	\$882.8	\$581.3	\$112.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1,576.8
289-BAA / Status of Black Oystercatchers in PWS	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$79.3	\$8.6	\$0.0	\$0.0	\$0.0	\$87.9
290 / Hydrocarbon Database	\$851.3	\$120.1	\$113.5	\$141.2	\$113.4	\$75.0	\$72.1	\$58.9	\$55.5	\$35.0	\$35.0	\$1,671.0
325-BAA / Intertidal/Subtidal Manuscript Preparation	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$79.7	\$41.1	\$0.0	\$0.0	\$0.0	\$120.8
326 / Data Re-Analysis for MM6	\$0.0	\$0.0	\$0.0	\$0.0	\$11.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$11.5
348 / Response of River Otters to Oil Contamination	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$236.9	\$316.6	\$50.6	\$0.0	\$0.0	\$604.1
379 / Assessment of Risk to Residual Oil Using P450	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$115.5	\$32.1	\$0.0	\$0.0	\$147.6
407 / Harlequin Duck Population Dynamics	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$63.8	\$71.0	\$71.0	\$205.8

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423 / Population Change in Nearshore Vertebrate Predators	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$60.0	\$185.4	\$265.0	\$265.0	\$775.4
427 / Harlequin Duck Monitoring	\$470.5	\$194.3	\$171.8	\$172.9	\$254.0	\$247.8	\$78.3	\$0.0	\$0.0	\$0.0	\$0.0	\$1,589.6
459 / Residual Oiling of Armored Beaches/GOA	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$124.9	\$40.0	\$0.0	\$0.0	\$164.9
466 / Barrow's Goldeneye Recovery Status	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$12.2	\$14.8	\$0.0	\$0.0	\$27.0
510-BAA / Intertidal Recovery and Monitoring Recommendations	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$48.8	\$0.0	\$0.0	\$48.8
598 / Publication: Background Hydrocarbons in Sediments	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$13.5	\$0.0	\$0.0	\$13.5
599 / Evaluation of Yakataga Oil Seeps	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$75.6	\$10.0	\$0.0	\$85.6
AW01 / Surface Oil Maps	\$8.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$8.4
B04 / Eagles Damage Assessment Closeout	\$60.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$60.6
B09 / Pigeon Guillemot Damage Assessment	\$18.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$18.0
B11 / Harlequin Ducks Damage Assessment	\$21.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$21.7
B12 / Shorebirds Damage Assessment Closeout	\$20.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$20.7

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FS13 / Clam Injury	\$66.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$66.4
MM06 / Sea Otters Damage Assessment	\$199.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$199.7
R102 / Coastal Habitat Damage Assessment and Restoration	\$1,971.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1,971.4
ST01A / Subtidal Sediments	\$96.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$96.5
ST01B / Subtidal Microbial	\$7.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$7.8
ST02A / Shallow Benthic	\$115.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$115.2
ST02B / Deep Water Benthos	\$0.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.7
ST03A / Caged Mussels Damage Assessment	\$24.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$24.2
ST03B / Sediment Traps Damage Assessment	\$60.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$60.5
ST04 / Fate and Toxicity Damage Assessment	\$55.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$55.4
ST05 / Shrimp	\$23.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$23.4
ST08 / Sediment Data Synthesis	\$168.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$168.2
TM03 / River Otter and Mink Damage Assessment in OWS	\$72.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$72.1

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<u>Project</u>	<u>FY92</u>	<u>FY93</u>	<u>FY94</u>	<u>FY95</u>	<u>FY96</u>	<u>FY97</u>	<u>FY98</u>	<u>FY99</u>	<u>FY00</u>	<u>FY 01</u>	<u>FY 02</u>	Total <u>FY92-02</u>
Seabird/Forage Fish Projects	\$831.7	\$411.7	\$1,273.6	\$2,022.6	\$2,370.3	\$2,353.6	\$2,908.3	\$2,797.2	\$2,143.7	\$520.0	\$75.0	\$17,707.7
021 / Seasonal Movements by Common Murres	\$0.0	\$0.0	\$0.0	\$53.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$53.9
029 / Population Survey of Bald Eagles in PWS	\$0.0	\$0.0	\$0.0	\$48.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$48.7
031 / Reproductive Success of Murrelets in PWS	\$0.0	\$0.0	\$0.0	\$216.2	\$106.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$322.8
038 / Symposium/Publication on Seabird Restoration	\$0.0	\$0.0	\$0.0	\$74.5	\$17.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$92.2
039 / Common Murre Productivity Monitoring	\$0.0	\$0.0	\$0.0	\$27.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$27.4
041 / Introduced Predator Removal	\$0.0	\$0.0	\$77.0	\$51.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$128.2
101 / Removal of Introduced Foxes from Islands	\$0.0	\$0.0	\$0.0	\$0.0	\$22.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$22.2
102 / Murrelet Prey and Foraging Habitat	\$428.5	\$0.0	\$214.2	\$48.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$690.8
121 / Fatty Acid Signatures of Forage Fish	\$0.0	\$0.0	\$0.0	\$33.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$33.2
142-BAA / Status and Ecology of Kittlitz's Murrelet	\$0.0	\$0.0	\$0.0	\$0.0	\$154.2	\$182.2	\$265.3	\$0.0	\$0.0	\$0.0	\$0.0	\$601.7

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<u>Project</u>	<u>FY92</u>	<u>FY93</u>	<u>FY94</u>	<u>FY95</u>	<u>FY96</u>	<u>FY97</u>	<u>FY98</u>	<u>FY99</u>	<u>FY00</u>	<u>FY 01</u>	<u>FY 02</u>	Total <u>FY92-02</u>
144 / Common Murre Population Monitoring	\$314.9	\$163.2	\$209.1	\$0.0	\$65.1	\$69.7	\$55.9	\$72.6	\$15.4	\$0.0	\$0.0	\$965.9
159 / Marine Bird Abundance Surveys	\$48.5	\$248.5	\$142.5	\$0.0	\$261.4	\$62.4	\$231.7	\$37.0	\$233.6	\$37.0		\$1,302.6
163 / Alaska Predator Ecosystem Experiment (APEX)	\$0.0	\$0.0	\$463.2	\$1,415.3	\$1,743.1	\$1,796.4	\$1,949.1	\$2,052.1	\$1,230.1	\$200.0	\$0.0	\$10,849.3
167-BAA / Curation of Seabirds Salvaged from EVOS	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$31.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$31.9
169 / Genetics of Murres, Guillemots, Murrelets	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$59.8	\$87.9	\$92.7	\$19.2	\$0.0	\$0.0	\$259.6
173 / Factors Affecting Pigeon Guillemot Recoveries	\$0.0	\$0.0	\$167.6	\$54.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$221.7
231 / Marbled Murrelet Productivity (in /163 after FY 97)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$118.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$118.4
287-BAA / Seabird-Oceanographic Relationships in Northern GOA	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$151.3	\$0.0	\$0.0	\$151.3
306 / Ecology and Demographics of Sand Lance	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$32.8	\$31.9	\$30.0	\$20.0	\$0.0	\$0.0	\$114.7
327 / Pigeon Guillemot Research	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$122.4	\$178.4	\$192.8	\$93.0	\$0.0	\$586.6
338 / Survival of Adult Murres and Kittiwake	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$56.0	\$57.9	\$59.7	\$46.4	\$0.0	\$220.0
346 / Sand Lance Publication	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$10.4	\$0.0	\$0.0	\$0.0	\$10.4

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347 / Fatty Acid Profile/Lipid Class Analysis	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$108.1	\$92.6	\$35.5	\$0.0	\$0.0	\$236.2
381 / Status of Seabird Colonies in Northeastern Prince William Sound	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$13.0	\$0.0	\$0.0	\$0.0	\$13.0
434 / East Amatuli Island Video Link	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$75.8	\$0.0	\$0.0	\$0.0	\$75.8
479 / Effects of Food Stress on Survival and Reproduction	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$84.7	\$125.2	\$129.6	\$75.0	\$414.5
501 / Protocols for Long-term Monitoring of Seabirds	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$39.9	\$14.0	\$0.0	\$53.9
516-BAA / Publication: Murrelet Habitat Use	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$21.0	\$0.0	\$0.0	\$21.0
B06 / Marbled Murrelet Damage Assessment	\$24.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$24.8
B07 / Storm Petrels Damage Assessment	\$7.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$7.5
B08 / Kittiwakes Damage Assessment Closeout	\$7.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$7.5

Archaeological Resources	\$348.3	\$81.6	\$234.4	\$276.3	\$449.1	\$204.0	\$176.2	\$166.7	\$90.2	\$0.0	\$0.0	\$2,026.8
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007 / Site Specific Archaeological Restoration	\$225.0	\$81.6	\$234.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$541.0
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<u>Project</u>	<u>FY92</u>	<u>FY93</u>	<u>FY94</u>	<u>FY95</u>	<u>FY96</u>	<u>FY97</u>	<u>FY98</u>	<u>FY99</u>	<u>FY00</u>	<u>FY 01</u>	<u>FY 02</u>	Total <u>FY92-02</u>
007A / Archaeological Index Site Monitoring	\$0.0	\$0.0	\$0.0	\$164.3	\$109.9	\$126.6	\$122.3	\$151.5	\$90.2	\$0.0	\$0.0	\$764.8
007B / Site Specific Archaeological Restoration	\$0.0	\$0.0	\$0.0	\$112.0	\$78.2	\$21.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$211.7
149 / Archaeological Site Stewardship	\$0.0	\$0.0	\$0.0	\$0.0	\$63.9	\$55.9	\$53.9	\$15.2	\$0.0	\$0.0	\$0.0	\$188.9
154 / Archaeological Resource Restoration Plan	\$0.0	\$0.0	\$0.0	\$0.0	\$197.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$197.1
R104A / Site Stewardship	\$123.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$123.3
Subsistence	\$0.0	\$241.7	\$430.3	\$895.0	\$1,250.3	\$1,319.5	\$1,453.4	\$1,271.6	\$1,092.6	\$635.6	\$439.1	\$9,029.1
009D / Survey of Octopuses in Intertidal Habitats	\$0.0	\$0.0	\$0.0	\$125.0	\$141.2	\$48.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$314.2
052 / Community Involvement and Use of Traditional Knowledge	\$0.0	\$0.0	\$0.0	\$79.8	\$268.9	\$0.0	\$0.0	\$0.0	\$201.5	\$200.0	\$180.0	\$930.2
052A / Community Involvement	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$248.4	\$231.0	\$243.4	\$0.0	\$0.0	\$0.0	\$722.8
052B / Traditional Knowledge	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$92.4	\$60.8	\$38.9	\$0.0	\$0.0	\$0.0	\$192.1
127 / Tatitlek Coho Salmon Release	\$0.0	\$0.0	\$0.0	\$4.8	\$23.3	\$7.6	\$10.2	\$10.7	\$11.4	\$0.0	\$0.0	\$68.0
131 / Clam Restoration	\$0.0	\$0.0	\$0.0	\$223.6	\$257.3	\$365.0	\$287.8	\$306.2	\$0.0	\$0.0	\$0.0	\$1,439.9
138 / Elders/Youth Conference	\$0.0	\$0.0	\$0.0	\$75.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$75.1

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210 / Youth Area Watch	\$0.0	\$0.0	\$0.0	\$0.0	\$100.3	\$150.0	\$150.1	\$150.4	\$122.0	\$107.0	\$96.3	\$876.1
214 / Harbor Seal Documentary	\$0.0	\$0.0	\$0.0	\$0.0	\$72.4	\$8.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$80.5
220 / Eastern PWS Salmon Habitat Restoration	\$0.0	\$0.0	\$0.0	\$0.0	\$70.4	\$40.5	\$7.7	\$0.0	\$0.0	\$0.0	\$0.0	\$118.6
222 / Chenega Bay Salmon Habitat Enhancement	\$0.0	\$0.0	\$0.0	\$0.0	\$3.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$3.8
225 / Port Graham Pink Salmon Project	\$0.0	\$0.0	\$0.0	\$0.0	\$88.5	\$74.4	\$72.2	\$75.6	\$75.0	\$0.0	\$0.0	\$385.7
244 / Community Harbor Seal Sampling/Management	\$0.0	\$0.0	\$44.9	\$76.1	\$123.4	\$111.6	\$81.6	\$0.0	\$0.0	\$0.0	\$0.0	\$437.6
245 / Community-Based Harbor Seal Biosampling	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$70.7	\$56.5			\$127.2
247 / Kametolook River Coho Salmon	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$20.7	\$14.1	\$20.8	\$23.2	\$20.0	\$28.0	\$126.8
256B / Solf Lake Sockeye Salmon Stocking	\$0.0	\$0.0	\$0.0	\$0.0	\$52.0	\$34.7	\$103.3	\$68.3	\$159.5	\$40.0	\$40.0	\$497.8
263 / Port Graham Salmon Stream Enhancement	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$58.0	\$106.9	\$42.1	\$23.4	\$0.0	\$0.0	\$230.4
272 / Chenega Chinook Release Program	\$0.0	\$10.7	\$55.4	\$43.4	\$48.8	\$44.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$202.6
273 / Surf Scoter Life History and Ecology	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$155.6	\$206.2	\$205.4	\$0.0	\$0.0	\$567.2

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274 / Herring/Nearshore Documentary	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$87.8	\$0.0	\$0.0	\$0.0	\$0.0	\$87.8
279 / Food Safety Testing	\$0.0	\$231.0	\$272.1	\$173.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$676.8
286 / Elders/Youth Conference	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$15.8	\$84.3	\$0.0	\$0.0	\$0.0	\$0.0	\$100.1
401 / Spot Shrimp Population	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$38.3	\$88.7	\$95.0	\$33.0	\$255.0
428 / Subsistence Restoration Planning	\$0.0	\$0.0	\$57.9	\$93.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$151.4
481 / Documentary on Intertidal Resources	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$8.6	\$111.8	\$0.0	\$120.4
482-BAA / Optimization of Test Kits for PSP and ASP	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$55.6	\$0.0	\$0.0	\$55.6
610 / Kodiak Island Youth Area Watch	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$61.8	\$61.8	\$61.8	\$185.4
Recreation	\$0.0	\$40.8	\$75.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$115.8
065 / Prince William Sound Recreation Project	\$0.0	\$40.8	\$75.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$115.8
Reduction of Marine Pollution	\$0.0	\$0.0	\$0.0	\$260.8	\$48.4	\$241.5	\$0.0	\$63.8	\$0.0	\$0.0	\$0.0	\$614.5
115 / Sound Waste Management	\$0.0	\$0.0	\$0.0	\$260.8	\$48.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$309.2

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291 / Chenega Area Shoreline Residual Oiling Reduction	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$9.3	\$0.0	\$0.0	\$0.0	\$9.3
304 / Kodiak Waste Management	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$241.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$241.5
514 / Lower Cook Inlet Waste Management Plan	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$54.5	\$0.0	\$0.0	\$0.0	\$54.5
Habitat Improvement	\$633.0	\$886.9	\$0.0	\$123.9	\$479.8	\$647.4	\$542.3	\$487.7	\$24.7	\$0.0	\$0.0	\$3,825.7
051 / Habitat Assessments	\$633.0	\$886.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1,519.9
058 / Landowner Assistance	\$0.0	\$0.0	\$0.0	\$90.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$90.7
060 / Spruce Bark Beetle Impacts	\$0.0	\$0.0	\$0.0	\$17.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$17.5
180 / Kenai Habitat Restoration	\$0.0	\$0.0	\$0.0	\$0.0	\$479.8	\$586.4	\$401.4	\$321.0	\$10.7	\$0.0	\$0.0	\$1,799.3
230 / Valdez Duck Flats Restoration	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$61.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$61.0
314 / Homer Mariner Park	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$99.5	\$0.0	\$0.0	\$0.0	\$99.5
339 / Western PWS Human Use and Wildlife Disturbance Model	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$140.9	\$67.2	\$14.0		\$0.0	\$222.1
505B / Data Analysis for Stream Habitat	\$0.0	\$0.0	\$0.0	\$15.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$15.7

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<u>Project</u>	<u>FY92</u>	<u>FY93</u>	<u>FY94</u>	<u>FY95</u>	<u>FY96</u>	<u>FY97</u>	<u>FY98</u>	<u>FY99</u>	<u>FY00</u>	<u>FY 01</u>	<u>FY 02</u>	Total <u>FY92-02</u>
Ecosystem Synthesis	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$55.4	\$308.4	\$763.8	\$1,107.9	\$492.5	\$25.0	\$2,753.0
278 / Kachemak Bay Ecological Characterization	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$70.0	\$44.1	\$0.0	\$0.0	\$114.1
300 / Synthesis of Scientific Findings from EVOS	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$55.4	\$54.2	\$80.3	\$0.0	\$0.0	\$0.0	\$189.9
330-BAA / Mass-Balance Model of Trophic Fluxes	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$177.3	\$149.8	\$25.3	\$0.0	\$0.0	\$352.4
340 / Long-Term Oceanographic Monitoring	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$76.9	\$91.4	\$65.9	\$72.0	\$0.0	\$306.2
360-BAA / Guidance for Future Research Activities	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$304.8	\$131.5	\$0.0	\$436.3
368 / Environmentally Sensitive Areas: Summary Maps	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$37.3	\$0.0	\$0.0	\$0.0	\$37.3
391 / Cook Inlet Information Management/Monitoring System	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$335.0	\$361.0	\$239.0	\$0.0	\$935.0
455-BAA / Evaluation of a Data System for GEM	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$89.0	\$0.0	\$0.0	\$89.0
530 / Evaluating Scientific Sampling of Oil Spill Effects	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$78.4	\$0.0	\$0.0	\$78.4
567 / Monitoring Environmental Contaminants	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$54.7	\$0.0	\$0.0	\$54.7

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<u>Project</u>	<u>FY92</u>	<u>FY93</u>	<u>FY94</u>	<u>FY95</u>	<u>FY96</u>	<u>FY97</u>	<u>FY98</u>	<u>FY99</u>	<u>FY00</u>	<u>FY 01</u>	<u>FY 02</u>	Total <u>FY92-02</u>
630 / Planning for GEM	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$84.7	\$50.0	\$25.0	\$159.7
Pub. Info./Sci. Mgmt./Admin.	\$0.0	\$0.0	\$69.4	\$0.0	\$35.0	\$0.0	\$8.7	\$365.8	\$46.6	\$0.0	\$0.0	\$525.5
414-BAA / Development of Web-based System for Communicating Ecosystem Research Results to the Public	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$26.8	\$0.0	\$0.0	\$26.8
470 / 10 Year Symposium and Related Events	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$170.8	\$0.0	\$0.0	\$0.0	\$170.8
471 / Updating the Status of Services	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$8.7	\$195.0	\$0.0	\$0.0	\$0.0	\$203.7
507 / EVOS Symposium Publication	\$0.0	\$0.0	\$69.4	\$0.0	\$35.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$104.4
605 / Information Transfer to Managers, Stakeholders, Public	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$19.8	\$0.0	\$0.0	\$19.8
Research Facilities	\$0.0	\$0.0	\$87.3	\$37.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$124.9
199 / Institute of Marine Science - Seward Improvements EIS	\$0.0	\$0.0	\$87.3	\$37.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$124.9
Project Management	\$0.0	\$0.0	\$0.0	\$0.0	\$94.4	\$572.6	\$406.0	\$466.9	\$401.9	\$320.0	\$280.0	\$2,541.8
250 / Project Management	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$572.6	\$406.0	\$466.9	\$401.9	\$320.0	\$280.0	\$2,447.4

NOTES:

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<u>Project</u>	<u>FY92</u>	<u>FY93</u>	<u>FY94</u>	<u>FY95</u>	<u>FY96</u>	<u>FY97</u>	<u>FY98</u>	<u>FY99</u>	<u>FY00</u>	<u>FY 01</u>	<u>FY 02</u>	Total <u>FY92-02</u>
600 / NOAA Program Management	\$0.0	\$0.0	\$0.0	\$0.0	\$94.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$94.4

Data Management	\$704.5	\$184.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$888.7
FS30 / Database Management	\$216.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$216.9
R092 / GIS Mapping and Analysis: Restoration	\$114.8	\$122.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$236.9
TS03 / GIS Mapping and Analysis: Damage Assessment	\$372.8	\$62.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$434.9
Total Cost :	\$12,416.2	\$7,390.2	\$14,233.1	\$17,005.0	\$17,921.1	\$15,710.3	\$13,523.8	\$11,646.1	\$8,307.9	\$3,460.9	\$1,581.8	\$123,196.4

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Table B-2. History of Project Costs / Outside FY 01 Work Plan

<u>Project</u>	<u>FY 92</u>	<u>FY 93</u>	<u>FY 94</u>	<u>FY 95</u>	<u>FY 96</u>	<u>FY 97</u>	<u>FY 98</u>	<u>FY 99</u>	<u>FY 00</u>	<u>FY 01</u>	<u>FY 02</u>	Total <u>FY92-02</u>
Archaeological Resources	\$0.0	\$1,500.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$129.4	\$0.0	\$0.0	\$0.0	\$1,629.4
066 / Alutiiq Archaeological Repository	\$0.0	\$1,500.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1,500.0
154 / Archaeological Repository	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$129.4	\$0.0	\$0.0	\$0.0	\$129.4
Subsistence	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$781.3	\$0.0	\$0.0	\$0.0	\$781.3
405 / Port Graham Hatchery Reconstruction	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$781.3	\$0.0	\$0.0	\$0.0	\$781.3
Reduction of Marine Pollution	\$0.0	\$0.0	\$0.0	\$0.0	\$3.0	\$2,827.8	\$180.0	\$1,857.1	\$0.0	\$0.0	\$0.0	\$4,867.9
115 / Sound Waste Management	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1,167.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1,167.7
291 / Chenega Area Shoreline Residual Oiling Reduction	\$0.0	\$0.0	\$0.0	\$0.0	\$3.0	\$1,660.1	\$180.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1,843.1
304 / Kodiak Waste Management	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1,857.1	\$0.0	\$0.0	\$0.0	\$1,857.1
514 / Lower Cook Inlet Waste Management Plan	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0			\$0.0	\$0.0

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<u>Project</u>	<u>FY92</u>	<u>FY93</u>	<u>FY94</u>	<u>FY95</u>	<u>FY96</u>	<u>FY97</u>	<u>FY98</u>	<u>FY99</u>	<u>FY00</u>	<u>FY 01</u>	<u>FY 02</u>	Total <u>FY92-02</u>
Habitat Protection	\$0.0	\$156.8	\$1,656.4	\$2,231.5	\$2,045.3	\$819.1	\$596.4	\$770.4	\$373.5	\$0.0	\$0.0	\$8,649.4
059 / Habitat Identification Workshop	\$0.0	\$23.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$23.1
060 / Accelerated Data Acquisition	\$0.0	\$43.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$43.9
064 / Imminent Threat Habitat Protection	\$0.0	\$89.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$89.8
110 / Habitat Data Acquisition and Support	\$0.0	\$0.0	\$437.7	\$134.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$572.1
126 / Habitat Prot./Acq. Support	\$0.0	\$0.0	\$805.5	\$2,097.1	\$2,045.3	\$819.1	\$596.4	\$770.4	\$373.5			\$7,507.3
505 / Information Needs for Habitat Protection	\$0.0	\$0.0	\$413.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$413.2
Pub. Info./Sci. Mgmt./Admin.	\$4,291.8	\$2,653.8	\$4,012.6	\$3,171.4	\$2,979.6	\$2,662.6	\$2,531.0	\$2,495.7	\$2,033.9	\$1,500.0	\$0.0	\$28,332.4
089 / Information Management System	\$0.0	\$0.0	\$0.0	\$313.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$313.9
100 / Public Information, Science Management and Administration	\$4,291.8	\$2,653.8	\$3,709.1	\$2,834.1	\$2,979.6	\$2,662.6	\$2,531.0	\$2,495.7	\$2,033.9	\$1,500.0		\$27,691.6
422 / Restoration Plan Environmental Impact Statement	\$0.0	\$0.0	\$303.5	\$23.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$326.9

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<u>Project</u>	<u>FY92</u>	<u>FY93</u>	<u>FY94</u>	<u>FY95</u>	<u>FY96</u>	<u>FY97</u>	<u>FY98</u>	<u>FY99</u>	<u>FY00</u>	<u>FY 01</u>	<u>FY 02</u>	Total <u>FY92-02</u>
Research Facilities	\$0.0	\$0.0	\$0.0	\$12,500.0	\$12,456.0	\$1,248.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$26,204.5
197 / SeaLife Center Fish Pass	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$540.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$540.2
Alaska SeaLife Center	\$0.0	\$0.0	\$0.0	\$12,500.0	\$12,456.0	\$708.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$25,664.3
Restoration Reserve	\$0.0	\$0.0	\$12,000.0	\$12,000.0	\$12,000.0	\$12,000.0	\$12,000.0	\$12,000.0	\$12,000.0	\$12,000.0	\$12,000.0	\$108,000.0
424 / Restoration Reserve	\$0.0	\$0.0	\$12,000.0	\$12,000.0	\$12,000.0	\$12,000.0	\$12,000.0	\$12,000.0	\$12,000.0	\$12,000.0	\$12,000.0	\$108,000.0
Total Cost :	\$4,291.8	\$4,310.6	\$17,669.0	\$29,902.9	\$29,483.9	\$19,558.0	\$15,307.4	\$18,033.9	\$14,407.4	\$13,500.0	\$12,000.0	\$178,464.9

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APPENDIX C

PROTOCOLS FOR INCLUDING INDIGENOUS KNOWLEDGE IN THE *EXXON VALDEZ* OIL SPILL RESTORATION PROCESS

Exxon Valdez Oil Spill Trustee Council
Adopted December 6, 1996

Introduction, Purpose, and Objectives

Indigenous knowledge, including traditional ecological knowledge (TEK), provides an important perspective that can help the *Exxon Valdez* Oil Spill (EVOS) restoration effort by providing information and analysis of the environment and resources affected by the oil spill. Fishers, hunters, and gatherers have detailed descriptions of animal behavior and ecology. For many species, subsistence harvesters possess the following information:

- where it is found in any season
- what it eats
- how it moves from place to place
- when it mates
- where its young are born
- what preys on it
- how it protects itself
- how best to hunt for it
- population cycles

As astute observers of the natural world and as repositories of knowledge on the long term changes in their biophysical environment, practitioners of TEK can provide western biologists and ecologists with systematic and analytical observations that cover many years. While the differences between indigenous and scientific ways of knowing must be understood, restoration projects which successfully incorporate both perspectives will improve our collective understanding of the natural processes involved in the EVOS-affected region.

Working in and with Alaska Native communities requires sensitivity to their cultures, customs, traditions, and history. Successful working relationships are built on mutual respect and trust. The people of the communities of the oil spill area have experienced severe dislocations in their lives due to the *Exxon Valdez* Oil Spill. Subsistence and commercial fishing activities have been interrupted. Researchers and agency personnel have used the communities as logistical bases. Disruptions related to the clean up, litigation, and increased bureaucratic demands have impacted the people's ability to conduct their daily business.

As a consequence of these stresses to their privacy and out of concern to preserve respect for their traditions, the Alaska Native communities of the area affected by the spill, assisted by EVOS staff, the Chugach Regional Resources Commission, and staff from Trustee Council agencies, have developed a series of protocols formalizing their relationship with outside researchers. These protocols provide a set of guidelines that will facilitate collaboration between

Alaska Natives and scientists in meeting the goals of EVOS restoration. The protocols describe the major elements of a research partnership, but their application depends on common sense and courtesy. For those researchers planning to collaborate with local respondents in the collection of indigenous knowledge or whose proposed research directly affects subsistence activities, the EVOS Trustee Council requires consideration of these protocols prior to the initiation of research.

The objectives of these protocols are:

1. Provide guidelines for restoration project planning and review
2. Identify a set of ethical principles that establishes the parameters for a research partnership between Alaska Native communities and restoration scientists
3. Establish procedures for facilitating the collection of indigenous knowledge in restoration projects
4. Provide guidance on the development of research agreements between Alaska Native communities and researchers.

Protocols

1. Project planning and review.

- a) In developing projects that include the collection and use of indigenous knowledge, researchers and community residents should keep in mind how this information will be used in improving restoration, management, education, and future research.
- b) In designing restoration projects that include indigenous knowledge, researchers should recognize that local communities' knowledge of and interest in natural resources extends beyond the physical boundaries of the communities themselves to their harvest areas and beyond.
- c) All research proposals involving indigenous knowledge will be reviewed by the TEK Specialist, the Community Facilitators, and village councils, and their recommendations will be forwarded to the Executive Director. The overall program of research involving indigenous knowledge will be reviewed annually.
- d) Costs for incorporating TEK in a restoration project should be reflected in the project's budget.

2. Ethical principles. EVOS research which involves the collection and use of indigenous knowledge should follow the ethical principles for research listed below, which are based upon guidelines adopted by the Alaska Federation of Natives (AFN) Board of Directors in May 1993 (attached).

- e) Advise Alaska Native communities and people who are to be involved in or affected by the study of the purpose, goals, and time-frame of the research, the proposed data-gathering techniques, and the potential positive and negative implications and impacts of the research.
- f) Obtain the informed consent of the appropriate governing bodies and of individual participants
- g) Protect the knowledge and cultural/intellectual property of the Alaska Native people
- h) Seek to hire local community research assistants, and provide meaningful training to Alaska Native people to develop research skills, as appropriate
- I) Use the local Alaska Native language in oral communications whenever English is the second language

- j) Address issues of confidentiality of sensitive material
- k) Include Alaska Native viewpoints in the final study report
- l) Acknowledge the contributions of local research assistants and respondents in project reports
- m) Provide the communities with a summary of the major findings of the study in non-technical language.
- n) Provide copies of the annual and final project reports and related publications to the local library

The AFN Guidelines also include establishing and funding a "Native Research Committee." This may not be necessary in most EVOS Restoration Projects, depending upon the scope of the collection of indigenous knowledge and the wishes of the local community. Also, a new entity may not be necessary. For example, the traditional council may serve as such a review body. This point should be addressed in a "research agreement," as discussed in #4, below.

3. Facilitating the collection of indigenous knowledge.

- o) Initial contacts should be made through the TEK Specialist hired under Project 97052B to discuss the potential collection of indigenous knowledge in a project. The TEK Specialist will then pass the requests on to the communities concerned, and assist in establishing contact between the researcher and the Community Facilitator. The TEK Specialist will also inform the Spill Area Wide Coordinator of such requests.
- p) Once contact has been established through the TEK Specialist, researchers should use the Community Facilitator or designee as the primary community contact.
- q) The Community Facilitator or designee will arrange for the researcher to meet with the Village Council (or other appropriate body authorized by the Village Council) to discuss the project's goals, scope, methods, expectations, benefits and risks. The Facilitator or designee will help orient the researcher to the community and its customs.

4. Research agreements.

The researcher and the Village Council (or other appropriate body authorized by the Village Council), assisted by the Community Facilitator, will work together to set up a research agreement. In developing the agreement, the following topics should be considered: the nature of the research, the form of consent that will be required, the need for local research assistants, compensation of participants, acknowledgments, anonymity and confidentiality of personal and other sensitive information, project monitoring, project review, final disposition of data, and provision of study results. The agreement may take one of several forms, such as a binding contract, a memorandum of agreement, a letter of agreement, or a village resolution. In any agreement, the responsibility and expectations of the researcher and the community should be spelled out. Terms and conditions should be clear and understandable to all parties, should not place unreasonable or unfair burdens on the participants, and must be consistent with applicable laws.

AFN BOARD ADOPTS POLICY GUIDELINES FOR RESEARCH

At its quarterly meeting in May, the AFN Board of Directors adopted a policy recommendation that includes a set of research principles to be conveyed to scientists who plan to conduct studies among Alaska Natives.

The principles will be sent to all Native organizations and villages in the hope that compliance by researchers will deter abuses such as those committed in the past which lately have come to light.

Alaska Natives share with the scientific community an interest in learning more about the history and culture of our societies. The best scientific and ethical standards are obtained when Alaska Natives are directly involved in research conducted in our communities and in studies where the findings have a direct impact on Native populations.

AFN recommends to public and private institutions that conduct or support research among Alaska Natives that they include a standard category of funding in their projects to ensure Native participation.

AFN conveys to all scientists and researchers who plan to conduct studies among Alaska Natives that they must comply with the following research principles:

- * Advise Native people who are to be affected by the study of the purpose, goals, and time-frame of the research, the data-gathering techniques, the positive and negative implications and impacts of the research.
- * Obtain the informed consent of the appropriate governing body.
- * Fund the support of a Native Research Committee appointed by the local community to assess and monitor the research project and ensure compliance with the expressed wishes of Native people.
- * Protect the sacred knowledge and cultural/intellectual property of Native people.
- * Hire and train Native people to assist in the study.
- * Use Native language whenever English is the second language.
- * Guarantee confidentiality of surveys and sensitive material.
- * Include Native viewpoints in the final study.
- * Acknowledge the contributions of Native resource people.
- * Inform the Native Research Committee in a summary and in non-technical language of the major findings of the study.
- * Provide copies of studies to the local library.

***Exxon Valdez* Oil Spill Trustee Council**
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ADDRESS CORRECTION REQUESTED

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