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Photo by Robert Angell

Invitation to Submit Restoration Proposals for Federal Fiscal Year 2000

Prepared by:

***Exxon Valdez* Oil Spill Trustee Council**

645 G Street, Suite 401, Anchorage, Alaska 99501-3451

907/278-8012 *Toll-free in Alaska:* 1-800-478-7745 *Outside Alaska:* 1-800-283-7745

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Invitation to Submit Restoration Proposals for Federal Fiscal Year 2000

February 15, 1999

Prepared by:
Exxon Valdez Oil Spill
Trustee Council

BRUCE BOTELHO
Attorney General
State of Alaska

MICHELE BROWN
Commissioner
Alaska Department of Environmental Conservation

MARILYN HEIMAN
Special Assistant
to the Secretary for Alaska
U.S. Department of the Interior

DAVE GIBBONS
U.S. Forest Service Representative
Alaska Region
U.S. Department of Agriculture

STEVE PENNOYER
Director, Alaska Region
National Marine Fisheries Service

FRANK RUE
Commissioner
Alaska Department of Fish & Game

DATES TO REMEMBER in 1999

- **April 15:** 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 17:** Draft Work Plan released

- **July 20:** Comments due on Draft Work Plan

- **Aug. 10*:** Trustee Council decision

*Tentative

Invitation to Submit Restoration Proposals for Federal Fiscal Year 2000

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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 2000 (FY 00), which is the period October 1, 1999, through September 30, 2000. 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 00. 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.

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

Work Plan Process

Milestones in the development of the FY 00 work plan are described in Table 1. Proposals are due on April 15. The Trustee Council usually makes funding decisions in August so that projects can begin on October 1.

Table 1. Milestones for FY 00 Work Plan

➡	Feb. 15, 1999	*Invitation to Submit Restoration Proposals for Federal Fiscal Year 2000* is issued.
	Mar. 23-27, 1999	Workshop (10 Years After *Exxon Valdez*) to discuss results of restoration work to date.
	April 15, 1999	Proposals due.
	May 16-19, 1999	Chief Scientist and core reviewers meet to discuss the scientific and technical merits of proposals.
	June 17, 1999	*FY 00 Draft Work Plan* is distributed for public comment.
	July 20, 1999	Comments due on *FY 00 Draft Work Plan.*
	Aug. 10, 1999*	Trustee Council expected to decide on *FY 00 Final Work Plan.*
	Oct. 1, 1999	Fiscal year 2000 begins.

*Tentative

Funding Targets

After considering the cash flow for restoration funds, the Trustee Council has tentatively set a funding target of $8 to $9 million for the FY 00 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 00 than in FY 99 and will continue to decline through FY 02, when the final payment from Exxon Corporation will be spent and 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	$18.0 million (actual)
	FY 97	$15.8 million (actual)
	FY 98	$14.1 million (authorized)
	FY 99	$11.5 million (authorized)
➡	FY 00	$8.0 - 9.0 million (target)
	FY 01	$16.0 million -- FY 01 &
	FY 02	FY 02 total (target)
	FY 03+	Restoration Reserve

Project Cost Estimates for FY 00

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 99 work plan estimates that the FY 00 cost for 32 projects continuing from FY 99 will be about $3.7 million (this includes an estimate of bench fees for those projects that will continue at the Alaska SeaLife Center). Seventeen additional projects funded in FY 99 may continue into FY 00, 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 00, if funded, would likely be roughly $2.7 million.

Given a total funding target of $8 to $9 million for FY 00, these estimates suggest that roughly $1.5 to $2.5 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 00

	Number of Projects	Estimated Cost
Continuing Projects	32	$3,736,500
Potential Continuing Projects	17	$2,721,800
New Projects	Unknown	$1,541,700 - 2,541,700
Funding Target:		**$8,000,000 - 9,000,000**

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 40 for information on the BAA process and instructions on submitting a proposal under the BAA.

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 00 and Beyond" and a section called "Invitation for FY 00."

STRATEGIES FOR FY 00 AND BEYOND

This section summarizes the current strategies for restoring the resources and services in each resource cluster. In 1994 the Trustee Council adopted the Restoration Plan, which established recovery objectives for each of the resources injured by the oil spill and strategies for achieving those objectives. In 1999 the Council is updating the objectives to reflect the results of the scientific research and review that have occurred since the Restoration Plan was last updated in September 1996. Each year through this invitation and the annual work plan the Council updates the strategies for achieving the objectives. This section identifies the restoration strategies the Council plans to implement in FY 00, and describes the projects the Council funded in FY 99 and expects to continue funding in FY 00 to implement the strategies. (NOTE: The revised *Update on Injured Resources and Services* will be available from the Anchorage Restoration Office on or about March 1.)

INVITATION FOR FY 00

For each resource cluster, this section invites a proposal for each of the projects the Trustee Council expects to continue from FY 99. Before making FY 00 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 99.

Potential Continuing Projects.
Each resource cluster includes, in a shaded box, a description of additional projects funded in FY 99 that may be continued in FY 00. 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 spent in FY 02 and the Trustee Council has not yet decided how the Restoration Reserve will be used 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 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 12.7 million in 1990. The total wild return to the sound in the 1998 season was more than 5 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 SEA project (/320). In addition, field, laboratory, and synthesis 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 00 AND BEYOND

Research and Monitor the Toxic Effect of Oil.

Two Trustee Council-funded projects will conclude in FY 99: *Oil-Related Embryo Mortalities (\191A)* and *Synthesis of Toxicological Impacts (\329)*. The following project is ongoing:

Effects of Oiled Incubation on Reproduction (\476). FY 00 would be the second 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). In the project's first year, eggs are being exposed to oil in water and surviving fry are being released to the wild.

Provide Management Information and Tools.

Two Trustee Council-funded projects will conclude in FY 99: *Otolith Thermal Mass Marking (\188)* and *Genetic Stock Structure (\196)*. The following projects are ongoing:

Genome Linkage Map (\190). FY 00 would be the fifth and final year of support for a project to construct a detailed map of the pink salmon genome, which will improve understanding of genetic variation and how such variation relates to marine survival, run timing, size, and other traits that are important from the standpoint of salmon restoration, management, and harvest. Aspects of this research are being carried out at the Alaska SeaLife Center.

Remote Video and Time-Lapse Recording (\366). FY 00 would be the second year of a three-year project to develop and test the use of remote video and time-lapse recording technology for enumerating pink salmon escapements. 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.

Port Dick Spawning Channel (\139A2). In FY 96, a spawning channel was constructed at Port Dick Creek on the outer Kenai Peninsula in an effort to increase habitat available for spawning pink and chum salmon. Monitoring in FY 97 indicated that over 300,000 fry emigrated from eggs laid in the newly available habitat. Monitoring is expected to continue with Trustee Council funds through FY 2001.

Investigate Ecological Factors that Influence Adult Pink Salmon Returns.

Sound Ecosystem Assessment (\320). This project is described under the Sound Ecosystem Assessment cluster.

INVITATION FOR FY 00

The Trustee Council expects that the following projects will be continued from FY 99 and invites proposals for work planned in FY 00. Their FY 00 costs are estimated below.

FY 00	\139A2	Port Dick Spawning Channel	$47,000	
	\190	Genome Linkage Map	$187,300	
	\366	Remote Video and Time-Lapse Recording	$46,500	
	\476	Effects of Oiled Incubation on Reproduction	$75,000	
		Total FY 00:		**$355,800**

Potential Continuing Projects. The following project was funded in FY 99. The Trustee Council has not made a commitment to continue it in FY 00 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 00.

Fisheries Synthesis and Publications (\367). In FY 99, the Alaska Department of Fish and Game is synthesizing research results from previous Trustee Council-sponsored fisheries projects and will submit four manuscripts for publication in peer-reviewed scientific journals. The Trustee Council encourages publication of prior EVOS research results. Depending on progress in FY 99 and other factors, the Council will consider a request for additional support in FY 00.

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 40 for more information on the Alaska SeaLife Center.

Effects of Oil on Early Life Stages of Pink Salmon. Studies in the field and laboratory following the oil spill have demonstrated the sensitivity of early life stages of pink salmon to

(box continued from previous page)

the toxic effects of oil. Recent experimental work has shown that exposure to even very low concentrations of weathered oil can kill salmon eggs. There is need to relate the results of this experimental work to conditions in intertidal spawning habitats in Prince William Sound. In FY 00, the Trustee Council will consider a proposal for a new field project that can shed additional light on the potential exposure of pink salmon in natal habitats, the biological significance of such exposure, and the recovery status of pink salmon.

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. 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. Based on preliminary results from herring sampled in 1998, there also continues to be concern about the presence of a virus in the wild population.

STRATEGIES FOR FY 00 AND BEYOND

Investigate Herring Disease as a Cause of the 1993 Crash.

Three Trustee Council-funded projects will conclude in FY 99: *Herring Disease Manuscripts (\162A & \162B)* and *Synthesis of Impacts on Pacific Herring* (\328). The following project is ongoing:

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 a virus in the population. The Trustee Council supported continued monitoring of the disease in FY 99. FY 00 would be the second year of what is expected to be a three-year project.

Provide Management Information.

One Trustee Council-funded project will conclude in FY 99: *Estimations of Acoustic Target Strength (\468).* The following projects are ongoing:

Investigate Ecological Factors that Influence Populations of Pacific Herring.

One Trustee Council-funded project will conclude in FY 99: *Productivity Dependencies: Stable Isotopes (\311).*

Sound Ecosystem Assessment (SEA, \320). This project is described under the Sound Ecosystem Assessment cluster.

Effects of Egg Distribution and Ecology (\375). This project was funded in FY 99 to analyze 20 years of historical data on the distribution and ecology of herring eggs in relation to oceanographic factors in Prince William Sound. The project was proposed as a two-year effort, with closeout funds to be provided in FY 00.

INVITATION FOR FY 00

The Trustee Council expects that the following projects will be continued from FY 99 and invites proposals for work planned in FY 00. Their FY 00 costs are estimated below:

FY 00	\375 Effects of Egg Distribution and Ecology	$48,200	
	\462 Effects of Disease on Population Recovery	$78,500	
		Total FY 00:	**$126,700**

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 herring disease and physiological ecology. See page 40 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; a final report is being prepared in FY 99. The resulting information and models should directly benefit recovery and management of salmon and herring in the sound and, more broadly, the marine ecosystem injured by the oil spill.

The preliminary results of 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. The Council expects to continue projects that explore these relationships during the period FY 00-02 and possibly beyond.

STRATEGIES FOR FY 00 AND BEYOND

Investigate and Monitor Ecological Factors that Influence Marine Productivity.

In FY 99, the Trustee Council funded three one-year projects that supplemented SEA, *Observational Oceanography (\320M), Acoustic Assessments (\320N),* and *Graphical Synthesis/Communication (\361)*. The following projects are ongoing:

Long-Term Oceanographic Monitoring (\340). This project upgrades and continues a 27-year time series of temperature and salinity data from a marine buoy (GAK 1) 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 and APEX, Project /163) and aid in the design of a cost-effective, long-term monitoring program for the northern Gulf of Alaska. Companion studies being carried out as part of the U.S. GLOBEC program are leveraging and extending the Council's contribution to this work. FY 00 is expected to be the third year of what is proposed as a four-year project.

Food Webs: Structure and Change (\393). Research carried out as part of SEA 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.

These data will also help validate the ECOPATH mass-balance model being developed in a separate Trustee Council-sponsored project (\330). FY 00 would be the second year of what is expected to be a three-year project.

INVITATION FOR FY 00

The Trustee Council expects that the following projects will be continued from FY 99 and invites proposals for work planned in FY 00. Their FY 00 costs are estimated below:

FY 00	\340 Long-Term Oceanographic Monitoring	$57,500	
	\393 Food Webs: Structure and Change	$143,600	
		Total FY 00:	**$201,100**

Potential Continuing Projects. The following projects were funded in FY 99. The Trustee Council has not made a commitment to continue them in FY 00 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 00.

Monitor Pristane Levels (\195). Pristane is a hydrocarbon that is naturally synthesized from chlorophyll by certain plant-eating copepods, the only proven marine source of pristane. Because the copepods that synthesize the pristane potentially provide an inexpensive measure of food availability, tracking pristane concentrations in mussels may be a useful tool for monitoring the transfer of energy from copepods to juvenile salmon and indirectly assessing potential year-class strength for pink salmon and herring. The strength of these relationships, however, is not fully established. This project began in FY 96. A decision on FY 00 funding depends, in part, on the results of tests for correlations with marine survival of hatchery-reared salmon.

Sound Ecosystem Assessment (\320). A draft final report on the SEA project will be submitted and evaluated in FY 99. It is expected, however, that additional funds may be required to complete revisions to the report and publication of a series of synthesis papers in peer-reviewed journals. The Trustee Council will consider a modest proposal to fully close-out and synthesize this project in FY 00.

New Projects.

Oceanographic Buoy at Hinchinbrook Entrance. During the course of field work for the SEA project (FY 94-98), an oceanographic buoy was maintained in the Hinchinbrook Entrance to Prince William Sound. Research by SEA investigators and others demonstrate the importance of this area as a link between the Gulf of Alaska and the sound. Maintaining the flow of climate, current, and other measurements from this buoy is essential for continued development of the SEA circulation model and for the U.S. GLOBEC program, which will be working in the central Gulf of Alaska through FY 03. The Trustee Council will consider a proposal to sustain data gathering and analysis from the Hinchinbrook Entrance buoy during FY 00-02 and possibly beyond.

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 to overescapement (Project \048). These projects successfully 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 on Kodiak Island. Assessment of juvenile growth rates in freshwater at Chignik Lake did not identify any impacts associated with a 1989 overescapement event.

In addition to these studies, support from the Trustee Council has made possible the development of new in-season stock assessment and genetic separation techniques (e.g., Project \255), which now are being used by the Alaska Department of Fish and Game to help manage the Kenai River sockeye fishery. The Council also carried out a project to fertilize Coghill Lake to enhance sockeye production in Prince William Sound (Project \259) and to explore the feasibility of fertilization of Delight and Desire lakes on the Kenai coast (Project \254). 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).

STRATEGIES FOR FY 00 AND BEYOND

Supplement Populations.

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

Restore Habitats.

Kenai River Habitat Restoration and Recreation Enhancement (\180). This project is described under the Habitat Improvement cluster. In addition, the Trustee Council has supported the acquisition of key parcels of private lands along the Kenai River (see discussion of Habitat Protection and Acquisition in Appendix A).

INVITATION FOR FY 00

See the Subsistence and Habitat Improvement clusters.

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. Preliminary 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. In addition, closures of salmon fisheries following the 1989 oil spill apparently increased fishing pressures on rockfish (several species). Rockfish are designated as an injured resource by the Trustee Council, but very little is known about populations of these long-lived species in the northern Gulf of Alaska. More recently, commercial fishers have been able to take advantage of information developed in the SEA project (\320) and have established a significant replacement fishery on pollock in Prince William Sound. Management of rockfish and pollock fisheries will benefit greatly from improved information on their population stock structures.

STRATEGIES FOR FY 00 AND BEYOND

Research and Monitor Populations.

One Trustee Council-funded project will conclude in FY 99: *Cutthroat Trout and Dolly Varden: Relationships Among Anadromous and Resident Forms (\145).*

Provide Management Information and Tools.

One Trustee Council-funded project will conclude in FY 99: *Genetic Investigations of Rockfish and Pollock (\252).*

Improve Habitat.

One Trustee Council-funded project will conclude in FY 99: *Cutthroat Trout and Dolly Varden Habitat Improvement Monitoring (\043B).*

INVITATION FOR FY 00

See New Projects in the shaded box below.

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 40 for more information on the Alaska SeaLife Center.

Cutthroat Trout and Dolly Varden Growth Rates. There was strong evidence that cutthroat trout and Dolly Varden grew more slowly in oiled than in unoiled streams in Prince William Sound during 1989-91, but recent-but-still-preliminary data suggest that differences in growth rates also could reflect geographic differences. To the extent that the recent data may bear on interpretation of the data obtained during the earlier damage assessment study (Project FS5), an analysis of historical and recent data on growth rates may be appropriate. The Trustee Council would consider a proposal along these lines, especially if the investigators involved to date would collaborate to conduct the project.

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. Since 1989 harbor seals have continued to decline at a rate of about five percent per year, based on aerial surveys of molting seals in the west-central sound. 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 between 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 quality forage fish reduced the ecosystem's carrying capacity, meaning that it can sustain fewer seals. Survival of young seals is probably most dependent on the availability of forage fish which are high in fat content, and, thus, pup seals are the focus of ongoing research into the harbor seal decline.

There were 23 whales in the AB pod of killer whales in Prince William Sound in 1996, compared to 36 before the oil spill. During the period 1996-98, five calves were recruited and only two adults were lost. This is a positive sign, but it is too soon to establish that recovery is underway. In addition, ten individuals in the genetically distinct AT1 "transient" pod have not been seen in eight 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 00 AND BEYOND

Monitor Populations and Research Declines or Lack of Recovery.

Harbor Seal Monitoring and Field Research (\064). This project provides basic information on population trends and structure, movements, and ecology, including changes in diet, in order to identify causes of the ongoing decline in harbor seals in west-central Prince William Sound. The research component of this project in FY 99 is emphasizing pup seals and the analysis of previously gathered telemetry data on adults. This project is expected to continue at least through FY 00; subsequent work depends on the recovery status of this keystone species in the sound and the northern Gulf of Alaska.

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

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 research will enable investigators to better interpret blood chemistry data obtained from wild seals and understand the physiological conditions that distinguish healthy seals from those that are stressed or in poor health. FY 00 would be the third year of what is expected to be a four-year project.

Harbor Seal Metabolism/Stable Isotopes (\371). This is a companion project 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 00 would be the second year of what is expected to be a three-year project.

Harbor Seal Diet: Lipid Metabolism and Health (\441). This project is also a companion project to Project \341. 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 00 would be the final year of Trustee Council contribution to this project.

INVITATION FOR FY 00

The Trustee Council expects that the following projects will be continued from FY 99 and invites proposals for work planned for FY 00. Their FY 00 costs are estimated below:

FY 00	\064	Harbor Seal Monitoring and Field Research	$130,000	
	\341	Harbor Seal Health and Diet	$124,100	
	\371	Harbor Seal Metabolism/Stable Isotopes	$101,700	
	\441	Harbor Seal Diet: Lipid Metabolism and Health	$131,600	
		Total FY 00:		**$487,400**

Potential Continuing Projects. The following project was funded in FY 99. The Trustee Council has not made a commitment to continue it in FY 00 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 00.

Monitor Killer Whales (\012A). Since FY 93, the Trustee Council has supported annual monitoring of resident and transient killer whales in Prince William Sound. This work previously included research on genetic characteristics, contaminant levels, and predation on harbor seals. The Council funded a reduced proposal in FY 99, emphasizing ongoing monitoring of resident and transient whales. The Council will consider a proposal to continue monitoring in FY 00.

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 40 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 were additional disturbances during cleanup activities. Although it is evident that there is progress in the recovery of the nearshore ecosystem, it also is evident that a 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 (\025), 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. Laboratory work and report writing are underway in FY 99.

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 1997 (1998 samples are still being analyzed). Regarding river otters, previously documented differences in the biochemistry and behavior of otters from oiled and unoiled areas largely disappeared by 1997. Based on the lack of differences in 1997 and 1998, there no longer are 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. Experimental work on the biochemistry of river otters in relation to hydrocarbon exposure will be concluded in FY 99.

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 unoiled 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 1998 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. Preliminary 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, data gathered on the injury and recovery of intertidal and subtidal communities from 1989-95 are being integrated and submitted to peer-reviewed journals for publication. Also in FY 99, field teams will be revisiting a series of

oiled mussel beds to monitor hydrocarbon levels and to assess the results at several beds that were cleaned on an experimental basis in FY 94.

In FY 97, the Trustee Council funded additional cleanup of selected beaches near the village of Chenega Bay (Project \291; see Reduction of Marine Pollution cluster). 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 and other injured species, and the need to document decreases in residual oil over time, it probably is necessary to conduct another survey in the sound. The Council will consider a shoreline-survey proposal in FY 01 or FY 02.

STRATEGIES FOR FY 00 AND BEYOND

Research Mechanisms Constraining Recovery.

Three Trustee Council-funded projects will conclude in FY 99: *Status of Black Oystercatchers (\289)*, *Intertidal/Subtidal Manuscript Preparation (\325)*, and *Responses of River Otters to Oil Contamination (\348)*. The following projects are ongoing:

Assessment of Risk to Residual Oiling Using P450 (\379). There is evidence that several species of fish and wildlife continue to be exposed to hydrocarbons in Prince William Sound, but the mechanisms and geography of this possible exposure are not known. This project is designed to explore the geography of hydrocarbon exposure in two intertidal fishes, masked greenling and crescent gunnel, in the sound. In FY 99, the project will analyze hydrocarbons in previously obtained specimens and secure additional samples at sites known to have oiled mussel beds. In FY 00, the Trustee Council expects a proposal to complete biochemical analyses of all specimens and prepare a final report.

Barrow's Goldeneye Recovery Status (\466). Although Barrow's goldeneye is not listed as an injured species, there is evidence of possible hydrocarbon exposure from samples collected in 1996-97 and concern about goldeneye populations in Prince William Sound based on survey data. The Trustee Council funded a project in FY 99 to synthesize information on the status of and possible injury to this species. In FY 00, the Council expects a proposal to complete this work, including preparation of manuscripts for submission to peer-reviewed journals.

Monitor the Fate and Persistence of Oil.

Residual Oiling of Armored Beaches (\459). For at least five years after the oil spill, oil mousse persisted on boulder-armored beaches on the shorelines of the Kenai and Alaska peninsulas. In FY 99, a field team will revisit boulder-armored beach sites last visited in 1994 and several oiled mussel beds last visited in 1993. In FY 00, the Trustee Council expects a proposal to complete data analysis and preparation of a final report.

INVITATION FOR FY 00

The Trustee Council expects that the following projects will be continued from FY 99 and invites proposals for work planned for FY 00. Their FY 00 costs are estimated below.

FY 00	\379	Assessment of Risk to Residual Oiling Using P450	$28,300	
	\459	Residual Oiling of Armored Beaches	$40,000	
	\466	Barrow's Goldeneye Recovery Status	$14,200	
		Total FY 00:		**$82,500**

Potential Continuing Projects. The following projects were funded in FY 99. The Trustee Council has not made a commitment to continue them in FY 00 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 00.

Nearshore Vertebrate Predators (\025). Field work on this project (see above) was completed in FY 98. In FY 99, the Trustee Council funded additional laboratory analyses as well as data analysis and preparation of a draft final report. The Council anticipates receiving a FY 00 proposal for report revisions and the preparation and submission of manuscripts to peer-reviewed journals.

Oiled Mussel Bed Monitoring (\090). In FY 99, field teams will revisit and monitor hydrocarbon levels at a series of oiled mussel beds in Prince William Sound. Some of these beds were experimentally cleaned and restored in 1994 and have not been revisited since 1995. The Trustee Council anticipates receiving a FY 00 proposal for data analysis, report writing, and preparation and submission of manuscripts to peer-reviewed journals.

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 supported development of a hydrocarbon database in FY 93 as a way to compile and integrate data on hydrocarbon concentrations and biological exposure from thousands of sediment, tissue, and other samples. The Council anticipates receiving a proposal to continue this project in FY 00.

Population Change in Nearshore Vertebrate Predators (\423). Although field work on the large-scale Nearshore Vertebrate Predator project (\025) was concluded in FY 98, neither the sea otter nor the harlequin duck has recovered from the effects of the spill. In FY 99, the Council funded aerial surveys to monitor numbers of sea otters in western Prince William Sound. In FY 00, the Council expects to receive a proposal to continue these surveys. The Council also would consider additional work on sea otters and harlequin ducks, providing that such work follows directly on the results of NVP and related projects (e.g., Project \427).

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; for example, the effects of nutrition or oil on the blood chemistry, physiology, behavior, and productivity of nearshore vertebrate predators. See page 40 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. The status of Kittlitz's murrelets in Prince William Sound is under investigation; a final project report is being prepared in FY 99. 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; this project will conclude 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.

STRATEGIES FOR FY 00 AND BEYOND

Research Mechanisms Limiting Recovery of Marine Bird Populations.

Two Trustee Council-funded projects will conclude in FY 99: *East Amatuli Island Video Link (\334)* and *Publication of a Sand Lance Bibliography (\346)*. 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 will conclude in FY 99. FY 00 is expected to be the final year of Trustee Council funding.

Genetics: Murres, Guillemots, Murrelets (\169). The Trustee Council began funding this project in FY 97 to examine genetic relationships within populations of common murres, pigeon guillemots, and marbled and Kittlitz's murrelets. Preliminary results suggest that gene flow across the north Pacific is most restricted in guillemots and less restricted in murres and murrelets. These data will determine the geographic extent of spill-affected populations, which will aid in understanding recovery processes and factors limiting recovery. In FY 00, the Council expects to provide funding only for report writing .

Sand Lance Ecology and Demographics (\306). In FY 97, the Trustee Council funded a basic study of the ecology, distribution, and population structure of this important forage fish in lower Cook Inlet. This project will provide background information for the benefit of the APEX project (\163). In FY 00, the Council expects to provide funding only for report writing.

Pigeon Guillemot Research (\327). This project, initiated in FY 98, has two interrelated components: (1) to conduct research on the growth and physiology of nestling guillemots in relation to nutrition and oil, and (2) to test as a restoration technique 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. FY 00 would be the third year of what is expected to be a four-year project. This work is being carried out at the Alaska SeaLife Center.

Adult Murre and Kittiwake Survival (\338). The APEX project (\163) emphasizes the link between the availability of forage fish and annual production 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 study 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 murre and kittiwake populations. FY 00 is expected to be the final year of this project.

Fatty Acid/Lipid Analyses (\347). Fatty acid and lipid (i.e., soluble fats) analyses can provide important insights into the diets of predators, such as harbor seals. The APEX (Project \163) work on seabirds and related work on harbor seals and other marine mammals will benefit from the development of a series of fatty acid profiles and lipid classes that will systematically describe their geographic and seasonal variations. This project was initiated in FY 98 and is focusing on Pacific herring and sand lance, both of which are of fundamental ecological importance. FY 00 is expected to the final year of work on this project.

Effects of Food Stress on Survival and Reproduction (\479). 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. In FY 99, the Trustee Council funded a pilot study on this technique, focusing on common murres and black-legged

kittiwakes in Cook Inlet. FY 00 would be the second year of support for what is expected to be a four-year project.

Monitor Marine Bird Populations.

Common Murre Population Monitoring (\144A). The Trustee Council has supported monitoring of common murre productivity, or numbers, in the Barren Islands since 1989. In FY 99, this project will again monitor murres at the Barren Islands in what is hoped to be a normal, post-El Niño season. Depending on the FY 99 results, the Council expects to provide funds in FY 00 only for preparation of a final report and submission of a synthesis manuscript.

Status of Seabird Colonies in Northeastern Prince William Sound (\381). In FY 99, the Trustee Council funded a survey of colonies occupied by pigeon guillemots and other seabirds (plus black oystercatchers). These colonies are along the shorelines of lands that are expected to be protected with Council funds and returned to public ownership. In FY 00, the Council expects to provide only a very small amount of closeout funding for this project.

INVITATION FOR FY 00

The Trustee Council expects that the following projects will be continued from FY 99 and invites proposals for work planned in FY 00. Their FY 00 costs are estimated below.

FY 00	\144A	Common Murre Population Monitoring	$23,000
	\163	Alaska Predator Ecosystem Experiment (APEX)	$900,100
	\169	Genetics: Murres, Guillemots, Murrelets	$13,800
	\306	Sand Lance Ecology and Demographics	$20,000
	\327	Pigeon Guillemot Research	$167,700
	\338	Adult Murre and Kittiwake Survival	$45,000
	\347	Fatty Acid/Lipid Analyses	$35,800
	\381	Status of Seabird Colonies in Northeastern PWS	$1,000
	\479	Effects of Food Stress on Survival and Reproduction	$125,200
		Total FY 00:	**$1,331,600**

Potential Continuing Projects. The following project was funded in FY 99. The Trustee Council has not made a commitment to continue it in FY 00 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 00.

Boat Surveys in Prince William Sound (\159). Starting in Summer 1989/Winter 1990, the Trustee Council has sponsored six sets of summer/winter boat surveys in Prince William Sound as the primary means of monitoring population trends for an entire suite of marine birds following the oil spill. There is now good statistical power for the analysis of these surveys, and they are expected to provide increasingly conclusive information on seabird population trends. The Council anticipates receiving a proposal in FY 00 to carry out another set of surveys (summer/winter) in the sound.

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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 40 for more information on the Alaska SeaLife Center.

Trawl Surveys for Forage Fish. A long-running series of trawl surveys on the Alaska Peninsula, lower Cook Inlet, and around Kodiak Island has provided critical data on changes in the species composition, abundance, and distribution of forage fishes and other pelagic marine biota, some of which are important as prey for seabirds and marine mammals. Although these surveys are ongoing with support from the National Marine Fisheries Service and Alaska Department of Fish and Game, there may be need to supplement this support in order to sustain adequate sampling intensity and frequency. These surveys are believed to be a critical element of any long-term ecological research and monitoring program in the Gulf of Alaska. The Trustee Council will consider a modest proposal for support to help sustain or expand the current program.

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. Natural erosion is the major agent of degradation at the sites, and erosion draws the attention of looters to exposed artifacts. Nine 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.

STRATEGIES FOR FY 00 AND BEYOND

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 01.

Monitor Archaeological Sites.

One Trustee Council project will conclude in FY 99: *Site Stewardship (\149).*

INVITATION FOR FY 00

See Potential Continuing Projects in the shaded box below.

Potential Continuing Projects.

Index Site Monitoring (\007A). The monitoring program for archaeological resources consists of periodic checks on sample ("index") sites to detect further damage from vandalism and looting and to gauge the effect of oiling on archaeological deposits. Annual monitoring began in FY 94 and will continue through FY 99. It appears that new vandalism is sporadic and less frequent. Since natural erosion is the main agent of degradation at the sites, and the erosion itself exposes sites to potential vandalism, it is increasingly difficult to attribute any new vandalism to the discovery of the sites at the time of the oil spill. This project is unlikely to be funded in FY 00 without a strong justification of its continuing restoration value.

New Projects. No new projects have been identified but project proposals are welcome. At this time no data recovery efforts are planned for future years.

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 1990-1993 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 00 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.

Two Trustee Council-funded projects will conclude in FY 99: *Tatitlek Coho Salmon Release (\127)* and *Chugach Region Clam Restoration (\131)*. The following projects are ongoing:

Port Graham Pink Salmon (\225). This project is supplying pink salmon in the Port Graham area during the broodstock development phase of the Port Graham hatchery, replacing runs of coho and sockeye salmon depleted since the spill. Although the hatchery was destroyed by fire in January 1998, a temporary incubation facility is in place and should allow the broodstock development process to stay on track. Trustee Council funding will end in FY 00, which is when the broodstock development phase is to be complete.

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. Council funding is anticipated through FY 02.

Port Graham Stream Enhancement (\263). In FY 98, this project constructed a fish pass on the Port Graham River and a rearing pond on Windy Creek, both of which are near the village of Port Graham, in an effort to increase coho salmon production. In FY 99, vegetation will be planted around the rearing pond and project success will be monitored. FY 00 is expected to be the final year of Trustee Council funding for this project.

Spot Shrimp Abundance (\401). Concerns over the declining number of shrimp have been raised repeatedly by subsistence users. The Trustee Council funded this project in FY 99 to study the abundance of spot shrimp in Prince William Sound and determine whether the population can sustain seasonal openings for subsistence, personal use, or commercial fishing. FY 00 would be the second year of what is expected to be a four-year effort.

Port Graham Hatchery Reconstruction (\405). In FY 99, the Trustee Council approved $781,300 to help rebuild the Port Graham salmon hatchery, which was destroyed by fire in January 1998. The Council has supported the hatchery's programs for several years in an effort to rehabilitate and enhance the pink, coho, and sockeye salmon runs in the Port Graham and Nanwalek areas. The hatchery has provided additional fish for subsistence and commercial use, as well as providing an opportunity to reduce harvest pressure on the wild stocks in the area. The funding approved by the Council, which is only a portion of the total cost of the project, will extend into FY 00, when reconstruction of the hatchery is expected to be complete.

Increase Involvement of Subsistence Users in the Restoration Process.

Community Involvement (\052A). 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 Island region, and Alaska Peninsula region, to facilitate communication and interaction among the Council, scientists, and residents of communities impacted by the oil spill. In FY 98, student interns were added as facilitators in each of the Kodiak Island communities. The Council anticipates funding this effort, although probably at a reduced level, through FY 02.

Youth Area Watch (\210). 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. The Trustee Council anticipates supporting this effort through FY 02, though on a declining schedule as the project makes a transition to other funding sources.

Community-Based Harbor Seal Biosampling (\245). FY 99 is the fourth 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. These samples are provided to ongoing EVOS studies on why harbor seals are not recovering.

The Trustee Council anticipates supporting this project through FY 02, though on a declining schedule as the project makes a transition to other funding sources.

INVITATION FOR FY 00

The Trustee Council expects that the following projects will be continued from FY 99 and invites proposals for work planned in FY 00. Their FY 00 costs are estimated below.

FY 00	\052A	Community Involvement	$180,000	
	\210	Youth Area Watch	$123,100	
	\225	Port Graham Pink Salmon Project	$75,000	
	\245	Community-Based Harbor Seal Biosampling	$55,000	
	\247	Kametolook River Coho Salmon Project	$20,000	
	\263	Port Graham Stream Enhancement	$23,500	
	\401	Spot Shrimp Abundance	$89,800	
		Total FY 00:		**$566,400**

Potential Continuing Projects. The following projects were funded in FY 99. The Trustee Council has not made a commitment to continue them in FY 00 because of uncertainty about their scope or their priority in terms of the overall restoration program. The Council expects to receive proposals to fund these projects in FY 00.

Traditional Ecological Knowledge (\052B). As part of its community involvement effort, in FY 97 the Trustee Council began funding this project to explore and facilitate the use of traditional ecological knowledge (TEK) in the restoration of injured resources and services. The Council anticipates receiving a proposal to continue the project in FY 00. Funding will be contingent upon a favorable review of the results of the FY 99 effort.

Stocking of Solf Lake (\256B). A feasibility study funded by the Trustee Council in FY 96-97 verified that Solf Lake, located near the village of Chenega Bay, can support a population of sockeye salmon. Stocking began in FY 98. Additional work in FY 99 includes finalizing the design of a migration channel. Funding for FY 00 will be considered once the construction cost estimate is refined.

Surf Scoter Life History and Ecology (\273). The Trustee Council initiated this project in FY 98 at the request of subsistence users who have noted a decline in the number of scoters in Prince William Sound. Traditional ecological knowledge is being integrated into the project, which is intended to be the first step in determining the cause of the suspected population decline and developing conservation and management strategies to ensure the long-term health and welfare of the surf scoter population. The Council anticipates receiving a proposal to continue the project in FY 00.

New Projects.

Community-Based Harbor Seal Population Studies. In FY 99, the Trustee Council received a proposal (\444) to combine the expertise of Alaska Native hunters and University

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of Alaska researchers to monitor population parameters of harbor seals in the spill area. The Council postponed consideration of the proposal in order to allow time for the proposed work to be better coordinated and integrated with work underway by the National Marine Fisheries Service and the Alaska Department of Fish and Game. The Council would consider a revised proposal for FY 00, providing that the necessary coordination and integration is achieved.

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 46 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 39. If you would like help in preparing your proposal, please contact Hugh Short, the Community Involvement Coordinator, at the Anchorage Restoration Office (phone 907-278-8012 or 800-478-7745).

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 partial 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. Also in FY 97, the Council funded development of the Kodiak Island Borough Master Waste Management Plan (Project \304) and in FY 98 provided partial funds to implement the plan. Also in FY 98, the Council funded development of a lower Cook Inlet Waste Management Plan (Project \514). This plan 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 is being prepared in FY 99.

STRATEGIES FOR FY 00 AND BEYOND

Develop Plans for Waste Reduction in Communities.

See Potential Continuing Projects in the shaded box below.

Continue Shoreline Cleanup at Selected Sites.

One Trustee Council-funded project will conclude in FY 99: *Chenega Cleanup Final Report (\291).*

INVITATION FOR FY 00

See Potential Continuing Projects in the shaded box below.

Potential Continuing Projects. The following project was funded in FY 99. The Trustee Council has not made a commitment to continue it in FY 00 pending completion of the project's final report. The Council expects to receive a proposal to fund this project in FY 00.

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 project's final report is expected in FY 99. Following review of the report, the Council may consider a proposal for implementation of the plan. If the Council contributes to implementation of the plan, it will expect financial participation from the affected communities and from other sources. In previous years, funding for this type of capital project has been considered to be outside of the funding target for the annual work plan.

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 explore the feasibility of enhancing intertidal resources by restoring regular tidal flow to an area of mudflats that is now cut off from most tides (Project \314).

Habitat also can be protected and restored through better understanding and management of human uses. In FY 98 and FY 99, the Trustee Council 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 00 AND BEYOND

Restore Habitat.

One Trustee Council-funded project will conclude in FY 99: *Homer Mariner Park (\314).*

Understand and Manage Human Uses.

One Trustee Council-funded project will conclude in FY 99: *Human Use Model in Western Prince William Sound (\339).*

INVITATION FOR FY 00

See Potential Continuing Projects in the shaded box below.

Potential Continuing Projects.

Kenai River Habitat Restoration (\180). This project, first funded by the Trustee Council in FY 96, is protecting and restoring degraded shoreline habitat on public land needed to maintain healthy salmon runs on the Kenai River. Field work for this project concludes in FY 99. In FY 00, the Council may consider a very small proposal to complete preparation of the final report.

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

Ecosystem Synthesis

Ten 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 enables 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.

The three large-scale ecosystem projects sponsored by the Trustee Council -- SEA (\320), NVP (\025), and APEX (\163) -- are now mature; the time is ripe for syntheses within and among these projects. In addition, some species (e.g., herring) and themes (e.g., toxic effects of oil on pink salmon) have been the subjects of multiple projects, and are ready for analyses that integrate results from various projects. Concurrent with this interest in integration and 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 \325, \328, \329, and \367).

In FY 99, the Trustee Council funded two projects that compile existing information and datasets, including EVOS results, in the Cook Inlet watershed (Project \391) and 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. In FY 99, the Council also funded the second year of a project to develop a mass-balance ECOPATH model, integrating data on fish and wildlife populations in Prince William Sound (Project \330). Some of this same information will also be depicted on a series of four maps summarizing environmentally sensitive areas in the sound (Project \368).

STRATEGIES FOR FY 00 AND BEYOND

Integrate and Synthesize Project Results.

Two Trustee Council-funded projects will conclude in FY 99: *Synthesis of Scientific Findings/Long-Term Planning (\300)* and *Environmentally Sensitive Areas: Summary Maps (\368)*. The following project is ongoing:

Kachemak Bay Ecological Characterization (\278). In FY 99, the Trustee Council funded this project to collect, synthesize, analyze, and document physical, biological, and human or socioeconomic information on the Kachemak Bay-lower Cook Inlet area. The project is building a data system, with products including a GIS spatial data component and an annotated bibliography with a research summary/tracking capability. FY 00 is expected to be the second and final year of Council funding.

Develop Models of Research Results.

One Trustee Council-funded project will conclude in FY 99: *Mass-Balance Model of Trophic Fluxes (\330).*

INVITATION FOR FY 00

FY 00	\278 Kachemak Bay Ecological Characterization	$35,000	
		Total FY 00:	**$35,000**

Potential Continuing Projects. The following project was funded in FY 99. The Trustee Council has not made a commitment to continue it in FY 00 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 00.

Information Management/Monitoring System (\391). In FY 99, the Trustee Council funded a project to develop an integrated database containing digital and spatial data for the Cook Inlet watershed. The database will emphasize water quality and related environmental data. Its purpose is to support monitoring, management, and restoration of injured resources and lost or reduced services. FY 99 funding consists of two phases, with Phase 2 funding pending completion and satisfactory review of Phase 1 and progress toward resolving questions about the project's scope, schedule, costs, and other issues. If both phases of the project are funded and carried out successfully in FY 99, the Council will consider a proposal for FY 00 funding to complete the project. Substantial cost sharing on the part of natural resource agencies, industry, and other "consumers" of this product is strongly encouraged.

New Projects.

Information Transfer to Resource Managers and Stakeholders. Over the decade since the oil spill, many studies have been carried out to assess injury to and recovery of fish and wildlife resources. The results of these studies and the approaches underlying them can provide valuable guidance for the ongoing restoration program as well as for natural resource managers and other stakeholders who may make decisions or take actions that bear on the long-term recovery of injured resources and lost or reduced services. Accordingly, there is an ongoing need to synthesize and transfer study results to resource managers and stakeholders so that they can take full advantage of what has been learned through the EVOS program. The Trustee Council has sponsored several projects in this vein, including the mapping of environmentally sensitive areas in Prince William Sound (Project \368), development of the mass-balance model for the sound (Project \330), and the initial phase of a Cook Inlet information management system (Project \391), and there probably are other applications that would benefit injured resources and services. In FY 00, the Council may consider proposals that transfer information to resource managers and stakeholders. Significant cost sharing will increase prospects for a successful proposal.

(box continued from previous page)

Possible Transition to Long-Term Monitoring and Research Program. The Trustee Council will likely make a decision on future uses of the Restoration Reserve in FY 99. One possible use is a long-term monitoring and research program. If the Council moves to establish such a program, there will be many steps leading to development of its goals and objectives, detailed content, structure, and operations. Among those steps are reviewing a long-term science plan and facilitating the transition of key data sets from the current restoration program to formats and systems where they are accessible for long-term use. The Council will consider proposals that address these needs, with the caveat that action on such proposals may be deferred pending the Council's decision on uses of the Restoration Reserve.

Proposals for additional projects are welcome.

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 99, the Council authorized $454,200 for project management, which amounts to roughly four percent of overall project costs and represents a reduction from the amount approved for FY 98 ($560,000). Although an estimate of FY 00 funding for project management has not been developed, it is expected to decline consistent with the decline in the funding target for the overall work plan.

INVITATION FOR FY 00

As in FY 99, each Trustee agency will be asked to develop a budget for its project management costs following the receipt of project proposals on April 15, 1999. The timeline for submittal of these budgets to the Anchorage Restoration Office will be announced soon after April 15.

GENERAL INSTRUCTIONS FOR SUBMITTING A PROPOSAL

- All proposals must be received in the Anchorage Restoration Office by **April 15, 1999**. Proposals are required for all continuing projects, as well as for new projects.

- All proposals should be for federal fiscal year 2000 (FY 00), which is the period October 1, 1999 through September 30, 2000.

- Three paper copies and one electronic copy of a Detailed Project Description (DPD), prepared per the format and content instructions (pages 44-53), must be submitted. Electronic copies must be on an IBM-compatible disk in WordPerfect 6.1 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 54-67), 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

If you received funding from the Trustee Council in FY 98, by **April 15, 1999** 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 00 projects will not be authorized for any investigator who has an overdue report.* (See page 43 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 DPD and budget to NOAA at the address below by 2:00 p.m. Pacific Daylight (Seattle) time on April 15, 1999. (This is in addition to the three copies of the DPD 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 #52ABNF900033), 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. The Alaska SeaLife Center opened its doors for research in 1998. In order to ensure that space at

the Center is available and appropriate, proposals that indicate use of the Center in FY 00 or future years will be forwarded to the Center's Executive 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 studied for the purpose of improving rehabilitation techniques, 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. Mike Castellini, before submitting a proposal to the Trustee Council.

Dr. Mike Castellini
Alaska SeaLife Center
301 Railway Avenue
Box 1329
Seward, AK 99664
Phone: 1-907-224-6346
1-800-224-2525 (toll free)
e-mail: mikec@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 44-53 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 54-67 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 00. The draft work plan will be circulated for public comment in June 1999. The Council is expected to decide on the final work plan in August 1999. 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 1999 should be available for expenditure on October 1, 1999 (the beginning of federal fiscal year 2000). 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 00, the workshop will be held in Anchorage, for three days during the period January 18-28 (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 prepare a poster or give a presentation.

- **Possibly attend a technical review session.** Each year, the Trustee Council's Chief Scientist schedules intensive workshops on several areas of research. Review sessions 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 review sessions 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 00 will be due April 15, 2001. 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, October 1998* available from the Anchorage Restoration Office). PIs are also strongly encouraged to publish results of their work in the peer reviewed literature.

- **Maintain any data recorded during the course of the project** and make it available to other researchers and interested parties upon request. Trustee Council funds are public funds; therefore, 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 6.1 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.
- **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 40 for a discussion of the BAA)

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Project Number:	(For continuing projects, the last three digits of the 1999 project number preceded by "00" -- for example, 99163 would become 00163; 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 00)
Alaska SeaLife Center:	(Type "yes" if this project intends to use the Alaska SeaLife Center in FY 00 or future years; type "no" if it doesn't)
Duration:	(What year in the project's life FY 00 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 00:	(The amount of funding requested for expenditure in FY 00; show all dollar amounts in $000,000 format)
Cost FY 01:	(An estimate of the amount of funding, if any, that will be requested for expenditure in FY 01)
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)

remember the colon

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Headings in all caps; bold

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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.

footer like this

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

INTRODUCTION

↓ 1

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 99, a description of the work proposed for FY 00, 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.

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NEED FOR THE PROJECT

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A. Statement of Problem > subheadings in bold

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

B. Rationale/Link to Restoration

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.

C. Location

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

COMMUNITY INVOLVEMENT AND TRADITIONAL KNOWLEDGE

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 be used for the acquisition of vessels, technicians, equipment, and other locally available resources? 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 use 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 Trustee 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	907-573-5132
Cordova	Bob Henrichs	907-424-7738
Nanwalek	Nancy Yeaton	907-281-2274
Ouzinkie (Kodiak)	Paul Panamarioff	907-680-2259
Port Graham	Walter Meganack, Jr.	907-284-2227
Seldovia	Lillian Elvsaas	907-234-7898
Seward	Trudy Dotomain	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 42 of this invitation, the protocols call for all research proposals involving traditional knowledge to be reviewed by the TEK Specialist and the community facilitators.

↓ 2

PROJECT DESIGN

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A. Objectives

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What are the project's research/restoration objectives, both for FY 00 and throughout the life of the project?

indent over so in alignment

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.

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

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 00, 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 00, 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.

SCHEDULE

A. Measurable Project Tasks for FY 00 (October 1, 1999 - September 30, 2000)

When in FY 00 will major project tasks (for example, sample collection, data analysis, manuscript submittal, etc.) be completed? Include a schedule of work for FY 00 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.

December 31:	Complete analysis of data from FY 99 field season
January 14-16:	Present project results: American Society of Limnology and Oceanography
January 18-28 (3 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 99 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

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 (FY 00 and beyond). 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 00, 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 00 the Council will support page costs of publications anticipated to appear in print during FY 00. 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 56 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 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 00 are due April 15, 2001.) 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 00 (see page 56 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 Trustee 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-Trustee 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 99 should skip this section)

↓ 1

How does the proposal described in this DPD differ from the DPD approved by the Trustee Council for FY 99? 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 00 and describe what their responsibilities will be.

↓ 2

LITERATURE CITED

↓ 1

If appropriate, include literature citations here.

This section contains instructions for preparing Detailed Budgets.

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 00, 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 99 or what was projected in FY 99 for FY 00. 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 00 budget is for the period October 1, 1999 through September 30, 2000.

- **Project Number...**
  For continuing projects, use the last three digits of the 1999 project number preceded by "00" (for example, project 99163 would become 00163). 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 57). 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 2000 workshop will be held in Anchorage, for three days during the period January 18-28 (actual dates to be announced later). Unless you reside in Anchorage, include funds in your budget for travel and three 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. **Technical Review Sessions.** The Chief Scientist expects to conduct technical review sessions on the following projects in FY 00: SEA and related projects (\320, \340, \393), APEX (\163), pink salmon (\190, \476), herring (\311, \375, \462), marine mammals (\064, \341, \371, \423, \441), and subsistence (\052, \210, \273, \401). The review sessions will likely be held in Anchorage. PIs on these projects should include funds for travel and two days per diem (also for the co-PI, if appropriate) to attend a review session. Identify on the appropriate budget forms how much funding has been included for this purpose.

4. **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 00 are due April 15, 2001. If you represent a state or federal agency, the costs of preparing a report on your FY 00 activity should be included in your FY 01 budget. If you represent another type of organization, the costs of performing the project and preparing a report should both be included in your FY 00 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.)

5. **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 00 must be for manuscripts that will be published (i.e., appear in print) in FY 00. 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.

6. **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 will fund attendance at one professional conference in FY 00 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.

7. **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 01 and 02 or through the end of the project, whichever comes first) should be as reliable as possible in order to enable the Trustee Council to conduct long-range planning. The estimate of FY 01 funding that you make this year will be used by Council staff as a benchmark for reviewing your FY 01 budget when it is submitted in April 2000. 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 63.

•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, Biological Resources Division	DOI-BRD
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 55) 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 00. In estimating future years' costs (FY 01 and 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 99, 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 1999* - No input required. All the information is linked to individual agency forms.
2. *Proposed FY 2000* - 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 2000 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 99.
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 1999	Proposed FY 2000	PROPOSED FY 2000 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 2001	Estimated FY 2002				
General Administration								
Project Total								
Full-time Equivalents (FTE)								
Other Funds -3-								

Comments:

-6-

FY 00	Project Number: Project Title: -7- Lead Agency:	FORM 2A MULTI-TRUSTEE AGENCY SUMMARY

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 1999* - If the project was funded in FY 99, enter the total authorized by line-item. Otherwise, leave blank.
2. *Proposed FY 2000* - 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, technical review session 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 99.
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 1999	Proposed FY 2000						
Personnel								
Travel								
Contractual								
Commodities								
Equipment	- 1 -	- 2 -	LONG RANGE FUNDING REQUIREMENTS -4-					
Subtotal			Estimated FY 2001	Estimated FY 2002				
General Administration								
Project Total								
Full-time Equivalents (FTE)								
	Dollar amounts are shown in thousands of dollars.							
Other Funds - 3 -								

Comments:

-5-

FY 00	Project Number: Project Title: - 6 - Agency:	FORM 3A TRUSTEE AGENCY SUMMARY

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 2000 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 2000 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/	Months	Monthly		Proposed
Name	Position Description	Step	Budgeted	Costs	Overtime	FY 2000
- 1 -	- 2 -	- 3 -	- 4 -	- 5 -	- 6 -	- 7 -
	Subtotal					
					Personnel Total	

Travel Costs:	Ticket	Round	Total	Daily	Proposed
Description	Price	Trips	Days	Per Diem	FY 2000
- 8 -	- 9 -	- 10 -	- 11 -	- 12 -	- 13 -
				Travel Total	

FY 00	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 2000* - Enter the proposed FY 2000 contractual cost.
3. *Commodities Description* - Describe what is being purchased and its purpose.
4. *Proposed FY 2000* - Enter the proposed FY 2000 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 FY 2000
Description	
- 1 -	- 2 -
When a non-trustee organization is used, the form 4A is required. **Contractual Total**	

Commodities Costs:	Proposed FY 2000
Description	
- 3 -	- 4 -
Commodities Total	

FY 00	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 2000 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: Description		Number of Units	Unit Price	Proposed FY 2000
- 1 -	- 2 -	- 3 -	- 4 -	- 5 -
Indicate replacement equipment purchases with an R.			New Equipment Total	

Existing Equipment Usage: Description	Number of Units	Inventory Agency
- 6 -	- 7 -	- 8 -

FY 00	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 1999* - If the project was funded in FY 99, enter the total authorized by line-item. Otherwise, leave blank.
2. *Proposed FY 2000* - 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, technical review session 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 99.
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 1999	Proposed FY 2000	LONG RANGE FUNDING REQUIREMENTS - 5 -					
Personnel								
Travel								
Contractual								
Commodities	- 1 -	- 2 -						
Equipment								
Subtotal			Estimated FY 2001	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 00	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 2000 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 2000 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 2000
	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 2000
	Description					
	- 7 -	- 8 -	- 9 -	- 10 -	- 11 -	- 12 -
					Travel Total	

FY 00	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 2000* - Enter the proposed FY 2000 contractual cost.
3. *Commodities Description* - Describe what is being purchased and its purpose.
4. *Proposed FY 2000* - Enter the proposed FY 2000 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 FY 2000
Description	
- 1 -	- 2 -
Contractual Total	

Commodities Costs:	Proposed FY 2000
Description	
- 3 -	- 4 -
Commodities Total	

FY 00	Project Number: Project Title: - 5 - Name:	FORM 4B Contractual & Commodities DETAIL

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 2000 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: Description		Number of Units	Unit Price	Proposed FY 2000
- 1 -	- 2 -	- 3 -	- 4 -	- 5 -
Indicate replacement equipment purchases with an R.			New Equipment Total	

Existing Equipment Usage: Description	Number of Units	
- 6 -	- 7 -	

FY 00	Project Number: Project Title: - 8 - Name:	FORM 4B Equipment DETAIL

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 any 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 December 1998, the Trustee Council has committed $340 million to protect 636,000 acres of land in large parcels (generally over 1,000 acres each), including private inholdings within Kachemak Bay State Park, land adjacent to Seal Bay/Tonki Cape on Afognak Island, commercial timber rights on land along Orca Narrows near Cordova, a parcel on Shuyak Island, and lands owned by Afognak Joint Venture, Akhiok-Kaguyak, Inc., Old Harbor Native Corporation, Koniag, Inc., Chenega Corporation, Eyak Corporation, English Bay Corporation, and Tatitlek Corporation. Negotiations continue with Koniag, Inc. to protect additional habitat that is currently protected through a temporary conservation easement.

The Trustee Council has also spent $18.5 million to acquire 7,000 acres of habitat in small parcels (generally under 1,000 acres each), and authorized $2.5 million to purchase an additional 1,200 acres in small parcels.

Interests in the lands protected by the Trustee Council range from acquisition of fee simple title to various forms of conservation easements.

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 00 will depend upon the Trustee Council's habitat protection decisions, and 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;
- The Oil Spill Public Information Center, whose collection is now housed at the Alaska Resource Library and Information Services (ARLIS); the combined collection, which includes 150,000 books and journals plus electronic databases, videotapes, maps, and photographic slides, is cataloged in the online database of the Western Library Network;
- Publications, including this invitation; annual work plans; the *Restoration Update*, a bi-monthly 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 review 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 an internet 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 (beginning in FY 95) 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 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 99, the Council authorized $2,495,700 for public information/science management/administration. Although an estimate of FY 00 funding has not been developed, it is expected to decline consistent with the decline in funding for the overall restoration effort through FY 02, when the final payment from Exxon Corporation will be spent and funding for the restoration program will rely solely on the Restoration Reserve.

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 six years (FY 94–99). It is anticipated that $12 million will be allocated to the Reserve each year from FY 00 through FY 02. If this occurs, $108 million plus interest would be available for funding restoration activities after the last payment is received from Exxon Corporation.

Funds in the Reserve will be used for restoration activities, but allocation of the funds to specific activities has not yet occurred. During FY 98, the Trustee Council solicited input from throughout the spill area on possible uses of the funds. The Council will likely make a decision on future uses of the Reserve during FY 99.

	Allocations through FY 99 (excluding interest):		$72,000,000
FY 00	\424 *Exxon Valdez* Restoration Reserve Fund	$12,000,000	
FY 01	\424 *Exxon Valdez* Restoration Reserve Fund	$12,000,000	
FY 02	\424 *Exxon Valdez* Restoration Reserve Fund	$12,000,000	
	Subtotal FY 90-02 (excluding interest):		$36,000,000
	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 00. Table B-2 presents costs for projects outside of the annual work plan and, therefore, over and above the target spending level. For FY 00, this table includes a deposit into the Restoration Reserve; the amount of funding needed for public information/science management/administration and habitat protection and acquisition support in FY 00 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 nearly $22 million between FY 94 and FY 99.

The tables in this appendix also estimate future costs for projects. Table B-1 projects the FY 00 cost for 32 continuing projects to be about $3.2 million. The FY 00 cost for 17 additional projects funded in FY 99 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 92-97: Expenditures and Obligations. Costs shown for FY 92-97 are expenditures and obligations on restoration projects. Expenditures and obligations for FY 95-97 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 98-99: Authorized Amounts. The figures for FY 98-99 are the amounts authorized by the Trustee Council.

FY 00-02: Estimated Costs. The figures for FY 00-02 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 00 Work Plan

Project	FY92	FY93	FY94	FY95	FY96	FY97	FY98	FY99	FY00	Subtotal FY92-99	Subtotal FY00-02	Total FY92-02
Pink Salmon	$1,834.7	$847.6	$1,512.6	$2,316.9	$1,901.8	$1,806.1	$1,202.3	$917.5	**$355.8**	$12,339.5	**$419.1**	$12,758.6
076 / Effect of Oil on Straying and Survival	$0.0	$0.0	$0.0	$184.1	$371.3	$577.0	$272.2	$0.0	**$0.0**	$1,404.6	**$0.0**	$1,404.6
093 / Diversion of Harvest Effort	$0.0	$0.0	$0.0	$57.8	$0.0	$0.0	$0.0	$0.0	**$0.0**	$57.8	**$0.0**	$57.8
139 / Salmon Instream Habitat Restoration	$0.0	$0.0	$222.1	$25.4	$0.0	$0.0	$0.0	$0.0	**$0.0**	$247.5	**$0.0**	$247.5
139A1 / Little Waterfall Barrier Bypass Improvement	$0.0	$0.0	$0.0	$83.8	$33.1	$26.4	$13.4	$0.0	**$0.0**	$156.7	**$0.0**	$156.7
139A2 / Port Dick Spawning Channel	$0.0	$0.0	$0.0	$41.0	$222.8	$75.5	$85.8	$85.8	**$47.0**	$510.9	**$62.0**	$572.9
139C1 / Montague Riparian Rehabilitation Monitoring	$0.0	$0.0	$0.0	$49.3	$8.4	$8.4	$0.0	$0.0	**$0.0**	$66.1	**$0.0**	$66.1
186 / Coded-wire Tagging and Recovery	$1,421.8	$148.6	$237.7	$253.9	$239.8	$244.6	$120.2	$0.0	**$0.0**	$2,666.6	**$0.0**	$2,666.6
188 / Otolith Thermal Mass Marking	$0.0	$0.0	$48.9	$636.7	$85.2	$120.0	$141.1	$185.2	**$0.0**	$1,217.1	**$0.0**	$1,217.1
190 / Linkage Map for the Pink Salmon Genome	$0.0	$0.0	$0.0	$0.0	$163.0	$254.5	$229.4	$270.0	**$187.3**	$916.9	**$187.3**	$1,104.2
191 / Oil-Related Embryo Mortalities	$412.9	$699.0	$823.5	$758.2	$605.2	$164.2	$159.4	$58.4	**$0.0**	$3,680.8	**$0.0**	$3,680.8

NOTES:

1. Costs are shown in thousands of dollars.
2. Figures for FY 92-97 are expenditures or obligations on restoration projects. Expenditures and obligations for FY 95-97 have been audited.
3. An additional $6.8 million were spent on damage assessment studies in FY 92.
4. Figures for FY 98 and FY 99 are amounts authorized by the Trustee Council.
5. Costs projected for FY 00-02 are for planning purposes and have not yet been approved by the Trustee Council.
6. 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.

Project	FY92	FY93	FY94	FY95	FY96	FY97	FY98	FY99	FY00	Subtotal FY92-99	Subtotal FY00-02	Total FY92-02
194 / Spawning Habitat Recovery	$0.0	$0.0	$0.0	$0.0	$0.0	$140.2	$25.0	$0.0	**$0.0**	$165.2	**$0.0**	$165.2
196 / Genetic Structure	$0.0	$0.0	$180.4	$226.7	$173.0	$195.3	$130.2	$50.0	**$0.0**	$955.6	**$0.0**	$955.6
329 / Synthesis of Toxicological Impacts	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$25.6	$68.9	**$0.0**	$94.5	**$0.0**	$94.5
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**	$52.0	**$58.8**	$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		$73.1		$73.1
476 / Effects of Oiled Incubation on Reproduction	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$74.1	**$75.0**	$74.1	**$111.0**	$185.1
Herring	$0.0	$0.0	$511.2	$1,301.5	$1,240.5	$954.0	$754.3	$506.3	**$126.7**	$5,267.8	**$211.5**	$5,479.3
074 / Herring Reproductive Impairment	$0.0	$0.0	$0.0	$418.6	$146.9	$0.0	$0.0	$0.0	**$0.0**	$565.5	**$0.0**	$565.5
162 / Disease Affecting Declines	$0.0	$0.0	$85.5	$389.9	$609.1	$550.2	$517.7	$72.0	**$0.0**	$2,224.4	**$0.0**	$2,224.4
165 / Genetic Discrimination	$0.0	$0.0	$6.4	$98.3	$96.4	$37.7	$56.0	$0.0	**$0.0**	$294.8	**$0.0**	$294.8
166 / Herring Natal Habitats	$0.0	$0.0	$419.3	$394.7	$388.1	$366.1	$42.3	$0.0	**$0.0**	$1,610.5	**$0.0**	$1,610.5
311 / Productivity Dependencies: Stable Isotopes	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$119.3	$90.0	**$0.0**	$209.3	**$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**	$46.1	**$0.0**	$46.1
375 / Effects of Egg Distribution and Ecology	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$76.5	**$48.2**	$76.5	**$48.2**	$124.7

NOTES:

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3. An additional $6.8 million were spent on damage assessment studies in FY 92.
4. Figures for FY 98 and FY 99 are amounts authorized by the Trustee Council.
5. Costs projected for FY 00-02 are for planning purposes and have not yet been approved by the Trustee Council.
6. 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.

Project	FY92	FY93	FY94	FY95	FY96	FY97	FY98	FY99	FY00	Subtotal FY92-99	Subtotal FY00-02	Total FY92-02
462 / Effects of Disease on Population Recovery	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$75.1	**$78.5**	$75.1	**$163.3**	$238.4
468-BAA / Estimations of Acoustic Target Strength	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$19.0	$146.6	**$0.0**	$165.6	**$0.0**	$165.6
SEA and Related Projects	$0.0	$0.0	$5,618.5	$4,403.9	$5,110.3	$3,753.0	$2,669.6	$1,190.6	**$201.1**	$22,745.9	**$382.9**	$23,128.8
195 / Pristane Monitoring in Mussels	$0.0	$0.0	$0.0	$0.0	$99.8	$114.5	$114.9	$96.7		$425.9		$425.9
297-BAA / Oceanography of PWS Bays and Fjords	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$94.2	$0.0	**$0.0**	$94.2	**$0.0**	$94.2
320 / Sound Ecosystem Assessment (SEA)	$0.0	$0.0	$5,618.5	$4,403.9	$5,010.5	$3,638.5	$2,383.4	$851.9		$21,906.7		$21,906.7
340 / Long-Term Oceanographic Monitoring	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$77.1	$91.4	**$57.5**	$168.5	**$124.7**	$293.2
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**	$25.6	**$0.0**	$25.6
393-BAA / Food Webs: Structure and Change	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$125.0	**$143.6**	$125.0	**$258.2**	$383.2
Sockeye Salmon	$1,363.5	$1,552.3	$1,803.1	$1,497.3	$1,140.5	$555.5	$11.7	$0.0	**$0.0**	$7,923.9	**$0.0**	$7,923.9
048-BAA / Historical Analysis of Sockeye Salmon Growth	$0.0	$0.0	$0.0	$0.0	$106.3	$0.0	$0.0	$0.0	**$0.0**	$106.3	**$0.0**	$106.3
137 / Stock ID of Chum, Sockeye, Chinook and Coho in PWS	$310.9	$86.0	$188.4	$54.0	$0.0	$0.0	$0.0	$0.0	**$0.0**	$639.3	**$0.0**	$639.3

NOTES:

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3. An additional $6.8 million were spent on damage assessment studies in FY 92.
4. Figures for FY 98 and FY 99 are amounts authorized by the Trustee Council.
5. Costs projected for FY 00-02 are for planning purposes and have not yet been approved by the Trustee Council.
6. 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.

Project	FY92	FY93	FY94	FY95	FY96	FY97	FY98	FY99	FY00	Subtotal FY92-99	Subtotal FY00-02	Total FY92-02
251 / Akalura Lake Restoration	$0.0	$0.0	$0.0	$0.0	$0.0	$43.7	$0.0	$0.0	$0.0	$43.7	$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	$127.4	$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	$2,346.2	$0.0	$2,346.2
258 / Sockeye Salmon Overescapement	$0.0	$621.9	$762.3	$724.6	$540.2	$192.2	$0.0	$0.0	$0.0	$2,841.2	$0.0	$2,841.2
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	$897.6	$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	$867.9	$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	$54.3	$0.0	$54.3
Other Fish	$132.1	$0.0	$0.0	$147.5	$222.3	$261.6	$357.9	$367.9	$0.0	$1,489.3	$0.0	$1,489.3
043B / Cutthroat and Dolly Varden Habitat Improvement Monitoring	$0.0	$0.0	$0.0	$147.5	$22.3	$24.0	$24.0	$9.5	$0.0	$227.3	$0.0	$227.3
145 / Anadromous and Resident Forms	$0.0	$0.0	$0.0	$0.0	$200.0	$229.7	$120.7	$50.1	$0.0	$600.5	$0.0	$600.5
252 / Genetic Investigations of Rockfish and Pollock	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$209.1	$308.3		$517.4		$517.4
302 / PWS Inventory	$0.0	$0.0	$0.0	$0.0	$0.0	$7.9	$4.1	$0.0	$0.0	$12.0	$0.0	$12.0
R106 / Dolly Varden Restoration	$37.9	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$37.9	$0.0	$37.9

NOTES:

1. Costs are shown in thousands of dollars.
2. Figures for FY 92-97 are expenditures or obligations on restoration projects. Expenditures and obligations for FY 95-97 have been audited.
3. An additional $6.8 million were spent on damage assessment studies in FY 92.
4. Figures for FY 98 and FY 99 are amounts authorized by the Trustee Council.
5. Costs projected for FY 00-02 are for planning purposes and have not yet been approved by the Trustee Council.
6. 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.

Project	FY92	FY93	FY94	FY95	FY96	FY97	FY98	FY99	FY00	Subtotal FY92-99	Subtotal FY00-02	Total FY92-02
R90 / Dolly Varden Char Monitoring	$94.2	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	**$0.0**	$94.2	**$0.0**	$94.2
Marine Mammals	$24.7	$332.8	$279.7	$839.2	$704.1	$796.5	$739.3	$983.9	**$487.4**	$4,700.2	**$674.5**	$5,374.7
001 / Harbor Seal Condition and Health Status	$0.0	$0.0	$0.0	$105.4	$135.6	$192.0	$51.1	$0.0	**$0.0**	$484.1	**$0.0**	$484.1
012-BAA / Killer Whale Investigation	$0.0	$113.5	$30.8	$296.1	$98.1	$156.6	$154.7	$85.4		$935.2		$935.2
064 / Harbor Seal Monitoring, Habitat Use, Trophic Interactions	$24.7	$219.3	$248.4	$342.6	$332.0	$304.6	$272.5	$263.3	**$130.0**	$2,007.4	**$130.0**	$2,137.4
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**	$95.1	**$0.0**	$95.1
170 / Isotope Ratio Studies of Marine Mammals	$0.0	$0.0	$0.0	$0.0	$138.4	$143.3	$108.8	$0.0	**$0.0**	$390.5	**$0.0**	$390.5
341 / Harbor Seals: Health and Diet	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$152.2	$356.8	**$124.1**	$509.0	**$209.5**	$718.5
371 / Harbor Seal Metabolism/Stable Isotopes	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$120.0	**$101.7**	$120.0	**$203.4**	$323.4
425 / Marine Mammal Book Publication	$0.0	$0.0	$0.5	$0.0	$0.0	$0.0	$0.0	$0.0	**$0.0**	$0.5	**$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	**$131.6**	$158.4	**$131.6**	$290.0

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Project	FY92	FY93	FY94	FY95	FY96	FY97	FY98	FY99	FY00	Subtotal FY92-99	Subtotal FY00-02	Total FY92-02
Nearshore Ecosystem	$1,725.4	$2,768.5	$2,519.3	$2,882.2	$2,926.9	$2,229.4	$2,249.1	$1,387.8	**$82.5**	$18,688.6	**$82.5**	$18,771.1
025 / Nearshore Vertebrate Predators (NVP)	$0.0	$0.0	$0.0	$680.8	$1,814.4	$1,753.4	$1,652.9	$500.0		$6,401.5		$6,401.5
026 / Hydrocarbon Monitoring	$0.0	$0.0	$0.0	$116.5	$0.0	$15.1	$0.0	$0.0	**$0.0**	$131.6	**$0.0**	$131.6
027 / Kodiak Shoreline Assessment	$0.0	$0.0	$0.0	$174.5	$40.4	$0.0	$0.0	$0.0	**$0.0**	$214.9	**$0.0**	$214.9
034 / Pigeon Guillemot Recovery Monitoring	$0.0	$165.6	$194.5	$0.0	$0.0	$0.0	$0.0	$0.0	**$0.0**	$360.1	**$0.0**	$360.1
035 / Black Oystercatcher Recovery Monitoring	$0.0	$109.2	$17.0	$0.0	$0.0	$0.0	$0.0	$0.0	**$0.0**	$126.2	**$0.0**	$126.2
038 / PWS Shoreline Assessment	$0.0	$316.9	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	**$0.0**	$316.9	**$0.0**	$316.9
043 / Sea Otter Demographics and Habitat	$0.0	$144.0	$123.9	$0.0	$0.0	$0.0	$0.0	$0.0	**$0.0**	$267.9	**$0.0**	$267.9
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**	$2,075.2	**$0.0**	$2,075.2
090 / Mussel Bed Restoration	$769.3	$331.0	$433.6	$455.0	$197.6	$8.0	$0.0	$150.0		$2,344.5		$2,344.5
106 / Eelgrass Monitoring	$0.0	$0.0	$0.0	$181.6	$246.6	$0.0	$0.0	$0.0	**$0.0**	$428.2	**$0.0**	$428.2
161 / Differentiation/Interchange of Harlequins	$0.0	$0.0	$0.0	$0.0	$79.4	$87.3	$16.5	$0.0	**$0.0**	$183.2	**$0.0**	$183.2
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**	$42.8	**$0.0**	$42.8
266 / Experimental Oil Removal	$0.0	$0.0	$185.8	$143.9	$0.0	$0.0	$0.0	$0.0	**$0.0**	$329.7	**$0.0**	$329.7

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285 / Subtidal Monitoring	$0.0	$882.8	$581.3	$112.7	$0.0	$0.0	$0.0	$0.0	$0.0	$1,576.8	$0.0	$1,576.8
289 / Status of Black Oystercatchers in PWS	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$80.4	$8.6	$0.0	$89.0	$0.0	$89.0
290 / Hydrocarbon Database	$0.0	$120.1	$113.5	$141.2	$113.4	$75.0	$75.7	$58.9		$697.8		$697.8
325-BAA / Intertidal/Subtidal Manuscript Preparation	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$99.9	$41.1	$0.0	$141.0	$0.0	$141.0
326 / Data Re-Analysis for MM6	$0.0	$0.0	$0.0	$0.0	$11.5	$0.0	$0.0	$0.0	$0.0	$11.5	$0.0	$11.5
348 / Response of River Otters to Oil Contamination	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$245.4	$316.6	$0.0	$562.0	$0.0	$562.0
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	$28.3	$115.5	$28.3	$143.8
423 / Population Change in Nearshore Vertebrate Predators	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$60.0		$60.0		$60.0
427 / Harlequin Duck Monitoring	$470.5	$194.3	$171.8	$172.9	$254.0	$247.8	$78.3	$0.0	$0.0	$1,589.6	$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	$124.9	$40.0	$164.9
466 / Barrow's Goldeneye Recovery Status	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$12.2	$14.2	$12.2	$14.2	$26.4
R102 / Coastal Habitat Restoration	$485.6	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$485.6	$0.0	$485.6
Seabird/Forage Fish Projects	$743.8	$430.2	$1,154.5	$2,096.2	$2,314.8	$2,355.6	$2,992.1	$2,731.2	$1,331.6	$14,818.4	$1,631.3	$16,449.7
021 / Seasonal Movements by Common Murres	$0.0	$0.0	$0.0	$53.9	$0.0	$0.0	$0.0	$0.0	$0.0	$53.9	$0.0	$53.9

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029 / Population Survey of Bald Eagles in PWS	$0.0	$0.0	$0.0	$49.3	$0.0	$0.0	$0.0	$0.0	**$0.0**	$49.3	**$0.0**	$49.3
031 / Reproductive Success of Murrelets in PWS	$0.0	$0.0	$0.0	$245.9	$78.0	$0.0	$0.0	$0.0	**$0.0**	$323.9	**$0.0**	$323.9
038 / Symposium/Publication on Seabird Restoration	$0.0	$0.0	$0.0	$74.5	$17.7	$0.0	$0.0	$0.0	**$0.0**	$92.2	**$0.0**	$92.2
039B / Common Murre Productivity Monitoring	$0.0	$0.0	$0.0	$27.4	$0.0	$0.0	$0.0	$0.0	**$0.0**	$27.4	**$0.0**	$27.4
041 / Introduced Predator Removal	$0.0	$0.0	$77.0	$66.5	$0.0	$0.0	$0.0	$0.0	**$0.0**	$143.5	**$0.0**	$143.5
101 / Removal of Introduced Foxes from Islands	$0.0	$0.0	$0.0	$0.0	$7.0	$0.0	$0.0	$0.0	**$0.0**	$7.0	**$0.0**	$7.0
102 / Murrelet Prey and Foraging Habitat	$428.9	$0.0	$239.7	$53.1	$0.0	$0.0	$0.0	$0.0	**$0.0**	$721.7	**$0.0**	$721.7
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**	$33.2	**$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	$269.0	$0.0	**$0.0**	$605.4	**$0.0**	$605.4
144 / Common Murre Population Monitoring	$314.9	$174.6	$211.1	$0.0	$65.1	$69.7	$57.4	$72.6	**$23.0**	$965.4	**$23.0**	$988.4
159 / Marine Bird Abundance Surveys	$0.0	$255.6	$142.8	$0.0	$261.4	$62.4	$237.0	$37.0		$996.2		$996.2
163 / Alaska Predator Ecosystem Experiment (APEX)	$0.0	$0.0	$483.9	$1,492.4	$1,731.4	$1,797.4	$2,012.2	$1,986.1	**$900.1**	$9,503.4	**$900.1**	$10,403.5
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**	$31.9	**$0.0**	$31.9

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169 / Genetics of Murres, Guillemots, Murrelets	$0.0	$0.0	$0.0	$0.0	$0.0	$59.8	$88.2	$92.7	**$13.8**	$240.7	**$13.8**	$254.5
231 / Marbled Murrelet Productivity (in \163 after FY 97)	$0.0	$0.0	$0.0	$0.0	$0.0	$119.4	$0.0	$0.0	**$0.0**	$119.4	**$0.0**	$119.4
306 / Ecology and Demographics of Sand Lance	$0.0	$0.0	$0.0	$0.0	$0.0	$32.8	$32.8	$30.0	**$20.0**	$95.6	**$20.0**	$115.6
327 / Pigeon Guillemot Research	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$123.3	$178.4	**$167.7**	$301.7	**$262.8**	$564.5
338 / Survival of Adult Murres and Kittiwake	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$56.2	$57.9	**$45.0**	$114.1	**$45.0**	$159.1
346 / Sand Lance Publication	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$5.4	$10.4	**$0.0**	$15.8	**$0.0**	$15.8
347 / Fatty Acid Profile/Lipid Class Analysis	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$110.6	$92.6	**$35.8**	$203.2	**$35.8**	$239.0
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	**$1.0**	$13.0	**$1.0**	$14.0
434 / East Amatuli Island Video Link	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$75.8	**$0.0**	$75.8	**$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**	$84.7	**$329.8**	$414.5
Archaeological Resources	$123.3	$1,581.9	$234.4	$276.3	$449.8	$201.8	$206.6	$166.7	**$0.0**	$3,240.8	**$0.0**	$3,240.8
007A / Archaeological Index Site Monitoring	$0.0	$81.9	$234.4	$164.3	$109.9	$124.4	$139.7	$151.5		$1,006.1		$1,006.1
007B / Site Specific Archaeological Restoration	$0.0	$0.0	$0.0	$112.0	$78.2	$21.5	$0.0	$0.0	**$0.0**	$211.7	**$0.0**	$211.7

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066 / Alutiiq Archaeological Repository	$0.0	$1,500.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	**$0.0**	$1,500.0	**$0.0**	$1,500.0
149 / Archaeological Site Stewardship	$0.0	$0.0	$0.0	$0.0	$64.6	$55.9	$66.9	$15.2	**$0.0**	$202.6	**$0.0**	$202.6
154 / Archaeological Resource Restoration Plan	$0.0	$0.0	$0.0	$0.0	$197.1	$0.0	$0.0	$0.0	**$0.0**	$197.1	**$0.0**	$197.1
R104-A / Site Stewardship	$123.3	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	**$0.0**	$123.3	**$0.0**	$123.3
Subsistence	$0.0	$241.7	$430.3	$895.0	$1,252.7	$1,333.9	$1,481.9	$1,271.6	**$566.4**	$6,907.1	**$1,370.7**	$8,277.8
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**	$314.2	**$0.0**	$314.2
052A / Community Involvement	$0.0	$0.0	$0.0	$79.8	$268.9	$248.4	$232.1	$243.4	**$180.0**	$1,072.6	**$540.0**	$1,612.6
052B / Traditional Knowledge	$0.0	$0.0	$0.0	$0.0	$0.0	$92.4	$61.3	$38.9		$192.6		$192.6
127 / Tatitlek Coho Salmon Release	$0.0	$0.0	$0.0	$4.8	$24.3	$11.1	$10.5	$10.7	**$0.0**	$61.4	**$0.0**	$61.4
131 / Clam Restoration	$0.0	$0.0	$0.0	$223.6	$257.3	$365.0	$290.1	$306.2	**$0.0**	$1,442.2	**$0.0**	$1,442.2
138 / Elders/Youth Conference	$0.0	$0.0	$0.0	$75.1	$0.0	$0.0	$0.0	$0.0	**$0.0**	$75.1	**$0.0**	$75.1
210 / Youth Area Watch	$0.0	$0.0	$0.0	$0.0	$100.3	$150.0	$150.2	$150.4	**$123.1**	$550.9	**$326.4**	$877.3
214 / Harbor Seal Documentary	$0.0	$0.0	$0.0	$0.0	$72.4	$8.1	$0.0	$0.0	**$0.0**	$80.5	**$0.0**	$80.5
220 / Eastern PWS Salmon Habitat Restoration	$0.0	$0.0	$0.0	$0.0	$70.4	$40.5	$11.9	$0.0	**$0.0**	$122.8	**$0.0**	$122.8
222 / Chenega Bay Salmon Habitat Enhancement	$0.0	$0.0	$0.0	$0.0	$3.8	$0.0	$0.0	$0.0	**$0.0**	$3.8	**$0.0**	$3.8

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225 / Port Graham Pink Salmon Project	$0.0	$0.0	$0.0	$0.0	$88.5	$74.4	$73.5	$75.6	**$75.0**	$312.0	**$75.0**	$387.0
244 / Community Harbor Seal Sampling/Management	$0.0	$0.0	$44.9	$76.1	$124.8	$111.6	$84.7	$0.0	**$0.0**	$442.1	**$0.0**	$442.1
245 / Community-Based Harbor Seal Biosampling	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$70.7	**$55.0**	$70.7	**$120.0**	$190.7
247 / Kametolook River Coho Salmon	$0.0	$0.0	$0.0	$0.0	$0.0	$31.6	$14.9	$20.8	**$20.0**	$67.3	**$68.0**	$135.3
256B / Solf Lake Sockeye Salmon Stocking	$0.0	$0.0	$0.0	$0.0	$52.0	$34.7	$95.5	$68.3		$250.5		$250.5
263 / Port Graham Salmon Stream Enhancement	$0.0	$0.0	$0.0	$0.0	$0.0	$58.0	$107.0	$42.1	**$23.5**	$207.1	**$23.5**	$230.6
272 / Chenega Chinook Release Program	$0.0	$10.7	$55.4	$43.4	$48.8	$44.3	$0.0	$0.0	**$0.0**	$202.6	**$0.0**	$202.6
273 / Surf Scoter Life History and Ecology	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$170.4	$206.2		$376.6		$376.6
274 / Herring/Nearshore Documentary	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$89.6	$0.0	**$0.0**	$89.6	**$0.0**	$89.6
279 / Food Safety Testing	$0.0	$231.0	$272.1	$173.7	$0.0	$0.0	$0.0	$0.0	**$0.0**	$676.8	**$0.0**	$676.8
286 / Elders/Youth Conference	$0.0	$0.0	$0.0	$0.0	$0.0	$15.8	$90.2	$0.0	**$0.0**	$106.0	**$0.0**	$106.0
401 / Spot Shrimp Population	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$38.3	**$89.8**	$38.3	**$217.8**	$256.1
428 / Community Planning Project	$0.0	$0.0	$57.9	$93.5	$0.0	$0.0	$0.0	$0.0	**$0.0**	$151.4	**$0.0**	$151.4

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Recreation	$0.0	$40.8	$75.0	$0.0	$0.0	$0.0	$0.0	$0.0	**$0.0**	$115.8	**$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**	$115.8	**$0.0**	$115.8
Reduction of Marine Pollution	$0.0	$0.0	$0.0	$0.0	$48.0	$267.5	$0.0	$63.7	**$0.0**	$379.2	**$0.0**	$379.2
115 / Sound Waste Management	$0.0	$0.0	$0.0	$0.0	$48.0	$0.0	$0.0	$0.0	**$0.0**	$48.0	**$0.0**	$48.0
291 / Chenega-Area Shoreline Residual Oiling Reduction	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$9.2	**$0.0**	$9.2	**$0.0**	$9.2
304 / Kodiak Waste Management	$0.0	$0.0	$0.0	$0.0	$0.0	$267.5	$0.0	$0.0	**$0.0**	$267.5	**$0.0**	$267.5
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**	$54.5	**$0.0**	$54.5
Habitat Improvement	$0.0	$0.0	$0.0	$108.2	$479.8	$664.8	$631.1	$466.3	**$0.0**	$2,350.2	**$0.0**	$2,350.2
058 / Landowner Assistance	$0.0	$0.0	$0.0	$90.7	$0.0	$0.0	$0.0	$0.0	**$0.0**	$90.7	**$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**	$17.5	**$0.0**	$17.5
180 / Kenai Habitat Restoration	$0.0	$0.0	$0.0	$0.0	$479.8	$599.4	$491.9	$299.6		$1,870.7		$1,870.7
230 / Valdez Duck Flats Restoration	$0.0	$0.0	$0.0	$0.0	$0.0	$65.4	$0.0	$0.0	**$0.0**	$65.4	**$0.0**	$65.4
314 / Homer Mariner Park	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$99.5	**$0.0**	$99.5	**$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	$139.2	$67.2	**$0.0**	$206.4	**$0.0**	$206.4

NOTES:

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3. An additional $6.8 million were spent on damage assessment studies in FY 92.
4. Figures for FY 98 and FY 99 are amounts authorized by the Trustee Council.
5. Costs projected for FY 00-02 are for planning purposes and have not yet been approved by the Trustee Council.
6. 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.

Project	FY92	FY93	FY94	FY95	FY96	FY97	FY98	FY99	FY00	Subtotal FY92-99	Subtotal FY00-02	Total FY92-02
Habitat Protection	$633.0	$1,102.9	$851.1	$150.1	$0.0	$0.0	$0.0	$0.0	**$0.0**	$2,737.1	**$0.0**	$2,737.1
051 / Habitat Assessments	$633.0	$946.1	$413.2	$15.7	$0.0	$0.0	$0.0	$0.0	**$0.0**	$2,008.0	**$0.0**	$2,008.0
059 / Habitat Identification Workshop	$0.0	$23.1	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	**$0.0**	$23.1	**$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**	$43.9	**$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**	$89.8	**$0.0**	$89.8
110 / Habitat Data Acquisition and Support	$0.0	$0.0	$437.9	$134.4	$0.0	$0.0	$0.0	$0.0	**$0.0**	$572.3	**$0.0**	$572.3
Ecosystem Synthesis	$0.0	$0.0	$0.0	$0.0	$0.0	$55.4	$261.1	$672.4	**$35.0**	$988.9	**$35.0**	$1,023.9
278 / Kachemak Bay Ecological Characterization	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$70.0	**$35.0**	$70.0	**$35.0**	$105.0
300 / Synthesis of Scientific Findings from EVOS	$0.0	$0.0	$0.0	$0.0	$0.0	$55.4	$81.3	$80.3	**$0.0**	$217.0	**$0.0**	$217.0
330-BAA / Mass-Balance Model of Trophic Fluxes	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$179.8	$149.8	**$0.0**	$329.6	**$0.0**	$329.6
368 / Environmentally Sensitive Areas: Summary Maps	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$37.3	**$0.0**	$37.3	**$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		$335.0		$335.0

NOTES:

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3. An additional $6.8 million were spent on damage assessment studies in FY 92.
4. Figures for FY 98 and FY 99 are amounts authorized by the Trustee Council.
5. Costs projected for FY 00-02 are for planning purposes and have not yet been approved by the Trustee Council.
6. 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.

Project	FY92	FY93	FY94	FY95	FY96	FY97	FY98	FY99	FY00	Subtotal FY92-99	Subtotal FY00-02	Total FY92-02
Admin./Sci. Mgmt./Pub. Info.	$0.0	$0.0	$69.4	$0.0	$35.0	$0.0	$8.7	$365.8	$0.0	$478.9	$0.0	$478.9
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	$170.8	$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	$203.7	$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	$104.4	$0.0	$104.4
Project Management	$0.0	$0.0	$0.0	$0.0	$94.4	$572.6	$560.1	$454.2	$0.0	$1,681.3	$0.0	$1,681.3
250 / Project Management	$0.0	$0.0	$0.0	$0.0	$0.0	$572.6	$560.1	$454.2		$1,586.9		$1,586.9
600 / NOAA Program Management	$0.0	$0.0	$0.0	$0.0	$94.4	$0.0	$0.0	$0.0	$0.0	$94.4	$0.0	$94.4
Total Cost :	$6,580.5	$8,898.7	$15,059.1	$16,914.3	$17,920.9	$15,807.7	$14,125.8	$11,545.9	$3,186.5	$106,852.9	$4,807.5	$111,660.4

NOTES:

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3. An additional $6.8 million were spent on damage assessment studies in FY 92.
4. Figures for FY 98 and FY 99 are amounts authorized by the Trustee Council.
5. Costs projected for FY 00-02 are for planning purposes and have not yet been approved by the Trustee Council.
6. 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.

Table B-2. History of Project Costs / Outside FY 00 Work Plan

Project	FY92	FY93	FY94	FY95	FY96	FY97	FY98	FY99	**FY00**	Subtotal FY92-99	**Subtotal FY00-02**	Total FY92-02
100 / Administration, Science Management, Public Information	$4,295.9	$2,653.9	$4,013.1	$3,024.1	$2,995.6	$2,650.9	$2,796.3	$2,495.7		$24,925.5		$24,925.5
115 / Sound Waste Management	$0.0	$0.0	$0.0	$0.0	$0.0	$1,138.8	$0.0	$0.0	**$0.0**	$1,138.8	**$0.0**	$1,138.8
126 / Habitat Prot./Acq. Support	$0.0	$0.0	$822.9	$2,176.5	$1,967.1	$840.2	$851.4	$770.4		$7,428.5		$7,428.5
197 / SeaLife Center Fish Pass	$0.0	$0.0	$0.0	$0.0	$0.0	$535.9	$0.0	$0.0	**$0.0**	$535.9	**$0.0**	$535.9
291 / Chenega Area Shoreline Residual Oiling Reduction	$0.0	$0.0	$0.0	$0.0	$3.0	$1,800.2	$182.0	$0.0	**$0.0**	$1,985.2	**$0.0**	$1,985.2
304 / Kodiak Waste Management	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$1,857.1	**$0.0**	$1,857.1	**$0.0**	$1,857.1
405 / Port Graham Hatchery Reconstruction	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$781.3	**$0.0**	$781.3	**$0.0**	$781.3
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**	$72,000.0	**$36,000.0**	$108,000.0
Total Cost :	$4,295.9	$2,653.9	$16,836.0	$17,200.6	$16,965.7	$18,966.0	$15,829.7	$17,904.5	**$12,000.0**	$110,652.3	**$36,000.0**	$146,652.3

NOTES:

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3. An additional $6.8 million were spent on damage assessment studies in FY 92.
4. Figures for FY 98 and FY 99 are amounts authorized by the Trustee Council.
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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
645 G Street, Suite 401
Anchorage, AK 99501-3451

ADDRESS CORRECTION REQUESTED