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Invitation to Submit Restoration Proposals for Federal Fiscal Year 1999

Prepared by:

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Invitation to Submit

Restoration Proposals

for

Federal Fiscal Year 1999

February 15, 1998

Prepared by:
Exxon Valdez Oil Spill
Trustee Council

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DATES TO REMEMBER in 1998

- **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 21:** Comments due on Draft Work Plan

- **August 6*:** Trustee Council decision

*Tentative

Invitation to Submit Restoration Proposals for Federal Fiscal Year 1999

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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 1999 (FY 99), which is the period October 1, 1998, through September 30, 1999. The annual work plan includes monitoring, research, and general restoration projects. In addition to funding projects through the annual work plan, the Trustee 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 99. 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 encouraged.

- **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 99 work plan are described in Table 1. The work plan process begins each year with a restoration workshop. The Trustee Council usually makes funding decisions in August so that projects can begin on October 1.

Table 1. Milestones for FY 99 Work Plan

	Jan. 29-30, 1998	Annual Restoration Workshop discussed results of FY 97 work and directions for FY 99.
→	Feb. 15, 1998	*Invitation to Submit Restoration Proposals for Federal Fiscal Year 1999* is issued.
	April 15, 1998	Proposals due.
	May 17-19, 1998	Chief Scientist and core reviewers meet to discuss the scientific and technical merits of proposals.
	June 17, 1998	*FY 99 Draft Work Plan* is distributed for public comment.
	July 21, 1998	Comments due on *FY 99 Draft Work Plan.*
	Aug. 6, 1998*	Trustee Council expected to decide on *FY 99 Final Work Plan.*
	Oct. 1, 1998	Fiscal year 1999 begins.

*Tentative

Funding Targets

After considering the cash flow for restoration funds, the Trustee Council has tentatively set a funding target of $10 to $12 million for the FY 99 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 99 than in FY 98 and will continue to decline through FY 2002, 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. Tentative Work Plan Funding Targets

	FY 96	$18.2 million (authorized)
	FY 97	$16.2 million (authorized)
	FY 98	$14.1 million (authorized)
→	FY 99	$10.0 - 12.0 million
	FY 00	$10.0 million
	FY 01	$8.0 million
	FY 02	$6.0 million
	FY 03+	Restoration Reserve

Project Cost Estimates for FY 99

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 approved projects. The FY 98 work plan estimates that the FY 99 cost for 34 projects continuing from FY 98 will be about $6.3 million. Eleven additional projects funded in FY 98 may continue into FY 99, 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 99, if funded, would likely be roughly $2.1 million.

Given a total funding target of $10 to $12 million for FY 99, these estimates suggest that roughly $1.5 to $3.5 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 99

	Number of Projects	Estimated Cost
Continuing Projects	34	$6,322,300
Potential Continuing Projects	11	$2,100,000
New Projects	Unknown	$1,577,700 - 3,577,700
Funding Target:		**$10,000,000 - 12,000,000**

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, non-profit groups, and universities in states other than Alaska, please see page 36 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 99 and Beyond" and a section called "Invitation for FY 99."

STRATEGIES FOR FY 99 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 1996 the Council updated the objectives to reflect the results of the scientific research and review that had occurred since the Restoration Plan was adopted. 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 99, and describes the projects the Council funded in FY 98 and expects to continue funding in FY 99 to implement the strategies. (NOTE: The *Update on Injured Resources and Services*, September 1996, is available from the Anchorage Restoration Office.)

INVITATION FOR FY 99

For each resource cluster, this section invites a proposal for each of the projects the Trustee Council expects to continue from FY 98. Before making FY 99 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 98.

Potential Continuing Projects.
Each resource cluster includes, in a shaded box, a description of additional projects funded in FY 98 that may be continued in FY 99. 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.

The Trustee Council will give serious consideration to all proposals received in response to the projects and project ideas listed in the shaded box. In addition to the projects listed here, the Council hopes that proposers will use this invitation to come up with new ideas and proposals to aid the recovery of resources and services injured by the oil spill.

Pink Salmon

Since the oil spill, total returns of wild pink salmon have varied widely, ranging from a low of 2.2 million fish in 1992 to a high of 14.4 million in 1990. The total return in the 1997 season was 3.1 million. Although this was the third lowest return since the spill, the disappointing return was probably the result of the combination of cold temperatures and low freshwater levels in Prince William Sound in the 1995-96 winter season. Much of the research sponsored by the Trustee Council (e.g., SEA, Project \320) focuses on identifying the natural factors that influence returns of adult pink salmon. However, both field and laboratory studies sponsored by the Council continue to demonstrate the sensitivity of pink salmon eggs and pre-adult life stages to very low concentrations of crude oil. Understanding these effects continues to be an important part of the pink salmon restoration strategy, as is the development of information and tools to improve restoration and management programs.

STRATEGIES FOR FY 99 AND BEYOND

Research and Monitor the Toxic Effect of Oil.

Two Trustee Council-funded projects will conclude in FY 98: *Effects of Oiled Incubation Substrate on Straying and Survival (\076)* and *Spawning Habitat Recovery (\194)*. The following projects are ongoing:

Monitor Egg Mortality of Wild Pink Salmon (\191A). After the oil spill, monitoring indicated that the mortalities of pink salmon eggs were higher in oiled streams compared to unoiled streams from 1989 through 1993. In 1994 through 1996, egg mortalities in oiled streams had returned to levels that were not statistically different from those of unoiled streams. In 1997, however, there were again differences in egg mortalities between oiled and unoiled streams. Stream monitoring is continuing in FY 98. In FY 99, the Trustee Council anticipates only closeout funding for this project, pending the evaluation of FY 97 results.

Synthesize Toxicological Impacts (\329). Because the toxic effects of crude oil on pink salmon has been a central theme of Trustee Council studies in both the damage assessment and restoration programs, this project was initiated in FY 98 to synthesize the results of these studies. The project, which will result in the submission of a monograph for publication in a peer-reviewed scientific journal, will integrate information from seven separate studies sponsored by the Council and will consider additional work sponsored by Exxon Corporation. FY 99 is expected to be the final year of Trustee Council funding for this project.

Provide Management Information and Tools.

Marking Salmon: Coded Wire Tag (\186) & Otolith Thermal Marking (\188). Support from the Trustee Council enabled the installation of equipment and implementation of a program to apply thermal marks to the otoliths (ear bones) of all hatchery-reared pink salmon in Prince William Sound. The otolith marking program is now fully operational and is providing in-season data that enables fisheries managers to adjust harvest limits, locations, and timing to aid the restoration of wild pink salmon stocks. As a result, the concurrent

project to apply coded-wire tags to hatchery-reared pink salmon is no longer needed and will not be funded beyond FY 98. FY 99 is expected to be the final year of Council funding for the otolith marking project.

Genome Linkage Map (\190). FY 99 would be the fourth 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. The Trustee Council anticipates funding this project through FY 2000.

Genetic Stock Structure Investigations (\196). FY 98 is the final year of substantive work on this project, which is determining the degree and extent of geographic differences among pink salmon based on genetics. Knowing if there are one or multiple stocks among pink salmon in Prince William Sound will enable fisheries managers to refine management units and practices to better protect injured wild stocks. In FY 99, the Trustee Council anticipates providing funds only to complete a final report on this project.

Supplement Populations.

A final report on the *Little Waterfall Creek Barrier Bypass Project (\139A1)* is being prepared in FY 98. The following project is ongoing:

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 nearly 300,000 fry emigrated from eggs laid in the newly available habitat. Monitoring is expected to continue with Trustee Council funds through FY 2000.

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 99

The Trustee Council expects that the following projects will be continued from FY 98 and invites proposals for work planned in FY 99. Their FY 99 costs are estimated below.

FY 99	\139A2	Port Dick Spawning Channel	$76,500	
	\188	Otolith Thermal Marking	$182,900	
	\190	Genome Linkage Map	$187,000	
	\191A	Monitoring Egg Mortality	$58,700	
	\196	Genetic Stock Structure Investigation	$50,000	
	\329	Synthesis of Toxicological Impacts	$51,800	
		Total FY 99:		**$606,900**

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 36 for more information on the Alaska SeaLife Center.

Genetic Significance of Straying. Given that all hatchery-reared pink salmon in Prince William Sound now have marked otoliths, it should be possible to investigate more fully the degree of straying in the sound and the genetic significance of such straying. Any proposals along these lines would need to take into account prior work on straying (e.g., Project \076) and the ongoing work on pink salmon genetics (projects \190 and \196). A proposal on straying/genetics must be designed so that the results will be highly relevant to the restoration and management of wild stocks.

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 it was evident that the spawning biomass had rebounded. The spring commercial herring fishery, which had been curtailed in the sound in 1993, reopened in 1997. The spawning biomass in 1997 was less than had been projected and also less than in 1996, but there appear to be strong year-classes of juveniles that may be recruited into future spawning populations. However, there also was an increased incidence of a viral disease in wild herring in spring 1997 compared to autumn samples from 1995 and 1996.

STRATEGIES FOR FY 99 AND BEYOND

Investigate Herring Disease as a Cause of the 1993 Crash.

One Trustee Council-funded project will conclude in FY 98: *Investigations of Disease Factors Affecting Declines of Pacific Herring Populations in Prince William Sound (\162).*

Provide Management Information.

Two Trustee Council-funded projects will conclude in FY 98: *Herring Natal Habitats (\166)* and *Genetic Discrimination of Prince William Sound Herring Populations (\165).*

Investigate Ecological Factors that Influence Populations of Pacific Herring.

Determine Productivity Dependencies (\311). The recruitment and nutritional condition of herring in Prince William Sound may be influenced by carbon flow (e.g., in zooplankton) from the Gulf of Alaska into the sound. This project will help understand the environmental influence on herring productivity by isotopically analyzing a time series of herring for which energetics data were collected previously. FY 99 is expected to be the final year of Trustee Council funding for this project.

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

INVITATION FOR FY 99

The Trustee Council expects that the following project will be continued from FY 98 and invites a proposal for work planned in FY 99. Its FY 99 cost is estimated below.

FY 99	\311 Productivity Dependencies	$80,600	
		Total FY 99:	**$80,600**

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. Proposals for such studies will be strongest if linked to ongoing field studies, such as the SEA project (\320). See page 36 for more information on the Alaska SeaLife Center.

Herring Population Ecology and Biomass. Ecologically and commercially important aggregations of adult herring occur in Prince William Sound, along the outer Kenai Peninsula, in lower Cook Inlet, and around Kodiak Island. A more complete interpretation of Pacific herring ecology in the oil-spill area requires more information on the origin of young fish recruited into adult schools and spawning aggregations. The identification of essential habitats for all life stages of major stocks of herring would help clarify questions about stock structure and improve fisheries management and conservation. Additional research defining the acoustic target strengths of different age classes of herring and other schooling forage fishes would improve the ability to assess their biomasses. In FY 99, the Trustee Council will consider proposals that advance these objectives.

Synthesis of Herring Toxicological and Disease Studies. Since the crash of the Pacific herring population in Prince William Sound in 1993, the Trustee Council has made a major investment in studies that sought to identify causes of the crash and to explore possible relationships to the oil spill. A study on the toxic effects of the oil spill on herring was completed previously (Project \074), and work on herring disease is concluding in FY 98 (Project \162). In FY 99, the Trustee Council will consider a proposal that would lead to publication of one or more manuscripts integrating the results of these and related studies.

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 herring population in 1993, and long-term declines of several marine bird and mammal populations led the Trustee Council in FY 94 to initiate the Sound Ecosystem Assessment (SEA, \320). This project involves the University of Alaska, Prince William Sound Science Center, Alaska Department of Fish and Game, and other institutions, and it stems from the need to better understand the large-scale ecosystem processes that influence the recovery from oil-spill injuries.

The SEA project is identifying factors and developing models of the processes that influence the productivity of pink salmon and Pacific herring in Prince William Sound. This information should directly benefit long-term management and recovery of salmon and herring in the sound in several ways. For example, if SEA identifies key parameters influencing survival of juvenile salmon and herring that can be monitored efficiently on an annual basis, it should enable managers to develop more accurate forecasts of salmon and herring returns for the benefit of commercial fishing interests and resource managers. Monitoring these parameters, which may include such factors as the size and timing of plankton blooms or changes in the temperature or circulation of the Gulf of Alaska, also may yield insights about the status of fish-eating predators (for example, harbor seals) and enable better use and management of many marine resources.

STRATEGIES FOR FY 99 AND BEYOND

Investigate and Monitor Ecological Factors that Influence Marine Productivity.

In FY 98, the Trustee Council funded a one-year project, *Oceanography of Prince William Sound Bays (\297)*. The following projects are ongoing:

Sound Ecosystem Assessment (SEA, \320). Most of the early efforts in the SEA project (FY 94-95) were devoted to physical and biological oceanography and other factors (e.g., predation) related to survival of juvenile pink salmon. In FY 96, the project was restructured internally into three overlapping working groups: Ocean State and Plankton Dynamics, Pink Salmon Recruitment Dynamics, and Pacific Herring Recruitment Dynamics. Beginning in FY 97, there was increased emphasis on factors influencing the recruitment of Pacific herring. FY 98 is a year of transition, with a sharp reduction in the level of field work and increased emphasis on integration and development of predictive ecological models. FY 99, which is expected to be the final year of Trustee Council funding, will be devoted to synthesis and modeling, reporting, and preparation of manuscripts.

Long-Term Oceanographic Monitoring (\340). This project upgrades and continues a 27-year time series of temperature and salinity data from a marine buoy ("GAK1") in Resurrection Bay near Seward. Understanding year-to-year and long-term variations in physical factors that influence productivity is essential in order to distinguish between natural ecological change and anthropogenic (i.e., man-made) perturbations, such as oil

spills. The contemporary and historical data obtained from GAK1 will assist in the interpretation of data from the Trustee Council-sponsored ecosystem projects (especially SEA and APEX) 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 99 will be the second year of what is proposed as a five-year project.

INVITATION FOR FY 99

The Trustee Council expects that the following projects will be continued from FY 98 and invites proposals for work planned in FY 99. Their FY 99 costs are estimated below.

FY 99	\320 Sound Ecosystem Assessment (SEA)	$755,200	
	\340 Long-Term Oceanographic Monitoring	$85,800	
	Total FY 99:		**$841,000**

Potential Continuing Projects. The following project was funded in FY 98. The Trustee Council has not made a commitment to continue it in FY 99 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 99.

Monitor Pristane Levels (\195). Pristane is a hydrocarbon which is naturally synthesized from chlorophyll by certain plant-eating copepods, the only proven marine source of pristane. By measuring levels of pristane in species that prey on juvenile pink salmon and larval Pacific herring, it is possible to determine the dietary dependence of these predators on the copepods as alternative prey. These results would help with the evaluation of the SEA project hypotheses. Monitoring pristane levels also provides an indirect index of potential year-class strength for pink salmon and herring, because the copepods that synthesize the pristane potentially provide an inexpensive measure of food availability. The Trustee Council began funding this project in FY 96; funds have been requested through FY 2000. The Council will evaluate the need for continued work in FY 99 following review of the first three years' results.

New Projects. No new projects have been identified, but project proposals 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 overescapement at Chignik Lake on the Alaska Peninsula, but the impact was not measured.

Beginning in FY 93, the Trustee Council sponsored a series of projects to study the mechanisms and monitor the effects of overescapement in the Kenai River drainage, in Red and Akalura lakes in the Kodiak Archipelago, and in Chignik Lake on the Alaska Peninsula. In the case of the Kenai River, returns of adults-per-spawner are now within normal bounds. Productivity in Red Lake also is showing signs of recovery. Final results of the studies at Akalura Lake and Chignik Lake are currently being compiled.

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, which now are being used by the Alaska Department of Fish and Game to help manage the Kenai River sockeye fishery. Finally, the Council had 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.

STRATEGIES FOR FY 99 AND BEYOND

Supplement Populations.

One Trustee Council-funded project will conclude in FY 98: *Delight and Desire Lakes Restoration (\254)*. The following project is ongoing:

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 99

See the Subsistence and Habitat Improvement clusters.

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

Cutthroat Trout, Dolly Varden, Rockfish and Pollock

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 few, rarely more than 1,000 fish, and are geographically isolated. Studies conducted from 1989 to 1991 indicated that cutthroat trout and Dolly Varden growth rates were less in oiled than in unoiled areas, but preliminary results from research initiated in FY 96 (Project \145) suggest that, at least for cutthroat trout, geographic differences may account for the previously identified differential growth rates. Past restoration projects for cutthroat trout and Dolly Varden have emphasized small-scale habitat improvements. Once the results of the two projects being completed in FY 98 (see below) are fully evaluated, it will be possible to reassess future restoration strategies and adjust management approaches accordingly.

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 increased fishing pressures on rockfish (several species). Rockfish were 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 the rockfish and pollock fisheries will benefit greatly from improved information on their population stock structures.

STRATEGIES FOR FY 99 AND BEYOND

Research and Monitor Populations.

Two Trustee Council-funded projects will conclude in FY 98: *Cutthroat Trout and Dolly Varden: Relations Among and Within Populations of Anadromous and Resident Forms (\145)* and *Prince William Sound Cutthroat Trout, Dolly Varden Char Inventory (\302).*

Provide Management Information and Tools.

Genetic Investigations of Rockfish and Pollock (\252). Similar to other Trustee Council-sponsored projects on pink salmon and Pacific herring, the aim of this project is to provide basic information on the genetic stock structure of rockfish and pollock. The results will aid state and federal fisheries managers and the fishing industry in developing and managing sustainable fisheries on these species in the Gulf of Alaska. This work is being carried out at the Alaska SeaLife Center. FY 99 is the second year of what is expected to be a five-year project.

Improve Habitat.

Monitoring Habitat Improvement Structures (\043B). Four previous projects to provide additional rearing habitat for cutthroat trout and Dolly Varden in Prince William Sound are being monitored in FY 98 to determine their physical and biological success. Evaluating the success of these projects will enable fisheries habitat managers to improve restoration

techniques. The Trustee Council anticipates providing only close-out funds for this project in FY 99.

INVITATION FOR FY 99

The Trustee Council expects that the following projects will be continued from FY 98 and invites proposals for work planned in FY 99. Their FY 99 costs are estimated below.

FY 99	\043B	Monitoring Habitat Improvement Structures	$8,000
	\252	Genetic Investigations of Rockfish and Pollock	$263,800
		Total FY 99:	**$271,800**

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 36 for more information on the Alaska SeaLife Center.

Proposals for additional projects are welcome. The Trustee Council is unlikely to fund additional work on cutthroat trout and Dolly Varden until the final report on Project \145, which is due in early 1999, is evaluated.

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 area, but there are recent signs that this regional population may be stabilizing. Preliminary results of research on harbor seal health (Project \001) do not indicate striking differences between seals from Prince William Sound and Southeast Alaska. The leading hypothesis about the harbor seal decline is that changes in the availability of quality forage fish have 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. In 1996, this pod experienced two births and one death and clearly has not recovered during a time when all other major "resident" pods in the sound have increased in number. In addition, ten individuals in the genetically distinct AT1 "transient" pod have not been seen in eight years. 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.

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

STRATEGIES FOR FY 99 AND BEYOND

Monitor Populations and Research Declines or Lack of Recovery.

Two Trustee-Council funded projects will conclude in FY 98: *Harbor Seal Condition and Health Status (\001)* and *Isotope Ratio Studies of Marine Mammals in Prince William Sound (\170)*. The following projects are ongoing:

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 apparently ongoing decline among harbor seals in west-central Prince William Sound. The research component of this project in FY 98 will emphasize pup seals and the analysis of previously gathered telemetry data on adults. This project is expected to continue at least through FY 2000, depending on the recovery status of this keystone species in the northern Gulf of Alaska ecosystem.

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, the focus of research on harbor seal health is shifting to the Alaska SeaLife Center, where it will be 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 99 will be the second year of what is expected to be a four-year project.

Harbor Seal Biological Sampling (\244). This project is described under the Subsistence cluster.

INVITATION FOR FY 99

The Trustee Council expects that the following projects will be continued from FY 98 and invites proposals for work planned for FY 99. Their FY 99 costs are estimated below.

FY 99	\064 Harbor Seals: Monitoring and Field Research	$265,000	
	\341 Harbor Seals: Health and Diet	$125,100	
	Total FY 99:		**$390,100**

Potential Continuing Projects. The following project was funded in FY 98. The Trustee Council has not made a commitment to continue it in FY 99 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 99.

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 has included research on genetic characteristics, contaminant levels, and predation on harbor seals. These research components will be concluded and manuscripts submitted for publication in FY 98. The Trustee Council anticipates a reduced proposal in FY 99, more narrowly focused on monitoring of the injured AB pod.

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 36 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 along shorelines. Much of the spilled oil was deposited in this zone, and there were additional disturbances during clean-up 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.

Although sea otters are abundant in much of Prince William Sound and there is evidence of a slight increase in abundance in the western sound, there is no increasing trend in sea otters at northern Knight and Naked islands, both of which were oiled by the spill. The availability of prey does not appear to be limiting recovery of sea otters in oiled areas, and ongoing work is focusing on the hypotheses that demographic factors or continuing exposure to oil are constraining recovery. Regarding river otters, there is no evidence that food is limiting recovery of this species. Studies conducted during 1989-91 found several biochemical and behavioral differences between river otters in oiled and unoiled areas of Prince William Sound; some of these differences persisted through 1996. In 1997, most measures of health and condition did not differ between oiled and unoiled areas, but elevated P450 values, suggesting possible exposure to hydrocarbons, need further evaluation.

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 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 and 1997. The cause and significance of these differences have not yet been determined. The survey data are difficult to interpret, but there is some evidence of a sound-wide increase in harlequin ducks. Regarding pigeon guillemots, boat surveys have not shown any statistically significant evidence of a post-spill population increase, and comparisons of recent and historical data on nesting pigeon guillemots at Naked Island indicate that key measures of success, such as fledging rates, are depressed. Food availability may play a role in the lack of recovery of this species.

The status of black oystercatchers is being reevaluated in FY 98 with a field study in Prince William Sound. Data gathered on the injury and recovery of intertidal communities from 1989 through 1995 are being integrated and manuscripts for publication are being prepared.

STRATEGIES FOR FY 99 AND BEYOND

Research Mechanisms Constraining Recovery.

Two Trustee Council-funded projects will conclude in FY 98: *Differentiation and Interchange of Harlequin Duck Populations Within the North Pacific (\161)* and *Harlequin Duck Recovery Monitoring (\427)*. The following projects are ongoing:

Nearshore Vertebrate Predator Project (\025). This project was initiated in FY 95 as an integrated approach to determine whether sea otters, river otters, harlequin ducks, and

pigeon guillemots are recovering and whether recruitment processes, continuing exposure to oil, or food availability are limiting recovery. FY 97 was the second year of full-scale field work on this project. Field work continues at a reduced level in FY 98, with an increased emphasis on data analysis and integration. In FY 99, the Trustee Council expects to provide closeout funds only (data analysis, reporting, and preparation of manuscripts for publication).

Responses of River Otters to Oil Contamination (\348). This project was initiated in FY 98 to examine the blood, tissues, and feces of captive river otters for analyses of biochemical and immunological responses to small doses of crude oil. The work, which is being carried out in a controlled setting at the Alaska SeaLife Center, will help investigators interpret and validate results from wild river otters, which still may be exposed to crude oil in Prince William Sound. FY 99 is expected to be the final year of this project, including both experimental work and report writing.

Monitor the Fate and Persistence of Oil.

See Potential Continuing Projects in the shaded box below.

INVITATION FOR FY 99

The Trustee Council expects that the following projects will be continued from FY 98 and invites proposals for work planned for FY 99. Their FY 99 costs are estimated below.

FY 99	\025 Nearshore Vertebrate Predators	$450,000	
	\348 River Otters: Oil Contamination	$176,600	
		Total FY 99	**$626,600**

Potential Continuing Projects. The following projects were funded in FY 98. The Trustee Council has not made a commitment to continue them in FY 99 because of uncertainty about their future scope or priority in terms of the overall restoration program. The Council expects to receive proposals to fund these projects in FY 99.

Status of Black Oystercatchers (\289). The recovery status of black oystercatchers in Prince William Sound is being reassessed in FY 98. Depending on the results of the FY 98 effort, the Trustee Council may consider funding a more in-depth investigation in FY 99.

Hydrocarbon Database (\290). The oil that remains in the environment and the extent and significance of any biological exposure to that oil continues to be an important concern of direct relevance to the recovery status of injured resources and services. The Trustee Council initiated development of a hydrocarbon database in FY 93 as a way to bring together and integrate data on hydrocarbon concentrations and biological exposure from several thousand sediment, tissue, and other samples. Funding has been requested to maintain this electronic database through FY 02. The Council will determine the level of funding for FY 99 following a review of the expected workload in future years.

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Preparation of Manuscripts: Intertidal and Subtidal Communities (\325). In FY 98, the Trustee Council funded preparation of six manuscripts on results of intertidal studies previously funded by the Council. The original proposal included a request for funding preparation of an additional four manuscripts in FY 99. The Council will evaluate the need for additional manuscripts following a review of the manuscripts completed in FY 98.

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 36 for more information on the SeaLife Center.

Oiled Mussel Beds. In FY 94, the Trustee Council funded a project to experimentally remove oil from a series of mussel beds which harbored considerable volumes of crude oil underneath them. The presence of oil in these mussel beds has not been evaluated since FY 95. For FY 99, the Trustee Council invites a proposal to again monitor the concentration of oil underneath the beds and the survival of the mussels in treated and untreated beds. The results should give further insight into the value of the treatment technique as a restoration tool and the potential of oiled mussel beds as pathways of exposure to crude oil.

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 96 do not provide statistically significant evidence of recovery of 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 98. No projects focusing on common loons or cormorants have been undertaken.

Populations of several fish-eating marine birds and mammals, including marbled murrelets and 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 it is the underlying causes of the pre-spill declines that 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.

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, and in 1997 there was clear evidence of increased numbers of murres on census plots. The common murre is classified as a "recovering" species. The bald eagle was declared "recovered" in 1996.

STRATEGIES FOR FY 99 AND BEYOND

Research Mechanisms Limiting Recovery of Marine Bird Populations.

Two Trustee Council-funded projects will conclude in FY 98: *Status and Ecology of Kittlitz's Murrelets in Prince William Sound (\142)* and *Publication of an Indexed Bibliography of the Genus Ammodytes (Sand Lance) (\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. A modeling component was initiated in FY 97, although field studies will continue in FY 98 and FY 99. FY 2000 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. The Trustee Council expects this work to continue through FY 99, with closeout funding only in FY 2000.

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 study will provide background information for the benefit of the APEX project (\163), and is expected to conclude in FY 2000.

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 99 will be the second year of what is expected to be a four-year project (closeout funds only in FY 01). 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 manifest 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 99 will be the second year of what is expected to be a three-year project.

Fatty Acid/Lipid Analyses (\347). Fatty acid and lipid (i.e., soluble fats) analyses have been shown to provide important insights into the diets of predators, such as harbor seals (\064). The APEX (\163) work on seabirds as well as additional 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 will focus on Pacific herring and sand lance, both of which are of fundamental ecological importance. FY 99 will be the second year of field work with only closeout funds expected in FY 2000.

Monitor Marine Bird Populations.

Common Murre Monitoring (\144A). The Trustee Council has supported monitoring of common murre productivity (or numbers) in the Barren Islands since 1989. In FY 98, this project will move to the entrance to Resurrection Bay and census numbers of murres in the Chiswell Islands, which have not been visited in several years. Depending on the FY 98

results (and data from the Barren Islands collected as part of the APEX project, \163), the Council expects to provide funds in FY 99 only for a final report and preparation of a synthesis manuscript.

Boat Surveys in Prince William Sound (\159). Starting in Summer 1989/Winter 1990, the Trustee Council has sponsored five 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 and marine mammals 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 recovery trends (or lack of recovery). A round of surveys is being carried out in FY 98; FY 99 will be a year of data analysis and reporting.

INVITATION FOR FY 99

The Trustee Council expects that the following projects will be continued from FY 98 and invites proposals for work planned in FY 99. Their FY 99 costs are estimated below.

FY 99	\144A Common Murre Population Monitoring	$23,000	
	\159 Marine Bird Surveys	$35,000	
	\163 Alaska Predator Ecosystem Experiment (APEX)	$1,880,300	
	\169 Genetics: Murres, Guillemots, Murrelets	$86,200	
	\306 Sand Lance Ecology and Demographics	$30,000	
	\327 Pigeon Guillemot Research	$159,500	
	\338 Adult Murre and Kittiwake Survival	$57,900	
	\347 Fatty Acid/Lipid Analyses	$92,600	
	Total FY 99:		**$2,364,500**

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 36 for more information on the Alaska SeaLife Center.

Proposals for additional projects are welcome.

Archaeological Resources

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

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 into place over the activities of oil spill cleanup personnel. Archaeological site monitoring in 1994 and 1995 revealed no new disturbance or vandalism. In 1996, one site on the Kenai Peninsula and several sites in the Kodiak Island area suffered new damage from vandalism. In 1997, archaeologists revisited two of the sites injured in 1996 and several additional sites and found no evidence of new or continued vandalism. However, tidal action and foot traffic have caused erosion in or near some sites.

STRATEGIES FOR FY 99 AND BEYOND

Monitor Archaeological Sites.

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 is expected to continue through FY 02 unless injuries diminish to an insignificant level. Beginning in FY 98, the sites selected for monitoring may include those on land newly acquired with trust funds provided there is reasonable evidence that the site was injured as a result of the spill. In FY 99, the National Park Service is expected to conduct its biennial inspection of the archaeological site at MacArthur Pass.

Site Stewardship (\149). A three-year site stewardship pilot program began in FY 96 for Kachemak Bay, Uganik Bay, Uyak Bay, and the Chignik area of the Alaska Peninsula. Through this program, volunteer site stewards have been selected and trained and they have monitored vandalized archaeological sites. What is learned from the project will help in the design of similar volunteer programs elsewhere in the spill area. FY 98 will be the final year of Trustee Council funding for this program (FY 99 funds will be for preparation of the final report only). After FY 98, expenses will be assumed by either volunteer stewards or agency budgets.

INVITATION FOR FY 99

The Trustee Council expects that the following projects will be continued from FY 98 and invites proposals for work planned in FY 99. Their FY 99 costs are estimated below:

FY 99	\007A Index Site Monitoring	$151,500	
	\149 Site Stewardship	$10,000	
		Total FY 99:	**$161,500**

New Projects.

Archaeological Repositories. The Trustee Council intends to issue a separate invitation for proposals to establish a regional archaeological repository in one of the eight spill-affected communities in Prince William Sound and lower Kenai Peninsula, construct new or renovated display facilities in the remaining seven communities, and develop traveling exhibits. The eight spill-affected communities are Valdez, Cordova, Chenega Bay, Tatitlek, Seward, Seldovia, Port Graham, and Nanwalek. If you would like to receive a copy of the invitation for an archaeological repository, local display facilities, and traveling exhibits, please contact the Anchorage Restoration Office.

Proposals for additional projects are welcome. At this time no data recovery efforts are planned for future years although the monitoring project (\007A) may reveal the need for further data recovery.

Subsistence

Subsistence harvests of fish and wildlife in most of the villages in the oil spill region declined substantially following the spill. Household interviews of subsistence users were last conducted in 1993-94. At that time, the estimated size of the subsistence harvest in pounds per person appeared to have returned to prespill levels in some communities, but the relative contributions of certain important subsistence resources remained unusually low. Subsistence users have also reported that they have to travel farther and expend more time and effort to harvest the same amount as they did before the spill.

STRATEGIES FOR FY 99 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 which address resources used by subsistence harvesters are subsistence restoration projects.

Enhance/Replace Subsistence Resources.

One Trustee Council-funded project will conclude in FY 98: *Eastern Prince William Sound Wildstock Salmon Habitat Restoration (\220)*. The following projects are ongoing:

Tatitlek Coho Salmon Release (\127). This project is creating a coho salmon run near Tatitlek through the remote release of 20,000 smolt annually in Boulder Bay. Coho are currently returning to Tatitlek and are being used by subsistence and sport fishermen. Trustee Council funding is expected through one coho life cycle (through FY 99).

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. Five years of Council funding (through FY 2000) are expected. A fire in January 1988 destroyed the 1997 broodstock, but operations are expected to be back on track for the 1998 broodstock year.

Instream Habitat Improvements (\247, \263). Project \247, 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. In FY 98, Project \263 will construct instream habitat improvements on the Port Graham River and Windy Creek, both of which are near the community of Port Graham, in an effort to increase coho salmon production. The Council anticipates funding this project through FY 2000.

Increase Involvement of Subsistence Users in the Restoration Process.

Two Trustee Council-funded projects will conclude in FY 98: *Documentary on Subsistence Use of Herring and Nearshore Resources (\274)* and *Elders/Youth Conference on Subsistence and the Oil Spill (\286)*. Project /244, *Community-Based Harbor Seal Management and Biological Sampling*, was also scheduled to conclude in FY 98. However, see New Projects in the shaded box below. The following project is ongoing:

Community Facilitators (\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 community residents. The Council anticipates funding this effort, although probably at a reduced level, throughout the life of the restoration program (FY 02).

INVITATION FOR FY 99

The Trustee Council expects that the following projects will be continued from FY 98 and invites proposals for work planned in FY 99. Their FY 99 costs are estimated below.

FY 99	\052A	Community Involvement	$230,000	
	\127	Tatitlek Coho Salmon Release	$10,700	
	\225	Port Graham Pink Salmon Project	$75,000	
	\247	Kametolook River Coho Salmon Project	$14,800	
	\263	Port Graham Stream Enhancement	$23,600	
		Total FY 99:		**$354,100**

Potential Continuing Projects. The following projects were funded in FY 98. The Trustee Council has not made a commitment to continue them in FY 99 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 99.

Traditional Ecological Knowledge (\052B). As part of its community involvement effort, in FY 97 the Trustee Council began funding this pilot 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 99. Funding will be contingent upon a favorable review of the results of the FY 98 effort.

Chugach Region Clam Restoration (\131). The goals of this project are to develop hatchery production techniques for littleneck clams and to seed beaches near the Native villages of Port Graham, Nanwalek, and Tatitlek in an effort to reestablish local clam populations. Beach test plots were seeded in FY 96 and FY 97. In FY 98, the hatchery operation will move to a new facility, which should improve production capability. A decision on whether or not to provide funding in FY 99 will be made following a review of FY 98 progress and results.

Youth Area Watch (\210). FY 98 is the third year of a program that involves students from Chenega Bay, Tatitlek, Cordova, Valdez, Hinchenbrook Island, Whittier, and Seward in ongoing restoration projects. A decision on funding in FY 99 will be contingent on presentation in the project proposal of a concrete plan to transition away from Trustee Council funding.

Stocking of Solf Lake (\256B). A feasibility study funded by the Trustee Council in FY 96 and FY 97 verified the ability of Solf Lake, located near the community of Chenega Bay, to

(box continued from previous page)

support a population of sockeye salmon. In FY 98, the lake will be stocked with 100,000 sockeye fry and access improvements for returning sockeye will be constructed. The number of years of Council funding for the stocking effort will be dependent on annual results.

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 surf scoters in Prince William Sound. Traditional ecological knowledge will be 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 99.

New Projects.

Community-Based Harbor Seal Management and Biological Sampling. Since FY 96, the Trustee Council has provided funds to the Alaska Native Harbor Seal Commission to conduct a biological sample collection program for harbor seals in Prince William Sound, lower Cook Inlet, and the Kodiak area. Originally conceived as a three-year project scheduled to close out in FY 98, current indications are that the samples being collected by Alaska Native hunters are an important part of the Council's ongoing harbor seal research effort. The Trustee Council therefore invites a proposal to continue the biosampling in FY 99. Any such proposal should address comments from the 1997 project review regarding the need for a central computer database that tracks the locations and uses of harbor seal tissue samples. The Alaska SeaLife Center is considering developing such a system for Steller sea lion tissues, and there may be opportunity for a collaborative effort involving both seal and sea lion samples.

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 42 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 35. 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 types of wastes in community landfills adversely affects the quality of nearby marine waters through runoff and leachate. In some cases, these wastes are discharged directly into marine waters. Chronic marine pollution places added stress on fish and wildlife resources and thereby may delay the recovery of resources injured by the oil spill. In fact, with regard to the mortality of seabirds, chronic marine pollution is believed to be at least as important as large-scale spills.

In FY 95 and FY 96, the Trustee Council funded development of the Sound Waste Management Plan (\115) for Prince William Sound. In FY 97, the Council funded 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 operating in all five communities. Also in FY 97, the Trustee Council funded development of the Kodiak Island Borough Master Waste Management Plan (\304).

Strategies for FY 99 and Beyond

See Potential Continuing Projects in the shaded box below.

Invitation for FY 99

See Potential Continuing Projects in the shaded box below.

Potential Continuing Projects. The following project was funded in FY 97. The Trustee Council has not made a commitment to continue it in FY 99 pending completion of the project's final report. The Council expects to receive a proposal to fund this project in FY 99.

Kodiak Island Borough Master Waste Management Plan (\304). In FY 97 the Trustee Council funded this project to develop a plan for reducing marine pollution in the Kodiak Island Borough. Completion of the project's final report is expected in March 1998. 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 as well as 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, especially if they propose a regional approach to reducing marine pollution and include financial participation from the affected communities as well as other sources.

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. For example, fish spawning habitat can be restored by diverting foot traffic along streams or by revegetating trampled shorelines. Habitat also can be protected and restored through better understanding and management of human uses. Projects in this cluster protect or restore habitats by means other than acquiring land.

STRATEGIES FOR FY 99 AND BEYOND

Restore Habitat.

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. The project also enhances and directs recreational use of the riverbanks. Techniques include revegetation, streambank restoration, elevated boardwalks, floating docks, access stairs, fencing, signs, and interpretive displays. Projects completed in FY 97 include installation of a barrier, stairway, and walkway at the Kenai Beach Dunes dipnetting area near the mouth of the Kenai River and installation of a walkway and fishing platform, along with streambank bioengineering, at Rotary Park near the Soldotna airport. Projects to be undertaken in FY 98 include restoration of heavily damaged sites at Slikok Creek State Recreation Area and other locations. FY 99 is expected to be the final year of Council funding for this project.

Understand and Manage Human Uses.

Human Use Model in Western Prince William Sound (\339). This project was initiated in FY 98 to assess and model impacts of increased human use on injured resources and services in western Prince William Sound. The model will allow projections of future impacts from increased human access and provide information useful for evaluating and possibly changing management practices to aid restoration. FY 99 is expected to the final year of Trustee Council funding for this project.

INVITATION FOR FY 99

The Trustee Council expects that the following projects will be continued from FY 98 and invites proposals for work planned for FY 99. The FY 99 cost of these projects is estimated below.

FY 99	\180 Kenai River Habitat Restoration	$306,600	
	\339 Human Use Model	$53,100	
		Total FY 99:	**$359,700**

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

Ecosystem Synthesis

As the 10th anniversary of the oil spill draws near in FY 99, the Trustee Council is increasing its 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 will enable the Council, the scientific community, and the public to view the effects of the oil spill and the long-term restoration and management of injured resources and services from broad, multi-project and ecosystem-level perspectives. Having the benefit of these perspectives will not only aid interpretation of past results in regard to injury and recovery, but will also provide an improved framework for development of long-term restoration, research, monitoring, and management plans.

All three of the large-scale ecosystem projects sponsored by the Trustee Council -- SEA (\320), NVP (\025), and APEX (\163) -- are now mature and the time is ripe for syntheses within and among these projects. In addition, some species (e.g., harbor seals) and themes (e.g., toxic effects of oil on pink salmon) have been the subjects of multiple projects, and are now mature and ripe for analyses that integrate results from various projects. Concurrent with this emphasis on integration and synthesis is a continued emphasis on publication of results in open, peer-reviewed journals (e.g., Project \329). Although not described in this cluster, many of the projects in other clusters include funds for publication of project results.

STRATEGIES FOR FY 99 AND BEYOND

Integrate and Synthesize Project Results.

Synthesis of Scientific Findings/Long-term Planning (\300). In FY 98 the Trustee Council is supporting the second year of a synthesis project, managed by the Council's Chief Scientist, that has three main elements: reviewing and editing species accounts for the *Restoration Notebook* series (written for lay readers), preparing technical manuscripts synthesizing damage assessment and restoration projects related to particular themes (e.g., intertidal injury and recovery), and serving as liaisons between the modelers in Project \330 (see below) and various investigators on other Trustee Council-sponsored projects. It is expected that this project will continue in FY 99, with increased attention toward planning for long-term monitoring, research, and restoration needs.

Develop Models of Research Results.

Develop Mass-Balance Model (\330). In this project, an internationally recognized scientific team is constructing and validating two models of trophic interactions among the organisms of Prince William Sound. These food-web models will help synthesize existing research and monitoring results, help develop predictive tools that may be used to examine the impacts of large-scale perturbations (e.g., oil spills) in the ecosystem, and help the public understand how the marine ecosystem functions. FY 99 is expected to be the final year of funding for this two-year project.

FY 99	\300 Synthesis of Scientific Findings/Long-term Planning	$80,000	
	\330 Mass-Balance Model	$185,500	
		Total FY 99:	**$265,500**

New Projects.

Mapping Sensitive Habitats. A series of seasonal maps depicting "environmentally sensitive areas" in Prince William Sound was published by the National Oceanic and Atmospheric Administration (NOAA) in 1988 and has not been updated to take advantage of the tremendous volume of information generated through the oil spill damage assessment and restoration programs. Given what has been learned since 1989 and the ongoing need to identify and protect sensitive areas in the ecosystem injured by the oil spill, it may be timely to update this map series. The Trustee Council invites a proposal that integrates and depicts this information on a new series of maps. Cost sharing by partners from agencies, industry, or other organizations will be essential. In addition, proposals should conform to current NOAA environmentally sensitive index (ESI) mapping standards.

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 six 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.

In FY 98, the Council authorized $560,000 for project management, which amounts to four percent of overall project costs and represents a reduction from the amount approved for FY 97 ($641,600). Although an estimate of FY 99 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 99

As in FY 98, each Trustee agency will be asked to develop a budget for its project management costs following the receipt of project proposals on April 15. 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, 1998**. Proposals are required for all continuing projects, as well as for new projects.

- All proposals should be for federal fiscal year 1999 (FY 99), which is the period October 1, 1998 through September 30, 1999.

- Three paper copies and one electronic copy of a Detailed Project Description (DPD), prepared per the format and content instructions (pages 40-49), must be submitted. Electronic copies must be on an IBM-compatible disk in WordPerfect 6.1 or lower, or Microsoft Word 7.0 for Windows 95 or lower.

- Three paper copies and one electronic copy of a Detailed Budget, prepared per the format and content instructions (pages 50-63), 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:
  sandras@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 97, by **April 15, 1998** 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 99 projects will not be authorized for any investigator who has an overdue report.*

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 in 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 Standard (Seattle) time on April 15, 1998. (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 #52ABNF800034), which is available from NOAA:

Ms. Heide Sickles
NOAA, WASC, Procurement Division, WC33
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 early in 1998. In order to ensure that

space at the Center is available and appropriate, proposals that indicate use of the Center in FY 99 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
Institute of Marine Sciences
University of Alaska Fairbanks
Fairbanks, AK 99775
Phone: 1-907-474-6825 (in Fairbanks through February 1998)
1-800-224-2525 (at Alaska SeaLife Center beginning March 1998)
e-mail: mikec@ims.alaska.edu.

➜ **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 40-49 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 scientific fields. The scientific reviewers evaluate proposals according to the following criteria. 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.
  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.

- **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 50-63 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 identifies projects recommended for funding in FY 99. The draft work plan will be circulated for public comment in June 1998. The Council is expected to decide on the final work plan in August 1998. 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 1998 should be available for expenditure on October 1, 1998 (the beginning of federal fiscal year 1999). 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 99, the workshop will take the form of a symposium to be held on the 10th anniversary of the oil spill. Scheduled for March 23-27 in Anchorage, it will consist of an overview of the restoration program on the first day, followed by four days of scientific sessions. All PIs are expected to attend.

- **Possibly attend a technical review session.** Each year, the Trustee Council's Chief Scientist schedules 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 99 will be due April 15, 2000. PIs must revise all final reports to respond to peer review comments, if any; revision of annual reports is not required. All reports are made available to the public through the Alaska Resources Library and Information Services. (For more information, see *Procedures for the Preparation and Distribution of Reports* available from the Anchorage Restoration Office). PIs are also 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 7.0 for Windows 95 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 agency is assigned to a new project, when budget numbers are revised, or when a change in the project's scope necessitates a change in the abstract. 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. These pages may be detached from the DPD prior to its publication in the FY 99 Work Plan.

- **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 36 for a discussion of the BAA)

Bold; large font

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Project Number:	(For continuing projects, the last three digits of the 1998 project number preceded by "99"; for new projects, leave blank)
Restoration Category:	(Research, Monitoring, or General Restoration if known; otherwise, leave blank)
Proposer:	(Name of Trustee Council agency or other organization -- University, individual, 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 will receive funding under the project in FY 99)
Alaska SeaLife Center:	(Type "yes" if this project intends to use the Alaska SeaLife Center in FY 99 or future years; type "no" if it doesn't)
Duration:	(What year in the project's life FY 99 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 99:	(The amount of funding requested for expenditure in FY 99; show all dollar amounts in $000,000 format)
Cost FY 00:	(An estimate of the amount of funding, if any, that will be requested for expenditure in FY 00)
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

indent over so in alignment

Headings in all caps; bold

↓ 2 carriage returns

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 close-out 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 98, a description of the work proposed for FY 99, 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.

↓ 2 carriage returns before each heading

NEED FOR THE PROJECT

↓ 1 carriage return before each subheading

A. Statement of Problem > sub-headings 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 99 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	**Not Recovered**	**Recovery Unknown**	Commercial fishing
Bald eagle	Cormorants (3 species)	Black oystercatcher	Passive uses
	Harbor seal	Clams	Recreation and tourism
Recovering	Harlequin duck	Common loon	including sport fishing, sport hunting, and other recreational uses
Archaeological resources	Killer whale (AB pod)	Cutthroat trout	
Common murre	Marbled murrelet	Designated wilderness areas	Subsistence
Intertidal communities	Pacific herring	Dolly Varden	
Mussels	Pigeon guillemot	Kittlitz's murrelet	
Pink salmon	Sea otter (in oiled western PWS)	River otter	
Sediments		Rockfish	
Sockeye salmon			
Subtidal communities			

Source: *Exxon Valdez* Oil Spill Restoration Plan, Update on Injured Resources and Services, September 1996

B. Rationale/Link to Restoration

↓ 1

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.

↓ 1

C. Location

↓ 1

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

↓ 2

COMMUNITY INVOLVEMENT AND TRADITIONAL ECOLOGICAL KNOWLEDGE

↓ 1

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
e-mail: hughs@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
Kodiak	(vacant)	
Nanwalek	Nancy Yeaton	907-281-2274
Port Graham	Walter Meganack, Jr.	907-284-2227
Seldovia	Lillian Elvsaas	907-234-7898
Seward	Edgar Blatchford	907-224-3118
Tatitlek	Gary Kompkoff	907-325-2311
Valdez	Charles Hughey	907-835-4951

If you would like assistance in developing a traditional ecological knowledge (TEK) component for your proposal, contact:

Dr. Henry P. Huntington
P.O. Box 773564
Eagle River, AK 99577
Telephone: (907) 696-3564
Fax: (907) 696-3565

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

Protocols for including indigenous 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 38 of this invitation, the protocols call for all research proposals involving indigenous knowledge to be reviewed by the TEK Specialist and the community facilitators.

↓ 2

PROJECT DESIGN

↓ 1

A. Objectives

↓ 1

What are the project's research/restoration objectives, both for FY 99 and throughout the life of the project?

If your project has multiple objectives, please format them like the example below. Use this

same format any time you include a list in your DPD.

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 99, 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, proposers 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 99, 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 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 99 (October 1, 1998 - September 30, 1999)

When in FY 99 will major project tasks (for example, sample collection, data analysis, manuscript submittal, etc.) be completed? Include a schedule of work for FY 99 that specifies the dates for major tasks. This information will be the basis for the project progress report which is submitted quarterly to the Restoration Office.

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

December 31:	Complete analysis of data from FY 98 field season
January 14-16:	Present project results: American Society of Limnology and Oceanography
February 1-March 15:	Arrange logistics (boats, equipment, contracts, etc.)
March 23-27:	Attend 10th Anniversary Symposium
April 1- 10:	Consult with subsistence harvesters
April 15:	Submit annual report (FY 98 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 99 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 99, 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(s) 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 99 the Council will support page costs of publications anticipated to appear in print during FY 99. For close-out projects, the Council will consider funding a portion of a principal investigator's time specifically for preparation of a manuscript for publication. (See page 52 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 99 are due April 15, 2000.) 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*, contact the Anchorage Restoration Office.)

↓ 2

PROFESSIONAL CONFERENCES

↓ 1

The Trustee Council encourages presentation of project results at professional conferences, and is prepared to provide limited travel support for particularly important opportunities. If you are requesting travel funds for conference attendance in FY 99 (see page 52 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 98 should skip this section)

↓ 1

How does the proposal described in this DPD differ from the DPD approved by the Trustee Council for FY 98? 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, results of prior year, 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 99 and describe what their responsibilities will be.

↓ 2

LITERATURE CITED

↓ 1

If appropriate, include literature citations here.

FORMAT AND CONTENT: DETAILED BUDGET

This section contains instructions for preparing detailed budgets.

Part I. Instructions for All Proposers

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 99, 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 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 98 or what was projected in FY 98 for FY 99. Each budget form contains a comments 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 99 budget is for the period October 1, 1998 through September 30, 1999.

- **Project Number...**
  For continuing projects, use the last three digits of the 1998 project number preceded by "99". For new projects, leave the number blank.

- **Rules for Numbers...**
  1. Unless otherwise noted, show costs in thousands of dollars. For example, show $1,869,489 as $1,869.5.

  2. When the number "5" follows the digit to be rounded, round to the higher amount. For example, round $326,752 to $326.8.

  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 53). 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 devoted to execution of 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.** Due to their research nature, many projects funded by the Trustee Council are determined to be 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 1999 workshop will take the form of a symposium to be held on the 10th anniversary of the oil spill. The symposium is scheduled for March 23-27, 1999 in Anchorage. Unless you reside in Anchorage, include in your budget funds for travel and five 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 99: SEA (\320), APEX (\163), NVP (\025), clam restoration (\131), seabirds (\144, \159, \289, \338), and the five projects underway at the Alaska SeaLife Center (\190, \252, \327, \341, \348). The review session on the Alaska SeaLife Center projects will likely be held in Seward; the other 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. If you represent a state or federal agency, the costs of preparing a report on your FY 99 activity should be included in your FY 2000 budget. If you represent another type of organization, include in your FY 99 budget the cost of both performing the project in FY 99 and preparing a report on your FY 99 activity. 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* available from the Anchorage Restoration Office.)

5. **Manuscript Preparation and Publication.** The Trustee Council will 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 99 must be for manuscripts that will be published (i.e., appear in print) in FY 99. Identify on the appropriate budget forms how much funding has been included for each of these purposes. 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(s) 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 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 Ecological Knowledge (TEK).** 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 2000 through 2002 or 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 00 funding that you make this year will be used by Council staff as a benchmark for reviewing your FY 00 budget when it is submitted in April of 1999. 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 59.

•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	DOI
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 51) 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 99. In estimating future years' costs (FY 2000 and beyond), 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 98, 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 available.

- **Budget Forms...**

  Instructions for completing the individual 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 1998* - No input required. All the information is linked to individual agency forms.
2. *Proposed FY 1999* - 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 1999 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 98.
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 1998	Proposed FY 1999	PROPOSED FY 1999 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 2000	Estimated FY 2001	Estimated FY 2002			
General Administration								
Project Total								
Full-time Equivalents (FTE)								
Other Funds - 3 -								

Comments:

- 6 -

FY 99	Project Number: / Project Title: / Lead Agency: - 7 -	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 1998* - If the project was funded in FY 98, enter the total authorized by line-item. Otherwise, leave blank.
2. *Proposed FY 1999* - 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, workshop attendance, 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 98.
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 1998	Proposed FY 1999						
Personnel								
Travel								
Contractual								
Commodities								
Equipment	- 1 -	- 2 -	LONG RANGE FUNDING REQUIREMENTS -4-					
Subtotal			Estimated FY 2000	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 99	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. (For positions GS7/Range 14 or below, names are not required.)
2. *Position Description* - Include 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 salaries and benefits for each position.
6. *Overtime* - Enter the estimated overtime cost for each position.
7. *Proposed FY 1999 Personnel Costs* - No input necessary. The form automatically calculates: (Months Budgeted x Monthly Costs) + Overtime
8. *Travel Description* - Include the destination and purpose of any trips budgeted.
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 1999 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 1999
- 1 -	- 2 -	- 3 -	- 4 -	- 5 -	- 6 -	- 7 -
	Subtotal					
					Personnel Total	

Travel Costs:	Ticket	Round	Total	Daily	Proposed
Description	Price	Trips	Days	Per Diem	FY 1999
- 8 -	- 9 -	- 10 -	- 11 -	- 12 -	- 13 -
				Travel Total	

FY 99	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 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 1999* - Enter the proposed FY 1999 contractual cost.
3. *Commodities Description* - Describe what is being purchased and its purpose.
4. *Proposed FY 1999* - Enter the proposed FY 1999 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 1999
Description	
- 1 -	- 2 -
When a non-trustee organization is used, the form 4A is required. **Contractual Total**	

Commodities Costs:	Proposed FY 1999
Description	
- 3 -	- 4 -
Commodities Total	

FY 99	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 1999 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 1999
- 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 99	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 shall include all direct costs except equipment for which ownership resides with the University and subcontract costs in excess of $25,000. Subcontract costs in excess of $25,000 but less than $250,000 shall be subject to an indirect cost charge of 5 percent. Subcontract costs in excess of $250,000 shall be subject to an indirect cost charge of 2 percent." 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 1998* - If the project was funded in FY 98, enter the total authorized by line-item. Otherwise, leave blank.
2. *Proposed FY 1999* - 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, workshop attendance, 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 98.
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 1998	Proposed FY 1999						
Personnel								
Travel								
Contractual								
Commodities	- 1 -	- 2 -						
Equipment			LONG RANGE FUNDING REQUIREMENTS - 5 -					
Subtotal			Estimated FY 2000	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 99	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* - Include the position title.
3. *Months Budgeted* - Enter the number of months for each position.
4. *Monthly Costs* - Enter the monthly sum of salaries and benefits for each position.
5. *Overtime* - Enter the estimated overtime cost for each position.
6. *Proposed FY 1999 Personnel Costs* - No input necessary. The form automatically calculates: (Months Budgeted x Monthly Costs) + Overtime
7. *Travel Description* - Include the destination and purpose of any trips budgeted.
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 1999 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 1999
	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 1999
	Description					
	- 7 -	- 8 -	- 9 -	- 10 -	- 11 -	- 12 -
					Travel Total	

FY 99	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 charters, equipment rental or lease, utilities, 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 1999* - Enter the proposed FY 1999 contractual cost.
3. *Commodities Description* - Describe what is being purchased and its purpose.
4. *Proposed FY 1999* - Enter the proposed FY 1999 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 1999
Description	
- 1 -	- 2 -
Contractual Total	

Commodities Costs:	Proposed FY 1999
Description	
- 3 -	- 4 -
Commodities Total	

FY 99	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 1999 New Equipment* - No input necessary. The form automatically calculates: Number of Units x Unit Price
6. *Existing Equipment Description* - Describe existing equipment which will be used.
7. *Number of Units* - Enter the number of existing units which will be used. Use whole numbers.
8. *Project Identification Field* - Enter the project number, title, and your organization's name.
9. *Prepared* - Enter the date this budget was prepared.

New Equipment Purchases:		Number	Unit	Proposed
Description		of Units	Price	FY 1999
- 1 -	- 2 -	- 3 -	- 4 -	- 5 -
Indicate replacement equipment purchases with an R.		**New Equipment Total**		
Existing Equipment Usage:			Number	
Description			of Units	
	- 6 -		- 7 -	

FY 99	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 in order to protect the habitat of injured resources and services. 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.

As of February 1998, the Council had spent $212 million to protect habitat on about 457,000 acres of land and committed an additional $150 million to protect 200,000 acres. The Council is considering additional parcels.

Acquired lands include private inholdings within Kachemak Bay State Park, land adjacent to Seal Bay/Tonki Cape on Afognak Island, commercial timber rights along Orca Narrows near Cordova, a parcel on Shuyak Island, land owned by the English Bay Corporation in Kenai Fjords National Park, and lands formerly owned by Akhiok-Kaguyak, Inc., Old Harbor Native Corporation, Koniag, Inc., and Chenega Corporation. The Council has also funded the purchase of 32 smaller parcels of land in the spill area.

Purchase of six additional parcels is pending: land owned by Tatitlek Corporation in northeastern Prince William Sound, land owned by The Eyak Corporation in southeastern Prince William Sound, a package of lands owned by the Kenai Natives Association, and three small parcels. The agreements with Tatitlek Corporation and The Eyak Corporation are subject to shareholder votes.

Landowners are considering offers on ten additional small parcels and a package of 45 key waterfront parcels forfeited to the Kodiak Island Borough for tax delinquency. Negotiations continue with Afognak Joint Venture and Koniag, Inc. regarding protection of certain of their lands.

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 99 will depend upon the 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 subject to this invitation.

Public Information/Science Management/Administration

This project (\100) provides the science management, public outreach, 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 2,800 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 Council's radio series, *Alaska Coastal Currents*; the 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 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. Consistent with the projected decline in the size of the annual work plan through FY 2002, when the final payment from Exxon Corporation will be spent, the Council intends to reduce the amount of funds spent each year on public information/science management/administration as well. An estimate of FY 99 funding is given below:

FY 99	\100	Public Information/Science Mgmt./Administration	$2,500,000	
		Total FY 99:		**$2,500,000**

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 five years (FY 94–98). It is anticipated that $12 million will be allocated to the Reserve each year from FY 99 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.

In FY 97, the Trustee Council began planning for the long-term management and use of the Restoration Reserve. In FY 98, Council staff will conduct workshops and other forms of outreach throughout the spill area and in Anchorage, Fairbanks and Juneau to solicit public input on possible uses of the Reserve. The Council is expected to make a decision about the future management and use of the Reserve before the end of FY 98.

	Allocations through FY 98 (excluding interest):		$60,000,000
FY 99	\424 *Exxon Valdez* Restoration Reserve Fund	$12,000,000	
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 99-02 (excluding interest):		$48,000,000
	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 99. Table B-2 presents costs for projects outside of the annual work plan and, therefore, over and above the target spending level. For FY 99, this table includes funds for public information/science management/administration and the Restoration Reserve; the amount of funding needed for habitat protection and acquisition support in FY 99 will depend upon the Council's habitat protection decisions, and 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) began in FY 94, received over $20 million between FY 92 and FY 98, and is expected to cost an additional $755,000 in FY 99, for a total project cost of roughly $21.4 million.

The tables in this appendix also estimate future costs for projects. Table B-1 projects the FY 99 cost of 34 continuing projects to be about $6.3 million. The FY 99 cost of 11 additional projects funded in FY 98 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 as reported in the September 30, 1997 quarterly financial report. 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: Authorized Amounts. The figures for FY 98 are the amounts authorized by the Trustee Council in August and December 1997.

FY 99-02: Estimated Costs. The figures for FY 99-02 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 99 Invitation

Project	FY92	FY93	FY94	FY95	FY96	FY97	FY98	**FY99**	**FY00-02**	Subtotal FY92-98	**Subtotal FY99-02**	Total FY92-02
Pink Salmon	$1,834.7	$847.6	$1,512.6	$2,329.6	$1,906.2	$1,573.0	$1,202.3	**$606.9**	**$234.0**	$11,206.0	**$840.9**	$12,046.9
076 / Effect of Oil on Straying and Survival	$0.0	$0.0	$0.0	$180.3	$375.8	$475.5	$272.2	**$0.0**	**$0.0**	$1,303.8	**$0.0**	$1,303.8
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	$21.3	$0.0	$0.0	$0.0	**$0.0**	**$0.0**	$243.4	**$0.0**	$243.4
139A1 / Little Waterfall Barrier Bypass Improvement	$0.0	$0.0	$0.0	$86.2	$40.6	$22.6	$13.4	**$0.0**	**$0.0**	$162.8	**$0.0**	$162.8
139A2 / Port Dick Spawning Channel	$0.0	$0.0	$0.0	$32.9	$217.9	$71.5	$85.8	**$76.5**	**$47.0**	$408.1	**$123.5**	$531.6
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	$254.5	$240.3	$205.8	$120.2	**$0.0**	**$0.0**	$2,628.9	**$0.0**	$2,628.9
188 / Otolith Thermal Mass Marking	$0.0	$0.0	$48.9	$637.2	$85.4	$106.8	$141.1	**$182.9**	**$0.0**	$1,019.4	**$182.9**	$1,202.3
190 / Linkage Map for the Pink Salmon Genome	$0.0	$0.0	$0.0	$0.0	$163.5	$243.7	$229.4	**$187.0**	**$187.0**	$636.6	**$374.0**	$1,010.6
191 / Oil-Related Embryo Mortalities	$412.9	$699.0	$823.5	$787.1	$600.9	$147.1	$159.4	**$58.7**	**$0.0**	$3,629.9	**$58.7**	$3,688.6

NOTES: 1) Costs are shown in thousands of dollars.
2) Figures for FY 92-97 are expenditures/obligations on restoration projects; an additional $6.8 million were spent on damage assessment studies in FY 92.
3) Costs projected for FY 99-02 are for planning purposes and have not yet been approved by the Trustee Council.
4) 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	FY00-02	Subtotal FY92-98	Subtotal FY99-02	Total FY92-02
194 / Spawning Habitat Recovery	$0.0	$0.0	$0.0	$0.0	$0.0	$128.6	$25.0	$0.0	$0.0	$153.6	$0.0	$153.6
196 / Genetic Structure	$0.0	$0.0	$180.4	$223.0	$173.4	$163.0	$130.2	$50.0	$0.0	$870.0	$50.0	$920.0
329 / Synthesis of Toxicological Impacts	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$25.6	$51.8	$0.0	$25.6	$51.8	$77.4
Herring	$0.0	$0.0	$511.2	$4,880.5	$1,234.3	$892.6	$735.3	$80.6	$0.0	$8,253.9	$80.6	$8,334.5
074 / Herring Reproductive Impairment	$0.0	$0.0	$0.0	$3,998.0	$140.3	$0.0	$0.0	$0.0	$0.0	$4,138.3	$0.0	$4,138.3
162 / Disease Affecting Declines	$0.0	$0.0	$85.5	$389.4	$609.4	$537.4	$517.7	$0.0	$0.0	$2,139.4	$0.0	$2,139.4
165 / Genetic Discrimination	$0.0	$0.0	$6.4	$88.0	$96.3	$30.9	$56.0	$0.0	$0.0	$277.6	$0.0	$277.6
166 / Herring Natal Habitats	$0.0	$0.0	$419.3	$405.1	$388.3	$324.3	$42.3	$0.0	$0.0	$1,579.3	$0.0	$1,579.3
311 / Productivity Dependencies: Stable Isotopes	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$119.3	$80.6	$0.0	$119.3	$80.6	$199.9
SEA and Related Projects	$0.0	$0.0	$5,618.5	$4,407.0	$5,179.0	$3,287.2	$2,669.6	$841.0	$116.5	$21,161.3	$957.5	$22,118.8
195 / Pristane Monitoring in Mussels	$0.0	$0.0	$0.0	$0.0	$113.3	$105.6	$114.9			$333.8		$333.8
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	$4,407.0	$5,065.7	$3,181.6	$2,383.4	$755.2	$0.0	$20,656.2	$755.2	$21,411.4
340 / Long-Term Oceanographic Monitoring	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$77.1	$85.8	$116.5	$77.1	$202.3	$279.4

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4) 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**	**FY00-02**	Subtotal FY92-98	**Subtotal FY99-02**	Total FY92-02
Sockeye Salmon	$1,052.6	$1,466.3	$1,614.7	$1,442.2	$1,145.0	$540.9	$11.7	**$0.0**	**$0.0**	$7,273.4	**$0.0**	$7,273.4
048-BAA / Historical Analysis of Sockeye Salmon Growth	$0.0	$0.0	$0.0	$0.0	$109.4	$0.0	$0.0	**$0.0**	**$0.0**	$109.4	**$0.0**	$109.4
251 / Akalura Lake Restoration	$0.0	$0.0	$0.0	$0.0	$0.0	$38.7	$0.0	**$0.0**	**$0.0**	$38.7	**$0.0**	$38.7
254 / Delight and Desire Lakes Restoration	$0.0	$0.0	$0.0	$0.0	$0.0	$105.7	$11.7	**$0.0**	**$0.0**	$117.4	**$0.0**	$117.4
255 / Kenai River Sockeye Salmon Restoration	$687.4	$405.2	$348.7	$451.2	$297.3	$157.2	$0.0	**$0.0**	**$0.0**	$2,347.0	**$0.0**	$2,347.0
258 / Sockeye Salmon Overescapement	$0.0	$621.9	$762.3	$724.5	$540.5	$192.5	$0.0	**$0.0**	**$0.0**	$2,841.7	**$0.0**	$2,841.7
259 / Restoration of Coghill Lake Sockeye Salmon	$0.0	$145.1	$240.8	$266.5	$197.8	$46.8	$0.0	**$0.0**	**$0.0**	$897.0	**$0.0**	$897.0
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
Cutthroat Trout, Dolly Varden, Rockfish, and Pollock	$132.1	$0.0	$0.0	$136.9	$222.3	$261.6	$357.9	**$271.8**	**$843.0**	$1,110.8	**$1,114.8**	$2,225.6
043B / Habitat Improvement Monitoring	$0.0	$0.0	$0.0	$136.9	$22.3	$24.0	$24.0	**$8.0**	**$0.0**	$207.2	**$8.0**	$215.2
145 / Anadromous and Resident Forms	$0.0	$0.0	$0.0	$0.0	$200.0	$229.7	$120.7	**$0.0**	**$0.0**	$550.4	**$0.0**	$550.4

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Project	FY92	FY93	FY94	FY95	FY96	FY97	FY98	FY99	FY00-02	Subtotal FY92-98	Subtotal FY99-02	Total FY92-02
252 / Genetic Investigations of Rockfish and Pollock	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$209.1	**$263.8**	**$843.0**	$209.1	**$1,106.8**	$1,315.9
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
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	$830.2	$774.4	$738.0	$739.3	**$390.1**	**$354.2**	$3,719.1	**$744.3**	$4,463.4
001 / Harbor Seal Condition and Health Status	$0.0	$0.0	$0.0	$105.4	$203.8	$188.1	$51.1	**$0.0**	**$0.0**	$548.4	**$0.0**	$548.4
012 / Killer Whale Investigation	$0.0	$113.5	$30.8	$289.3	$98.1	$147.2	$154.7			$833.6		$833.6
064 / Harbor Seal Monitoring, Habitat Use, Trophic Interactions	$24.7	$219.3	$248.4	$340.9	$332.3	$266.4	$272.5	**$265.0**	**$130.0**	$1,704.5	**$395.0**	$2,099.5
117-BAA / Harbor Seal Blubber and Lipids	$0.0	$0.0	$0.0	$94.6	$0.0	$0.0	$0.0	**$0.0**	**$0.0**	$94.6	**$0.0**	$94.6
170 / Isotope Ratio Studies of Marine Mammals	$0.0	$0.0	$0.0	$0.0	$140.2	$136.3	$108.8	**$0.0**	**$0.0**	$385.3	**$0.0**	$385.3
341 / Harbor Seals: Health and Diet	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$152.2	**$125.1**	**$224.2**	$152.2	**$349.3**	$501.5
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

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4) 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	FY00-02	Subtotal FY92-98	Subtotal FY99-02	Total FY92-02
Nearshore Ecosystem	$1,725.4	$2,768.5	$2,519.3	$2,918.9	$2,885.7	$2,163.9	$2,249.1	**$626.6**	**$0.0**	$17,230.8	**$626.6**	$17,857.4
025 / Nearshore Vertebrate Predators (NVP)	$0.0	$0.0	$0.0	$685.7	$1,776.9	$1,727.0	$1,652.9	**$450.0**	**$0.0**	$5,842.5	**$450.0**	$6,292.5
026 / Hydrocarbon Monitoring	$0.0	$0.0	$0.0	$142.2	$0.0	$15.1	$0.0	**$0.0**	**$0.0**	$157.3	**$0.0**	$157.3
027 / Kodiak Shoreline Assessment	$0.0	$0.0	$0.0	$180.5	$42.9	$0.0	$0.0	**$0.0**	**$0.0**	$223.4	**$0.0**	$223.4
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**		$267.9	**$0.0**	$267.9
086C / Herring Bay Experimental and Monitoring Studies	$0.0	$504.6	$697.9	$703.1	$169.9	$0.0	$0.0	**$0.0**	**$0.0**	$2,075.5	**$0.0**	$2,075.5
090 / Mussel Bed Restoration	$769.3	$331.0	$433.6	$434.9	$192.4	$7.6	$0.0	**$0.0**	**$0.0**	$2,168.8	**$0.0**	$2,168.8
106 / Eelgrass Monitoring	$0.0	$0.0	$0.0	$181.6	$247.2	$0.0	$0.0	**$0.0**	**$0.0**	$428.8	**$0.0**	$428.8
161 / Differentiation/Interchange of Harlequins	$0.0	$0.0	$0.0	$0.0	$81.1	$94.3	$16.5	**$0.0**	**$0.0**	$191.9	**$0.0**	$191.9
223-BAA / Publication of Sea Otter Data	$0.0	$0.0	$0.0	$0.0	$0.0	$40.2	$0.0	**$0.0**	**$0.0**	$40.2	**$0.0**	$40.2
266 / Experimental Oil Removal	$0.0	$0.0	$185.8	$146.5	$0.0	$0.0	$0.0	**$0.0**	**$0.0**	$332.3	**$0.0**	$332.3
285 / Subtidal Monitoring	$0.0	$882.8	$581.3	$117.8	$0.0	$0.0	$0.0	**$0.0**	**$0.0**	$1,581.9	**$0.0**	$1,581.9

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Project	FY92	FY93	FY94	FY95	FY96	FY97	FY98	FY99	FY00-02	Subtotal FY92-98	Subtotal FY99-02	Total FY92-02
289-BAA / Status of Black Oystercatchers in Prince William Sound	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$80.4		$0.0	$80.4	$0.0	$80.4
290 / Hydrocarbon Database	$0.0	$120.1	$113.5	$153.7	$109.4	$66.4	$75.7			$638.8		$638.8
325-BAA / Intertidal/Subtidal Manuscript Preparation	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$99.9		$0.0	$99.9	$0.0	$99.9
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	$176.6	$0.0	$245.4	$176.6	$422.0
427 / Harlequin Duck Monitoring	$470.5	$194.3	$171.8	$172.9	$254.4	$213.3	$78.3	$0.0	$0.0	$1,555.5	$0.0	$1,555.5
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 and Related Projects	$743.8	$430.2	$1,154.5	$2,082.6	$2,308.6	$2,274.7	$2,992.1	$2,364.5	$1,755.1	$11,986.5	$4,119.6	$16,106.1
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
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	$79.8	$0.0	$0.0	$0.0	$0.0	$325.7	$0.0	$325.7
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

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Project	FY92	FY93	FY94	FY95	FY96	FY97	FY98	**FY99**	**FY00-02**	Subtotal FY92-98	**Subtotal FY99-02**	Total FY92-02
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	$30.8	$0.0	$0.0	$0.0	**$0.0**	**$0.0**	$30.8	**$0.0**	$30.8
142-BAA / Status and Ecology of Kittlitz's Murrelet	$0.0	$0.0	$0.0	$0.0	$156.9	$171.3	$269.0	**$0.0**	**$0.0**	$597.2	**$0.0**	$597.2
144 / Common Murre Population Monitoring	$314.9	$174.6	$211.1	$0.0	$65.1	$62.5	$57.4	**$23.0**	**$0.0**	$885.6	**$23.0**	$908.6
159 / Marine Bird Abundance Surveys	$0.0	$255.6	$142.8	$0.0	$259.7	$62.5	$237.0	**$35.0**	**$495.0**	$957.6	**$530.0**	$1,487.6
163 / Alaska Predator Ecosystem Experiment (APEX)	$0.0	$0.0	$483.9	$1,481.2	$1,722.4	$1,736.8	$2,012.2	**$1,880.3**	**$882.1**	$7,436.5	**$2,762.4**	$10,198.9
167-BAA / Curation of Seabirds Salvaged from EVOS	$0.0	$0.0	$0.0	$0.0	$0.0	$30.0	$0.0	**$0.0**	**$0.0**	$30.0	**$0.0**	$30.0
169 / Genetics of Murres, Guillemots, Murrelets	$0.0	$0.0	$0.0	$0.0	$0.0	$59.4	$88.2	**$86.2**	**$13.8**	$147.6	**$100.0**	$247.6
231 / Marbled Murrelet Productivity	$0.0	$0.0	$0.0	$0.0	$0.0	$119.4				$119.4		$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**	$65.6	**$50.0**	$115.6
327 / Pigeon Guillemot Research	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$123.3	**$159.5**	**$263.9**	$123.3	**$423.4**	$546.7

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4) 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**	**FY00-02**	Subtotal FY92-98	**Subtotal FY99-02**	Total FY92-02
338 / Survival of Adult Murres and Kittiwakes in Relation to Forage Fish Abundance	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$56.2	**$57.9**	**$45.0**	$56.2	**$102.9**	$159.1
346 / Sand Lance Publication	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$5.4	**$0.0**	**$0.0**	$5.4	**$0.0**	$5.4
347 / Fatty Acid Profile/Lipid Class Analysis	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$110.6	**$92.6**	**$35.3**	$110.6	**$127.9**	$238.5
Archaeological Resources	$123.3	$1,581.9	$234.4	$274.5	$449.8	$226.1	$206.6	**$161.5**	**$0.0**	$3,096.6	**$161.5**	$3,258.1
007A / Archaeological Index Site Monitoring	$0.0	$81.9	$234.4	$162.5	$109.9	$141.8	$139.7	**$151.5**		$870.2	**$151.5**	$1,021.7
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
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	$62.8	$66.9	**$10.0**	**$0.0**	$194.3	**$10.0**	$204.3
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	$890.6	$1,255.8	$1,300.3	$1,481.9	**$354.1**	**$834.8**	$5,600.6	**$1,188.9**	$6,789.5
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	$79.0	$269.4	$241.9	$232.1	**$230.0**	**$690.0**	$822.4	**$920.0**	$1,742.4

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4) 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	FY00-02	Subtotal FY92-98	Subtotal FY99-02	Total FY92-02
052B / Traditional Knowledge	$0.0	$0.0	$0.0	$0.0	$0.0	$91.1	$61.3			$152.4		$152.4
127 / Tatitlek Coho Salmon Release	$0.0	$0.0	$0.0	$4.8	$24.1	$10.5	$10.5	**$10.7**	**$0.0**	$49.9	**$10.7**	$60.6
131 / Clam Restoration	$0.0	$0.0	$0.0	$223.6	$257.4	$356.4	$290.1	**$0.0**		$1,127.5	**$0.0**	$1,127.5
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	$100.5	$149.9	$150.2			$400.6		$400.6
214 / Harbor Seal Documentary	$0.0	$0.0	$0.0	$0.0	$73.9	$6.9	$0.0	**$0.0**	**$0.0**	$80.8	**$0.0**	$80.8
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
225 / Port Graham Pink Salmon Project	$0.0	$0.0	$0.0	$0.0	$89.2	$70.9	$73.5	**$75.0**	**$75.0**	$233.6	**$150.0**	$383.6
244 / Community Harbor Seal Sampling/Management	$0.0	$0.0	$44.9	$76.1	$125.0	$107.4	$84.7	**$0.0**	**$0.0**	$438.1	**$0.0**	$438.1
247 / Kametolook River Coho Salmon	$0.0	$0.0	$0.0	$0.0	$0.0	$30.4	$14.9	**$14.8**	**$46.2**	$45.3	**$61.0**	$106.3
256B / Solf Lakes Sockeye Salmon Stocking	$0.0	$0.0	$0.0	$0.0	$52.0	$31.6	$95.5			$179.1		$179.1
263 / Port Graham Salmon Stream Enhancement	$0.0	$0.0	$0.0	$0.0	$0.0	$56.5	$107.0	**$23.6**	**$23.6**	$163.5	**$47.2**	$210.7
272 / Chenega Chinook Release Program	$0.0	$10.7	$55.4	$43.4	$48.9	$42.5	$0.0	**$0.0**	**$0.0**	$200.9	**$0.0**	$200.9
273 / Surf Scoter Life History and Ecology	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$170.4			$170.4		$170.4

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4) 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	FY00-02	Subtotal FY92-98	Subtotal FY99-02	Total FY92-02
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	$169.8	$0.0	$0.0	$0.0	$0.0	$0.0	$672.9	$0.0	$672.9
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
428 / Community Planning Project	$0.0	$0.0	$57.9	$93.8	$0.0	$0.0	$0.0	$0.0	$0.0	$151.7	$0.0	$151.7
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	$1.4	$0.0	$267.5	$0.0	$0.0	$0.0	$268.9	$0.0	$268.9
304 / Kodiak Waste Management Plan	$0.0	$0.0	$0.0	$0.0	$0.0	$267.5	$0.0		$0.0	$267.5	$0.0	$267.5
417 / Waste Oil Disposal Facilities	$0.0	$0.0	$0.0	$1.4	$0.0	$0.0	$0.0	$0.0	$0.0	$1.4	$0.0	$1.4
Habitat Improvement	$0.0	$0.0	$0.0	$117.5	$476.6	$646.0	$631.1	$359.7	$0.0	$1,871.2	$359.7	$2,230.9
058 / Landowner Assistance Program	$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	$26.8	$0.0	$0.0	$0.0	$0.0	$0.0	$26.8	$0.0	$26.8
180 / Kenai Habitat Restoration	$0.0	$0.0	$0.0	$0.0	$476.6	$578.2	$491.9	$306.6	$0.0	$1,546.7	$306.6	$1,853.3
230 / Valdez Duck Flats Restoration	$0.0	$0.0	$0.0	$0.0	$0.0	$67.8	$0.0	$0.0	$0.0	$67.8	$0.0	$67.8

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Project	FY92	FY93	FY94	FY95	FY96	FY97	FY98	FY99	FY00-02	Subtotal FY92-98	Subtotal FY99-02	Total FY92-02
339 / Prince William Sound Human Use and Wildlife Disturbance Model	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$139.2	**$53.1**	**$0.0**	$139.2	**$53.1**	$192.3
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	$64.9	$261.1	**$265.5**	**$0.0**	$326.0	**$265.5**	$591.5
300 / Synthesis of Scientific Findings from EVOS	$0.0	$0.0	$0.0	$0.0	$0.0	$64.9	$81.3	**$80.0**		$146.2	**$80.0**	$226.2
330-BAA / Mass-Balance Model of Trophic Fluxes	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$179.8	**$185.5**	**$0.0**	$179.8	**$185.5**	$365.3
Admin./Sci. Mgmt./Pub. Info.	$0.0	$0.0	$69.4	$0.0	$35.0	$0.0	$0.0	**$0.0**	**$0.0**	$104.4	**$0.0**	$104.4
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

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Project	FY92	FY93	FY94	FY95	FY96	FY97	FY98	FY99	FY00-02	Subtotal FY92-98	Subtotal FY99-02	Total FY92-02
Project Management	$0.0	$0.0	$0.0	$0.0	$94.6	$556.1	$560.1	**$0.0**	**$0.0**	$1,210.8	**$0.0**	$1,210.8
250 / Project Management	$0.0	$0.0	$0.0	$0.0	$0.0	$556.1	$560.1			$1,116.2		$1,116.2
600 / NOAA Program Management	$0.0	$0.0	$0.0	$0.0	$94.6	$0.0	$0.0	**$0.0**	**$0.0**	$94.6	**$0.0**	$94.6
Total Cost :	$6,269.6	$8,812.7	$14,870.7	$20,462.0	$17,967.3	$14,792.8	$14,098.1	**$6,322.3**	**$4,137.6**	$97,273.2	**$10,459.9**	$107,733.1

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Table B-2. History of Project Costs / Projects Outside FY 99 Invitation

Project	FY92	FY93	FY94	FY95	FY96	FY97	FY98	**FY99**	**FY00-02**	Subtotal FY92-98	**Subtotal FY99-02**	Total FY92-02
100 / Administration, Science Management, Public Information	$4,295.9	$2,653.9	$4,013.1	$3,205.0	$2,999.0	$2,514.7	$2,796.3	**$2,500.0**		$22,477.9	**$2,500.0**	$24,977.9
115 / Sound Waste Management	$0.0	$0.0	$0.0	$260.8	$48.4	$1,135.6	$0.0	**$0.0**	**$0.0**	$1,444.8	**$0.0**	$1,444.8
126 / Habitat Prot./Acq. Support	$0.0	$0.0	$1,930.9	$1,309.7	$1,967.1	$860.7	$851.4			$6,919.8		$6,919.8
197 / SeaLife Center Fish Pass	$0.0	$0.0	$0.0	$0.0	$0.0	$533.7	$0.0	**$0.0**	**$0.0**	$533.7	**$0.0**	$533.7
291 / Chenega Area Shoreline Residual Oiling Reduction	$0.0	$0.0	$0.0	$0.0	$0.0	$1,748.6	$0.0	**$0.0**	**$0.0**	$1,748.6	**$0.0**	$1,748.6
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**	**$36,000.0**	$60,000.0	**$48,000.0**	$108,000.0
Total Cost :	$4,295.9	$2,653.9	$17,944.0	$16,775.5	$17,014.5	$18,793.3	$15,647.7	**$14,500.0**	**$36,000.0**	$93,124.8	**$50,500.0**	$143,624.8

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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.

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