

19.05.03

*please return to Cherie*



# **Invitation to Submit Restoration Proposals for Federal Fiscal Year 1997**

**February 15, 1996**

Prepared by:

**Exxon Valdez Oil Spill  
Trustee Council**

645 G Street, Suite 401  
Anchorage, Alaska 99501-3451  
907/278-8012

*Toll-free in Alaska*  
1-800-478-7745

*Outside Alaska*  
1-800-283-7745





The *Exxon Valdez* Oil Spill Trustee Council and the Oil Spill Public Information Center conduct all programs and activities free from discrimination on the basis of sex, color, race, religion, national origin, age, marital status, pregnancy, parenthood, or disability. This publication is available in alternative communication formats upon request. Please contact the Oil Spill Public Information Center at 907/278-8008 to make any necessary arrangements. Any person who believes he or she has been discriminated against should write to: EVOS Trustee Council, 645 G St., Suite 401, Anchorage, AK 99501; or O.E.O., U.S. Department of the Interior, Washington, D.C. 20240.

---

This publication was released by the *Exxon Valdez* Oil Spill Trustee Council and produced at a cost of \$2.35 per copy. This document is issued for public review. It was printed on recycled paper in Anchorage, Alaska.

# **Invitation to Submit Restoration Proposals for Federal Fiscal Year 1997**

**February 15, 1996**

**Prepared by:  
*Exxon Valdez Oil Spill*  
Trustee Council**

**BRUCE BOTELHO**  
Attorney General  
State of Alaska

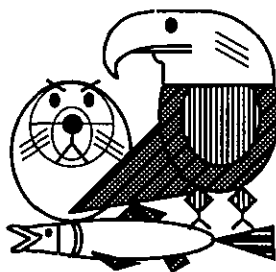
**MICHELE BROWN**  
Commissioner  
Alaska Department of  
Environmental Conservation

**GEORGE T. FRAMPTON, JR.**  
Assistant Secretary  
U.S. Department of the Interior

**PHIL JANIK**  
Regional Forester  
Alaska Region  
U.S. Department of Agriculture

**STEVE PENNOYER**  
Director, Alaska Region  
National Marine Fisheries Service

**FRANK RUE**  
Commissioner  
Alaska Department of Fish and Game



---

## DATES TO REMEMBER

- ➡ April 15:           Proposals and project reports due
- ➡ June 21:           Draft Work Plan released
- ➡ August 9:           Comments due on Draft Work Plan
- ➡ August 30\*:       Trustee Council decision

\*Tentative

---

**Invitation to Submit Restoration Proposals  
for Federal Fiscal Year 1997  
February 15, 1996**

**Table of Contents**

	<u>Page</u>
<b>Introduction</b> . . . . .	<b>1</b>
Background . . . . .	1
A Comprehensive, Balanced Approach to Restoration . . . . .	2
Resources and Services Injured by the Oil Spill . . . . .	3
Financial Summary . . . . .	4
Community Involvement . . . . .	6
Alaska SeaLife Center . . . . .	7
 <b>General Instructions for Submitting a Proposal</b> . . . . .	 <b>9</b>
Evaluation of Proposals . . . . .	12
Questions about Submitting a Proposal . . . . .	13
 <b>Restoration Strategies and Invitation</b> . . . . .	 <b>15</b>
Pink Salmon . . . . .	17
Pacific Herring . . . . .	21
Sound Ecosystem Assessment (SEA) & Related Projects . . . . .	23
Sockeye Salmon . . . . .	27
Cutthroat Trout and Dolly Varden . . . . .	29
Marine Mammals . . . . .	31
(Harbor seals, killer whales)	
Nearshore Ecosystem . . . . .	33
(Sea otters, river otters, harlequin ducks, pigeon guillemots, black oystercatchers, mussels, clams, other intertidal/subtidal organisms)	
Seabird/Forage Fish & Related Projects . . . . .	37
(Bald eagles, common murre, marbled murrelets, pigeon guillemots)	
Sediments . . . . .	39
(Subtidal and shoreline oil)	
Archaeological Resources . . . . .	41
Subsistence . . . . .	43
Reduction of Marine Pollution . . . . .	47
Habitat Improvement . . . . .	49
Recreation and Tourism . . . . .	51
Ecosystem Synthesis . . . . .	53
 <b>Other Trustee Council Activities</b> . . . . .	 <b>55</b>
Habitat Protection and Acquisition . . . . .	55
Public Information, Science Management, and Administration . . . . .	56
Restoration Reserve . . . . .	58
 <b>Appendices</b>	
A. Instructions for Preparing Detailed Project Descriptions . . . . .	A1
B. Budget Instructions . . . . .	B1
C. Restoration Project Costs: FY 92-99 and Beyond . . . . .	C1

# INTRODUCTION

---

The *Exxon Valdez* Oil Spill Trustee Council funds activities to restore the resources and services injured by the 1989 *Exxon Valdez* oil spill. The Trustee Council invites individuals, private industry, government agencies, and other interested parties to submit proposals for federal fiscal year 1997 (FY 97), which is the period October 1, 1996 through September 30, 1997.

This invitation explains how to submit a proposal, funding limitations, the review process, and the types of projects which the Trustee Council is seeking for FY 97. Proposals are due by April 15, 1996. Proposals submitted for funding by the Trustee Council will be evaluated by independent scientific and technical reviewers. They also will be subject to policy and legal review by Trustee Council staff. Following the review, proposals recommended for funding in FY 97 will be circulated for public review in the Draft FY 97 Work Plan, scheduled to be published in June 1996.

Using public comment on the Draft FY 97 Work Plan and further scientific evaluation, the Trustee Council will approve projects for funding in FY 97. The Council is expected to make its funding decisions in late August 1996. The Council's funding decisions will be based on its assessment of long-range restoration needs, and in many cases will reflect the expectation to fund a project to its completion in a future fiscal year.

For the current year (FY 96), the Trustee Council authorized approximately \$18 million for the work plan. The work plan includes monitoring, research, and general restoration projects and excludes the Restoration Reserve, the Alaska SeaLife Center, Public Information/Science Management/Administration and acquisition of habitat parcels. The Council expects to authorize approximately \$16 million for FY 97.

## Background

In 1991, the U.S. District Court approved a settlement of a lawsuit concerning the 1989 *Exxon Valdez* oil spill. The terms of the civil settlement 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) they provide. Under the court-approved terms of the settlement, a Trustee Council of three federal and three state members was designated to administer the restoration fund and to restore the resources and services injured by the spill. According to the settlement:

- Restoration funds must be used "... for the purposes of restoring, replacing, enhancing or acquiring the equivalent of natural resources injured as a result of the Oil Spill or the reduced or lost services provided by such resources..."
- Restoration funds must be spent on restoration of natural resources in Alaska unless the Trustee Council unanimously agrees that spending funds outside the state is necessary for effective restoration.
- All decisions made by the Trustee Council, including a decision to spend restoration funds, must be made by unanimous consent.

# A Comprehensive, Balanced Approach to Restoration

Since the 1991 settlement, the Trustee Council has been working to restore the resources and services injured by the oil spill. In November 1994, the Council adopted a *Restoration Plan* to guide the restoration effort. The plan is available upon request from the Anchorage Restoration Office. To be eligible for funding, proposals must be consistent with the policies in the *Restoration Plan*, and must be designed to achieve the recovery objectives for injured resources and services.

The *Restoration Plan* outlines a comprehensive, balanced approach to the restoration of damaged resources and services including monitoring and research, general restoration, habitat protection and acquisition, and establishment of a restoration reserve to fund long-term restoration needs.

**Monitoring and Research** activities include gathering information about how resources and services are recovering, whether restoration activities are successful and what continuing problems may be constraining recovery of injured resources. This information is necessary to help resource managers and the Trustee Council restore the injured resources and services.

**General Restoration** includes a wide variety of activities. Some activities improve the rate of natural recovery by directly manipulating the environment. Others protect natural recovery by managing human uses or reducing marine pollution.

**Habitat Protection and Acquisition** includes the purchase of private land or interests in land in order to minimize further injury to resources and services and allow recovery to continue unimpeded. Decisions about Habitat Protection and Acquisition — which land to purchase and funding for acquisition support activities — are being addressed through a separate process. For more information about Habitat Protection and Acquisition, see page 55.

**The Restoration Reserve** is intended to provide a source of funding for restoration activities needed after payments from Exxon Corporation end. Exxon's last payment occurs in September 2001 and is expected to fund restoration for FY 2002. Restoration activities needed for FY 2003 and beyond are expected to be funded from the Restoration Reserve. In August 1995, the Trustee Council made its third \$12 million deposit in the Restoration Reserve. While future deposits to the Reserve will be made after reviewing each year's restoration needs, the Council anticipates that, for each of the remaining six years of Exxon payments, they will add \$12 million to the Reserve. This would give the Reserve \$108 million plus interest. Funds from the Restoration Reserve could potentially benefit any resource or service injured by the oil spill.



## Resources and Services Injured by the Spill

Table 1 lists the resources and services injured by the spill. For biological resources, the table includes those resources for which scientific research has demonstrated a population-level injury or continuing sublethal effect.

Only restoration proposals that are designed to restore the resources or services identified in Table 1 will be evaluated for FY 97 unless new scientific or local knowledge shows that other resources experienced a population-level injury or continuing sublethal effect. In addition, restoration actions may address resources not listed in Table 1 if these activities will benefit an injured resource or service. For example, it may be permissible to focus activities on a resource that is not listed in Table 1 if the activities will help subsistence or commercial fishing, or if it is a necessary part of a research proposal designed to help understand the injuries to a resource identified in the table.

**Table 1. Resources and Services Injured by the Spill**

<b>INJURED RESOURCES</b>			<b>Lost or Reduced SERVICES</b>
<b>Biological Resources</b>		<b>Other</b>	
<b>Recovering</b> Bald eagle Black oystercatcher Intertidal organisms (some) Killer whale Mussels Sockeye salmon (Red Lake) Subtidal organisms (some)	<b>Not Recovering</b> Common murre Harbor seal Harlequin duck Intertidal organisms (some) Marbled murrelet Pacific herring Pigeon guillemot Pink salmon Sea otter Sockeye salmon (Kenai & Akalura systems) Subtidal organisms (some)	Archaeological resources Designated wilderness areas Sediment	Commercial fishing Passive uses Recreation and Tourism including sport fishing, sport hunting, and other recreation uses Subsistence
<b>Recovery Unknown</b> Clams Common Loon Cutthroat trout Dolly Varden Kittlitz's murrelets River otter Rockfish			

*Updates and changes being circulated for public review.* The Trustee Council is circulating for public review proposed changes to Chapter 5 of the 1994 *Restoration Plan*. The changes update the status of resources in Table 1 using information from 1994 and 1995, and propose adding other resources to the table. The changes also update the summaries of injury and recovery, and propose revised recovery objectives for some of the injured resources. A draft of the revised Chapter 5 is being circulated separately for public review. Comments are due April 15, 1996. Copies of the proposed changes to Chapter 5 are available upon request from the Anchorage Restoration Office (907-278-8012).

## Financial Summary

In the civil settlement, Exxon Corporation agreed to pay the United States and the State of Alaska \$900 million over ten years to restore the resources and services injured by the spill. From these payments approximately \$320 million had been authorized as of January 1996 for research, monitoring, general restoration, damage assessment including litigation costs and a portion of the cleanup. The Trustee Council has also committed \$161.5 million to protect land on Kodiak Island, Afognak Island, Shuyak Island, Kachemak Bay, and in Orca Narrows in Prince William Sound. With these funds, the Council protected 305,000 acres of land in perpetuity and an additional 56,000 acres under a conservation easement through the year 2001. Finally, the Trustee Council has so far deposited \$36 million in the Restoration Reserve.

Past and estimated future uses of the civil settlement fund as of January 1996 are outlined in Table 2. Future costs in the table are estimates made for planning purposes. The Trustee Council will base actual funding decisions on their examination of what is necessary for restoration at that particular time.

**Table 2. Past and Estimated Future Uses of the Civil Settlement Fund**  
as of January 1996

<b>Research, Monitoring, and General Restoration</b>		<b>\$ 180 Million</b>
Past Authorizations:	\$ 105.7 Million	
FY 92	\$ 14.1	
(3) FY 93	\$ 11.2	
FY 94	\$ 18.0	
FY 95	\$ 19.2	
FY 96	\$ 18.2	
Alaska SeaLife Ctr	\$ 25.0	
Estimated Future:	\$ 74.7 Million	
<b>Habitat Protection</b>		<b>\$ 375 Million</b>
Large- & Small-parcel Acquisitions (including past and anticipated future purchases, and support costs)		
<b>Public Information, Science Mgmt, &amp; Admin.</b>		<b>\$ 35 Million</b>
Past Authorizations:	\$ 21.8 Million	
FY 92	\$ 5.1	
(3) FY 93	\$ 4.1	
FY 94	\$ 4.9	
FY 95	\$ 4.3	
FY 96	\$ 3.4	
Estimated Future:	13.2 Million	
<b>Restoration Reserve</b>		<b>\$ 108 Million (plus interest)</b>
FY 94, FY 95 & FY 96	\$ 36.0 Million	
Anticipated future:	\$ 72.0 Million	
<b>Damage Assessment (incl. litigation &amp; cleanup)</b>		<b>\$ 214 Million</b>
(1) Reimbursements to govts:	\$ 173.7 Million	
(2) Reimbursements to Exxon:	\$ 39.9 Million	
<b>Total</b>		<b>\$ 912 Million</b>
Exxon Payments	\$ 900 Million	
Accumulated Interest less court fees	\$ 12 Million	

- (1) Reimbursements to governments is reduced by \$2.7 million because that amount of the reimbursement was for FY 92 research, monitoring, and general restoration activities.
- (2) Deduction by Exxon Corporation for cleanup activities after January 1, 1992.
- (3) FY 93 was a seven-month fiscal year to transition from the oil spill year to the federal fiscal year.

Table 2 shows that approximately \$180 million is expected to be spent on research, monitoring, and general restoration projects including the Alaska SeaLife Center. Of that amount, approximately \$75 million remains to be spent during the six years until Exxon payments end. These amounts do not include any funds spent from the Restoration Reserve after fiscal year 2002. For FY 96 the Trustee Council approved approximately \$18 million for research, monitoring, and general restoration projects. In FY 97 the Council expects to spend approximately \$16 million for those activities.

## Community Involvement

Residents of communities affected by the spill have asked the Trustee Council to be more aware of local concerns and issues, and local and traditional knowledge when planning, implementing and evaluating restoration projects. In response to these requests, the Council is making a concerted effort to increase the involvement of spill area residents, including subsistence users, in the restoration process.

Principal investigators are asked to assist the Trustee Council in its community involvement efforts. This is particularly true for investigators whose projects involve work in or near a community or resources and services that are of particular interest to community residents. The instructions for writing FY 97 Detailed Project Descriptions in Appendix A ask investigators to include a description of their plans to involve local residents in their proposal.

To improve the community involvement process, the Trustee Council funded the Community Involvement Project (\052). The project coordinates a network of local facilitators that may be helpful to you in preparing your project. The facilitators are creating local directories of persons with traditional knowledge, vessels and other equipment available for research projects, and persons for hire as technicians or observers. The facilitators also relay to the Council concerns about injured resources and help generate project proposals related to research and restoration of subsistence resources.

Nine local facilitators will be hired through this project; seven are from Prince William Sound/lower Cook Inlet communities, and the other two represent the Alaska Peninsula and Kodiak regions. The local facilitators hired so far are:

Gary Kompkoff	Tatitlek	325-2311
Don Kompkoff	Chenega Bay	573-5132
Walter Meganack	Port Graham	284-2227
Helmer Olsen	Valdez Native Tribe	835-5589
Charles Moonin	Nanwalek	281-2225
Kenny Blatchford	Qutekcak (Seward)	224-3118
Bob Henrich	Eyak Tribal Council (Cordova)	424-7739
Hank Eaton	Kodiak Tribal Council	486-4449

Martha Vlasoff has been contracted by Chugach Regional Resources Commission (CRRC) to serve as the Spill Area-Wide Coordinator for Project \052. CRRC is a non-profit organization serving the Chugach region in the areas of natural resource stewardship and economic development. Contact Ms. Vlasoff at the Anchorage Restoration Office (phone: 907-278-8012; e-mail: [marthav@evro.usa.com](mailto:marthav@evro.usa.com)) if you would like more information or assistance in developing a community involvement component for your project, or if you would like the name of the Alaska Peninsula facilitator.

The Trustee Council sponsored a Community Conference on Subsistence and the Oil Spill in September 1995 (Project 95138). Representatives from 20 communities met in



Anchorage to discuss mutual concerns about restoration. A Community Conference Steering Committee, comprised of participants from the conference, was formed to follow up on the issues raised at the conference. The Steering Committee and the local facilitators met during the Trustee Council's 1996 Restoration Workshop and made the following recommendations regarding community involvement:

- Increase communications with the communities on research findings in non-technical language either through the Trustee Council newsletter, the bi-monthly Community Involvement Report (prepared by the Spill Area-Wide Coordinator), a radio program, school presentations, posters, or some other form of communication.
- Create a forum for local traditional knowledge bearers and principal investigators to increase the exchange between culturally diverse groups in an effort to plan, implement and evaluate future restoration projects.
- Develop protocols to assist principal investigators and local communities in regard to contact with the communities and collection of traditional ecological knowledge, including methodology, data ownership, compensation and data coordination.

Other projects funded by the Council that involve communities are described in the Subsistence section (page 43).

## Alaska SeaLife Center

In 1995 the Trustee Council contributed \$25 million toward the construction of basic marine research infrastructure at the Alaska SeaLife Center. The Council approved funding for this facility following a determination that no existing facilities in Alaska adequately addressed known and anticipated needs for laboratory-based research for the long-term restoration of marine mammals, marine birds, and fish.

The Alaska SeaLife Center is scheduled to open for research in mid-1998. To plan for the anticipated opening, the Trustee Council is interested in knowing if a proposal for FY 97 entails the use of Alaska SeaLife Center facilities in FY 98 or future years. Proposals that would require preliminary work in FY 97 before fully using the facility in FY 98 will be considered for Trustee Council funding. The instructions for writing FY 97 Detailed Project Descriptions (Appendix A) ask whether a proposal expects to use Alaska SeaLife Center facilities in FY 98 or future years.

In order to ensure that space at the Alaska SeaLife Center is available and appropriate for the research planned, proposals that indicate a need for the Alaska SeaLife Center facilities in FY 98 or future years will be forwarded to the Center's scientific review committee for screening before the Trustee Council makes its funding decisions. To expedite this process, proposers are encouraged to discuss their proposed use of the Center with its scientific director, Dr. Mike Castellini, before submitting a FY 97 proposal to the Trustee Council.

Dr. Castellini's address is Institute of Marine Sciences, University of Alaska Fairbanks, Fairbanks, Alaska 99775 (907-474-6825, email address is: [mikec@ims.alaska.edu](mailto:mikec@ims.alaska.edu)).

The Alaska SeaLife Center is a non-profit research center being built in Seward, about 120 miles south of Anchorage. The site is situated on the Gulf of Alaska at the head of Resurrection Bay on the Kenai Peninsula coast, west of Prince William Sound. The Alaska SeaLife Center's scientific program will be managed by the University of Alaska Fairbanks, but the facility itself will be owned by the City of Seward and operated on behalf of the city by the Seward Association for the Advancement of Marine Science.

***Mission.*** The Alaska SeaLife Center is dedicated to the study of the marine ecosystem of the northern Gulf of Alaska through a combined program of research, rehabilitation, and public education. The focus will be on Alaskan marine mammals, marine birds, and fish, and especially on species injured by the oil spill. The scientific plan for the Alaska SeaLife Center is to establish a research facility where visiting and resident scientists can work together on issues relevant to ecosystem questions and management in Alaska and elsewhere.

***Facilities.*** The Alaska SeaLife Center will be a large research facility with three major components: (1) a section dedicated to research, including 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 Alaska SeaLife Center's scientific program, see the species involved, and learn about the marine environment and research in Alaska.

Trustee Council support is limited to the research components of the Alaska SeaLife Center. The public education components will be developed using private contributions or other sources of funding.

The Alaska SeaLife Center is designed to simultaneously support multiple research projects. Detailed drawings of the research facilities will be available in June 1996. The Alaska SeaLife Center itself will not fund research projects, but will make facilities available to scientific investigators for a modest bench fee. The facility will also have office, conference, and library space available for resident and visiting scientists.

Proposers wishing to know more about the scientific program and research facilities at the Alaska SeaLife Center are encouraged to contact Dr. Castellini.

# GENERAL INSTRUCTIONS FOR SUBMITTING A PROPOSAL

---

**All proposals** must be received in the Anchorage Restoration Office by April 15, 1996. When submitting a proposal you must include:

- Three paper copies and one electronic copy of the Detailed Project Description (DPD). The instructions for completing DPDs are in Appendix A.
- Three paper copies and one electronic copy of the Detailed Budget. The instructions for completing a Detailed Budget are in Appendix B. To make it easier to fill out the forms, we will supply an IBM-formatted diskette with an Excel document for you to use. Please call the Anchorage Restoration Office for a copy. If you do not have Excel or cannot generate an electronic copy, please call the Anchorage Restoration Office to make other arrangements before April 15, 1996.
- All proposals should be sent to:  
Exxon Valdez Oil Spill Trustee Council  
Anchorage Restoration Office  
645 G Street  
Anchorage, AK 99501  
Telephone 907-278-8012  
(Toll free within Alaska 800-478-7745; outside Alaska 800-283-7745)
- The electronic copy may be sent by e-mail to Sandra Schubert at the following address:  
ospic@alaska.net  
Electronic copies must be in WordPerfect for DOS or WordPerfect for Windows.
- No faxes, please.

<p>An annual or final report for each project funded by the Trustee Council in FY 95 is also due April 15, 1996 unless other arrangements have been made with the Anchorage Restoration Office. <i>Be aware: FY 97 proposals will not be reviewed for any principal investigator who has an overdue report.</i></p>
---

**If you have a restoration idea that you would like the Trustee Council to consider but you do not want to implement it yourself**, send your idea to the Council. Provide as much of the information described in Appendix A as you can. One of the Trustee Council agencies may be asked to further develop the proposal so that it can be fully evaluated in terms of its scientific methodology and cost.

**If you want to submit a proposal, and you represent a private organization or non-profit group,** the Trustee Council welcomes your proposal. The Council encourages the active participation of individuals and groups outside state and federal agencies. However, requirements of state and federal law make it difficult to fund a private entity to implement a proposal without further competitive solicitation. This further solicitation may occur through a Request for Proposals issued *after* the Council approves funding for a project. Under this approach, you would have to compete against other bidders for the funds to implement your proposal. For research and monitoring projects, the Trustee Council, in cooperation with the National Oceanic and Atmospheric Administration, is providing an alternative method of competitive solicitation for private parties, the Broad Agency Announcement (BAA). For successful proposers who apply under the BAA, contract negotiations may begin directly without a further competitive solicitation.

**A Competitive Solicitation: 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.

Research or monitoring proposals submitted to NOAA under the BAA will be evaluated by the Trustee Council at the same time as others submitted to the Council. Proposals submitted as part of the BAA may be funded by the Council. A decision to approve or disapprove funding will be made in late August 1996. If funding is approved, NOAA may begin contract negotiations directly with the proposer without pursuing a further competitive solicitation. In some cases, a further competitive solicitation may be recommended.

*Please note:* State and federal agencies, including the University of Alaska, can be funded directly by the Trustee Council and should not submit a proposal under the BAA.

**Private sector or non-profit groups wishing to submit a proposal under the BAA must submit their proposals to NOAA.** In addition to the three copies of the Detailed Project Description and Detailed Budget that must be submitted to the Anchorage Restoration Office, a copy of the DPD and budget must be submitted to NOAA by **April 15, 1996**. The words "submitted under the BAA" must be part of the project title. See Appendices A and B for instructions concerning the DPD and budget.

More information, including proposal requirements and evaluation criteria, is available in the Broad Agency Announcement itself. Interested parties may obtain copies of BAA 52ABNF600073 directly from NOAA:

NOAA, WASC, Procurement Division, WC33  
7600 Sand Point Way NE, Bin C15700  
Seattle, WA 98115  
(206) 526-6262

Questions should be directed to Heide Sickles.



**Summary of Requirements for Principal Investigators.** When preparing your proposal, please remember that principal investigators funded by the *Exxon Valdez* Trustee Council are required to do the following:

- *Attend the Annual Restoration Workshop.* Next year's workshop is tentatively scheduled in Anchorage for January 22-25, 1997. All principal investigators are asked to attend. Those who conducted work in FY 96 will be asked to submit an abstract describing the FY 96 work. They may also be asked to present a poster or give a presentation at the workshop. Please include time and travel funds in your budget to attend this four-day conference in Anchorage.
- *Possibly attend a technical review session.* In the past, the Trustee Council's Chief Scientist has scheduled workshops on many of the Council's areas of research. Review sessions are often held in the fall, usually in Anchorage, but may occur at other times and at other locations. Selection of the date of the workshop takes into account investigators' schedules and advance notice is given. Please include time and travel funds in your budget to attend a two-day review session in Anchorage.
- *Prepare an annual or final report* which must be submitted by April 15 of each year. A report on work funded for FY 97 is due April 15, 1998. (See *Procedures for the Preparation and Distribution of Reports* available from the Anchorage Restoration Office).
- *Respond to peer review comments, if any,* on your project's proposal, and on the final report.
- *Provide a progress report* to the Anchorage Restoration Office four times a year for the Quarterly Status Report. The report is designed to track whether your project milestones are being met and to flag any significant problems being encountered. The report typically requires only a few sentences on a form supplied by the Anchorage Restoration Office.
- *Involve residents of spill-area communities* in the planning and implementation of your project, as appropriate. The DPD instructions (Appendix A) require a description of your plan to involve communities. For more information on the Trustee Council's commitment to community involvement, see page 6.

**Coordination with the Alaska SeaLife Center.** Proposals that indicate a need for Alaska SeaLife Center facilities in FY 98 or future years will be forwarded to the Center's scientific review committee for screening before the Trustee Council makes its funding decisions. This review is designed to ensure that the Alaska SeaLife Center can accommodate the proposal's future needs. To expedite this process, proposers are encouraged to discuss their proposed use of the Alaska SeaLife Center with its scientific director, Dr. Mike Castellini, before submitting an FY 97 proposal to the Trustee Council. Dr. Castellini's address is Institute of Marine Sciences, University of Alaska Fairbanks, Fairbanks, Alaska 99775 (907-474-6825). Dr. Castellini's email address is: [mikec@ims.alaska.edu](mailto:mikec@ims.alaska.edu). For more information on the Alaska SeaLife Center see page 7.

## Evaluation of Proposals

**Scientific Review.** All proposals received by the Trustee Council, including those received by NOAA under the Broad Agency Announcement, will be subject to independent scientific review. The scientific review is conducted by the Trustee Council's Chief Scientist and nationally recognized scientific reviewers who are familiar with the Trustee Council process and past restoration work and who are experts in their individual scientific fields.

The scientific reviewers evaluate proposals according to the following criteria:

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

**Policy, Budget, and Legal Review.** In addition to scientific review, proposals are examined by the Trustee Council's Public Advisory Group, a 17-member group representing a cross-section of interest groups affected by the spill. Council staff also conducts a policy, budget, and legal review of the projects, which includes an evaluation of proposed community involvement efforts.

**Public Comment and Funding Decision.** The Council's Executive Director uses the recommendations of the independent scientific review, the Public Advisory Group, and staff as well as public comment to compile a draft plan that describes projects recommended for funding. That document, the Draft FY 97 Work Plan, is expected to be published in June 1996.

The Draft FY 97 Work Plan will be subject to further review and comment from the public, independent scientists, the Public Advisory Group, and staff. The Trustee Council is expected to decide upon the final FY 97 Work Plan in late August 1996. Unanimous agreement of all six state and federal Trustee Council members is required to fund a proposal.

## Questions about Submitting Proposals

If you have questions about submitting a proposal or about any other aspect of the restoration process, please call the Anchorage Restoration Office at 907-278-8012 (or 1-800-478-7745 toll free within Alaska; or 1-800-283-7745 toll free outside Alaska).

Public meetings will be held this spring to report on the Trustee Council's restoration program. These meetings will be held in communities throughout the spill area and will be advertised in local newspapers and the Trustee Council newsletter. You may also obtain a list of the meeting dates from the Anchorage Restoration Office. Staff at the meetings will be able to answer questions about this Invitation.





# RESTORATION STRATEGIES AND INVITATION

---

This part of the Invitation presents restoration strategies and invites proposals for FY 97. Each of the resource "clusters," such as pink salmon or subsistence, has a one- to three-page entry that looks like this page: a section called "Strategies for FY 97 and Beyond" and a section called "Invitation for FY 97."

## STRATEGIES FOR FY 97 AND BEYOND

The *Restoration Plan*, adopted in 1994, established strategies for achieving recovery objectives. This Invitation updates the restoration strategies to reflect the results of extensive scientific research and review that have occurred over the last two years. Each year through its annual work plan the Trustee Council revises restoration strategies, if necessary, and decides which strategies to implement.

## INVITATION FOR FY 97

For each resource cluster, this section describes the projects the Council expects to be continued from FY 96 and invites proposals for work planned for FY 97. Before next year's funding decisions are made, the Council will reassess funding needs based on each project's progress, information gained during the year, and an assessment of restoration needs and project budgets. Nevertheless, the Council's FY 96 actions provide a measure of what is expected in future years. See Appendix C 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 96.

When the Council approved projects for FY 96, it did so with the expectation that the projects would be funded to completion. In FY 96, the Council approved \$18.2 million for monitoring, research and general restoration projects. The Council expects to approve approximately \$16 million for FY 97. Monitoring, research, and general restoration projects expected to continue from FY 96 are estimated to cost about \$14 million in FY 97. If all FY 96 projects continue as expected into the next year, approximately \$2 million would be available for new proposals in FY 97.

### *Other Projects.*

Each resource cluster includes, in a shaded box, text describing other projects for which proposals are invited. In addition, the Trustee 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 spill.



# Pink Salmon

Injuries to populations of wild pink salmon are difficult to detect because of the natural variation in their run strength. In the years preceding the spill, the total return varied widely from year to year, from a maximum return of 21 million fish in 1984 to a minimum of 1.8 million fish in 1988. Because of this large variation, research to understand the oil spill injury has focused on understanding the injury to pre-adult life stages and on investigating the ecological factors that influence the strength of these adult returns. In addition, the restoration program has provided new information and tools for fisheries managers to use to protect injured runs and supplemented pink salmon populations for commercial, sport, and subsistence use.

## STRATEGIES FOR FY 97 AND BEYOND

*Research and Monitor the Toxic Effect of Oil (1076, 191A).* Two projects continue to provide information to better understand the direct injury of oil to pink salmon and to monitor their recovery.

*Monitor Egg Mortality of Wild Pink Salmon (191A).* After the oil spill, research documented that pink salmon eggs in oiled streams were dying at higher rates than in unoiled streams. Monitoring of the even-year run in 1994 and of the odd-year run in 1995 showed that the levels of egg mortalities in oiled streams had returned to levels that were not statistically different from those of the unoiled streams. Monitoring is expected to continue until egg mortalities in oiled and unoiled streams are not significantly different for two years for each of the odd- and even-year runs.

*Heritability of Egg Mortality and Effect of Oil on Straying (1076).* Under this project, researchers expose fertilized eggs to oil in a simulated intertidal gravel environment. Investigators have found a dose-related relationship between egg mortality and exposure to oil; in other words, the greater the exposure, the greater the mortality. In addition, they have found that for some levels of oil exposure, when adults that had been exposed to oil as eggs grew up and spawned, their eggs died at a higher-than-normal rate. Finally, the study also investigates the effect of oil on straying, which is the tendency of adult pink salmon to return to streams other than where they were spawned. Results of this component of the study are not yet available. The study is expected to conclude in FY 98.

*Provide Stock Separation and Management Information (186, 188, 190, 196).* These projects provide better information for fisheries managers in order to prevent overfishing of injured pink salmon runs.

*Marking Salmon — Coded Wire Tag & Otolith Thermal Marking (186, 188).* These projects are funded jointly by the Trustee Council, the Alaska Department of Fish and Game, and non-profit fisheries groups. The projects mark salmon to allow fisheries managers to change harvest limits, locations, and timing to direct commercial harvest away from injured wild stocks. The projects have developed the more accurate and efficient otolith marking technique to replace the original coded-wire tag technique. Fisheries managers believe that the otolith technique will permanently increase their

ability to protect injured pink salmon stocks in Prince William Sound. Responsibility for long-term funding is shifting to other organizations. FY 99 is expected to be the last year of Council funding for these projects.

*Genetics and Stock Structure Investigations (\190, \196).* FY 96 is the third year of a five-year-program to determine the geographic extent of genetic differences in Prince William Sound pink salmon. Knowing if there are one or many stocks among pink salmon in the Sound will help refine pink salmon management areas and goals (\196). Project \190, which began in FY 96, is the beginning of a long-term program to construct a detailed genetic linkage map for pink salmon. The Trustee Council has agreed to provide at least two years of funding for this project and expects proposers to seek additional funding from other sources for future years.

*Supplement Populations (\139A1, A2).* These projects improve fish habitat and monitor the success of supplementation projects funded by the Trustee Council in prior years. The projects use barrier by-passes and spawning channels to extend pink, coho, and chum salmon habitat on Kodiak Island and the Kenai Peninsula. The projects are designed to provide replacement fish primarily for commercial fishermen. The last year of funding for these projects is expected to be FY 98 (\139A1) and FY 00 (\139A2).

*Investigate Ecological Factors: Sound Ecosystem Assessment (\320).* A multi-year ecological investigation of the factors influencing populations of Prince William Sound pink salmon and Pacific herring is described on page 23.

#### INVITATION FOR FY 97

The Trustee Council expects that the following projects will be continued from FY 96 and invites proposals for work planned in FY 97. The FY 97 costs of the projects are estimated below. Proposers should be aware that the Alaska SeaLife Center will be open for use by researchers in 1998. The facility is designed to accommodate research on fish. (See page 7 for more information.)

FY 97	\076 Oiled Incubation Substrate on Straying and Survival	\$619,000	
	\139A1 Little Waterfall Barrier Bypass Improvement	\$35,000	
	\139A2 Port Dick Spawning Channel	\$37,000	
	\186 Coded Wire Tag Recoveries - PWS Pink Salmon	\$260,500	
	\188 Otolith Thermal Marking of Hatchery-reared Pinks	\$100,500	
	\190 Linkage Map for Pink Salmon Genome	\$250,000	
	\191A Oil-related Embryo Mortalities	\$407,000	
	\196 Genetic Structure of PWS Pink Salmon	\$178,500	
	<b>Total FY 97:</b>		<b>\$1,887,500</b>



***Other Projects.***

***Analysis of Field Samples from Oiled Streams.*** In FY 97, the Trustee Council anticipates reconsidering a proposal submitted in FY 96 as 96194. This project would tie the actual concentrations of oil obtained from field samples in 1989, 1990, and 1995 in pink salmon streams to the observed mortalities. It would complete the understanding of the injury to pink salmon by documenting the initial exposure level and the recovery of the habitat.

***Other.*** No other projects have been identified as priorities, but proposals for additional projects are welcome. Any new supplementation proposal must comply with the Trustee Council's Supplementation Criteria, 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 during 1994 and 1995. The Prince William Sound commercial herring fishery was curtailed in 1993 and has not opened since then. Pacific herring is also an important food source for injured predators, such as harbor seals and some seabirds, that are not recovering. The sharp decline in the Prince William Sound herring population may be a factor limiting recovery of these resources.

The Pacific herring program focuses on investigating the causes of the crash and prospects for recovery, on providing management information to help fishery managers protect injured stocks, and on investigating the ecological factors that influence Prince William Sound herring populations.

## STRATEGIES FOR FY 97 AND BEYOND

*Investigate Causes of the Crash (\162).* Investigators have been testing two hypotheses to determine why the Prince William Sound Pacific herring population crashed. Investigators found that exposing herring eggs to crude oil in a laboratory induced early hatching, poor hatching success, reduced larval swimming, and reduced survival and size. However, investigators have found no indication that exposure of herring eggs to oil causes chromosomal damage in those herring's offspring. The project (\074) is being completed in FY 96. The second hypothesis addresses disease.

*Herring Disease (\162).* This project focuses on the causes and impact of the virus (Viral Hemorrhagic Septicemia or VHS) and the fungus (*Ichthyophonus*) that were found in herring populations after the crash. The study tests the hypothesis that oil-induced stress is linked to the disease outbreaks. The laboratory work has successfully obtained the virus and the fungus from Prince William Sound herring and cultured them in the laboratory. VHS-free herring exposed to increasing concentrations of the virus demonstrated a clear "dose response," with the first mortalities occurring four days after initial exposure. The project was first approved in FY 94 and is expected to be completed in FY 98.

*Provide Management Information (\165, \166).* Two projects provide new information and tools to increase the ability of the Alaska Department of Fish and Game to protect injured Pacific herring stocks while allowing commercial fishing to resume. The tools are being developed with Trustee Council funding but implementation will be taken over by the department.

*Genetic Stock Identification (\165).* Determining whether there are one or more stocks of Pacific herring in Prince William Sound is crucial to the success of herring management and restoration. When setting harvest limits, it is important to know whether the manager must protect one or more genetically distinct populations. Efforts to identify the stock structure in Prince William Sound were funded in FY 94, but the failure of the Pacific herring run disrupted the sampling schedule. The project was reauthorized in FY 95 and is expected to finish in FY 98.

*Herring Natal Habitats* (\166). This project investigates survival of juvenile herring and may improve the forecast of population strength. The forecast is used by managers to establish commercial harvest levels. The program began in FY 94 and is expected to begin shifting to a non-Trustee Council funding source in FY 97. The last year of Council funding will be FY 98.

*Investigate Ecological Factors: Sound Ecosystem Assessment* (\320). A multi-year ecological investigation of the factors influencing populations of Prince William Sound pink salmon and Pacific herring is described on page 23.

#### INVITATION FOR FY 97

The Trustee Council expects that the following projects will be continued from FY 96 and invites proposals for work planned in FY 97. Their FY 97 costs are estimated below. Proposers should be aware that the Alaska SeaLife Center will be open for use by researchers in 1998. The facility is designed to accommodate research on fish. (See page 7 for more information.)

FY 97	\162 Herring Disease	\$510,600	
	\165 Genetic Discrimination of PWS Herring	\$120,000	
	\166 Herring Natal Habitats	\$300,000	
	<b>Total FY 97:</b>		<b>\$930,600</b>

#### *Other Projects.*

*Turnover in Juvenile Pacific Herring Populations.* Understanding movements of juvenile Pacific herring and the turnover of their populations at nursery areas is necessary to more fully develop models of herring growth, survival, and productivity. The Trustee Council will consider proposals, possibly using tracer technologies or other innovative techniques, to address these issues. Any proposal would need to dovetail with hypotheses being addressed through the Sound Ecosystem Assessment project (see page ##) and other on-going work on herring.

*Other.* No other projects have been identified as priorities, but proposals for additional projects are welcome.

## Sound Ecosystem Assessment (SEA) and Related Projects

A combination of events led Trustee Council scientists to recognize the need to better understand the large-scale ecosystem processes that influence the recovery from oil-spill injuries. These events included the poor returns of pink salmon in 1992 and 1993 in Prince William Sound, the collapse of the Pacific herring population in 1993 in Prince William Sound, and long-term declines of several marine bird and mammal populations. As a result, in FY 94 the Trustee Council initiated a collaborative effort known as the Sound Ecosystem Assessment (320). This project involves the University of Alaska, the Prince William Sound Science Center, the Alaska Department of Fish and Game, and other institutions.

The SEA Project is intended to explore and develop models of the processes influencing productivity of pink salmon and Pacific herring in Prince William Sound. This information is expected to benefit long-term management and recovery of salmon and herring in the Sound in several ways. For example, if the SEA Project 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. These parameters, which might be such factors as the size and timing of plankton blooms or changes in the temperature or circulation of the Gulf of Alaska, may also reflect changes in the broader ecosystem. This information is therefore likely to 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 97 AND BEYOND

*Investigate Ecological Factors: Sound Ecosystem Assessment (SEA) Project (320).* The first phase of the SEA project, which was conducted in FY 94 and FY 95, consisted of intensive field work. These field studies will continue at some level in FY 97. As the project develops, however, an increasingly large fraction of the effort will be devoted to the development and testing of computer models that explain and predict ecological processes in Prince William Sound. The individual components of the SEA Project are organized into three overlapping working groups: Ocean State and Plankton Dynamics, Pink Salmon Recruitment Dynamics, and Pacific Herring Recruitment Dynamics.

*Ocean State and Plankton Dynamics.* Several studies are mapping the distribution and seasonal changes of physical factors, such as sea temperature, salinity, and currents, as well as blooms of phyto- (plant) and zoo- (animal) plankton. The timing of the annual spring phytoplankton bloom is governed by such physical conditions as storms and temperature, and its exact timing varies from year to year. The current thinking is that Prince William Sound functions both like a river and a lake in terms of its relationship to the Gulf of Alaska. The southern part of the Sound is more river-like in that currents and plankton enter the Sound through Hinchinbrook Entrance and leave through Montague Strait. The northern part of the Sound is more lake-like, with weaker connections to the open Gulf. These different physical characteristics influence

the timing, location, and abundance of plankton in the different parts of the Sound and strongly affect the growth and survival of pink salmon and Pacific herring and the productivity of the entire ecosystem.

*Pink Salmon Recruitment Dynamics.* The timing and abundance of phytoplankton, and especially of the zooplankton bloom that follows about two weeks after the phytoplankton bloom, are critical factors in the growth and survival of juvenile salmon and Pacific herring. Zooplankton, especially large copepods, are important prey for juvenile pink salmon, but they also are important to predatory fish, such as walleye pollock, which mostly inhabit the offshore parts of the Sound. One of the hypotheses being tested is whether fewer juvenile salmon are consumed by pollock in years when large copepods are abundant, with the pollock using the juvenile salmon for food only when the abundance of copepods is low (i.e., "prey switching"). If so, the abundance of large copepods available to pollock will influence how many juvenile salmon make it out of the Sound each year. One of the results from the SEA Project in 1995 was that pink salmon fry reared to larger-than-usual size in hatcheries and released in 1994 had greatly increased survival rates compared to the smaller fry that are typically released in hatchery operations. Although raising larger fry is complex (e.g., there is greater potential for disease and stress problems) and costly, larger fry may be better able to escape predation and thus have higher survival rates as they leave the Sound for the Gulf of Alaska. If these initial results are confirmed by additional research, it may have important implications for hatchery management.

*Pacific Herring Recruitment Dynamics.* Most efforts of the SEA Project have been devoted to physical and biological oceanography that relate to survival of pink salmon. However, the emphasis on Pacific herring will greatly increase in FY 96. Aerial surveys in FY 95 indicated there are at least four areas with major concentrations of juvenile Pacific herring: Port Gravina; northern Montague Island and Green Island; southwestern Prince William Sound including Whale and Jackpot bays and Bainbridge Island; and Resurrection and Aialik bays on the outer Kenai Peninsula. This is the first time there has been a systematic effort to identify these critical nursery areas for herring. A key part of the future work on herring is to assess the energy reserves of juvenile herring as they enter the stressful overwintering period and to understand what factors contribute to their survival until the following spring when the next plankton bloom once again provides sufficient food for growth.

*Monitor Pristane Levels (1995).* Pristane is a hydrocarbon which is naturally synthesized from chlorophyll by certain plant-eating copepods. These copepods are the only proven marine source of pristane. This fact means that 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. Thus, these results will be used to evaluate the prey-switching hypothesis of the SEA Project as described above. In addition, monitoring pristane levels 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, and it is expected to conclude in FY 2000.



## INVITATION FOR FY 97

The Trustee Council expects that the following projects will be continued from FY 96 and invites proposals for work planned in FY 97. Their FY 97 costs are estimated below. Proposers should be aware that the Alaska SeaLife Center will be open for use by researchers in 1998. The facility is designed to accommodate research on fish, marine birds, and marine mammals. (See page 7 for more information.)

FY 97	\195 Pristane Monitoring	\$85,000
	\320 SEA Program	\$3,600,000
	<b>Total FY 97:</b>	<b>\$3,685,000</b>

*Other Projects.* No other projects have been identified as priorities, but proposals for additional projects are welcome.



# Sockeye Salmon

Commercial fishing for sockeye salmon in 1989 was curtailed in many locations throughout the spill area. As a result, there was higher-than-usual escapement of spawning sockeye salmon to a number of lakes. Research indicates that the 1989 overescapement reduced the nursery capability of Kenai and Skilak lakes and also affected the productivity of Frazer, Akalura, and Afognak lake systems in the Kodiak Archipelago.

## STRATEGIES FOR FY 97 AND BEYOND

### KENAI/SKILAK SOCKEYE SALMON

The 1989 escapement levels for sockeye salmon in the Kenai River drainage were more than twice the levels thought to be optimal for the system. Nineteen eighty-nine was the third consecutive year of high escapement to the Kenai River system, due to the *Glacier Bay* oil spill in 1987 and naturally high escapement in 1988. The majority of sockeye in the 1989 year class returned to spawn in 1994 and 1995 and showed very low return-per-spawner ratios, which is evidence of the effect of 1989 and previous overescapements.

The sockeye salmon program for the Kenai River is intended to permanently increase the protection of the run by providing better tools to manage the escapement, a better understanding of the mechanisms underlying the problems caused by events such as overescapement, and habitat protection.

*Provide Stock Separation and Management Information* (1255). This project began in 1992 and developed techniques to identify the number of sockeye salmon in lower Cook Inlet and the portion of the upper Cook Inlet commercial catch that comes from different sockeye runs. The techniques were successfully tested in 1994 and implemented in 1995. This information allows fishery managers to concentrate the fishery on uninjured sockeye runs. In 1995 the techniques were in large part responsible for the fact that the Kenai run was able to meet escapement goals while commercial fishing continued in the Inlet. FY 97 is expected to be the last year of Trustee Council funding.

*Research Overescapement* (1258). Research to understand the mechanism and extent of the overescapement injury is expected to be completed in FY 97. If confirmed, the results of the 1995 limnological research explain how high escapement affects the nursery capacity of Kenai, Skilak, and other glacial lakes. The information provides important insights into the biological parameters that influence production in these lakes and will be useful for predicting adult returns.

*Protect and Improve Habitat.* The Trustee Council is providing significant funds for habitat protection and improvements along the Kenai River. (See Habitat Improvement, page 49; and Habitat Protection and Acquisition, page 55.) Funding for these activities is expected to continue over the next few years and will increase the level of protection afforded the Kenai River habitat.

## KODIAK ARCHIPELAGO

In the Kodiak Archipelago, the Red, Frazer, Akalura, and Afognak lake systems received significant overescapement of sockeye salmon in 1989. Subsequent monitoring of the biological parameters and smolt outmigrations in the lakes indicated that little long-term injury resulted for the Frazer and Afognak lake systems.

In the case of Red and Akalura lakes, Council-funded monitoring of rearing-lake productivities and smolt migrations documented losses in both categories following the large overescapement events of 1989. Nursery lake productivities appear to have returned to normal levels, but smolt production from both systems continues to be low. Although the low smolt production is of concern, non-oil related factors have also been identified in lowering the smolt production. Because of the uncertainty about the degree to which oil-related factors are responsible for the current smolt production, FY 96 was the last year of Trustee Council field work for this project.

## OTHER LOCATIONS

In FY 96, the Trustee Council sponsored a one-year study (96048) to synthesize existing information on sockeye overescapement, based on samples of scales from adult sockeye salmon. This analysis will include Chignik Lake (located on the Alaska Peninsula), which has not previously been studied following a large overescapement after the oil spill. Further funding for this study is not anticipated.

*Supplement Populations in Coghill Lake (1259).* Coghill Lake has been a mainstay of the commercial, sport, and subsistence sockeye fisheries in Prince William Sound. Drastic declines in recent years have put production at dangerously low levels. FY 96 is the fourth year of a five-year-effort to fertilize the lake to restore its productivity to the lake's historic levels. As a result of the first three years of fertilization, phosphorus, algae, and zooplankton levels in the lake have increased, as has production of sockeye smolts. The Alaska Department of Fish and Game has also established a migration corridor through the Prince William Sound mixed-stock fishery to increase the numbers of adult sockeye returning to the lake. Supplementation of Coghill Lake is being conducted to provide replacement fish for the sport, commercial, and subsistence fisheries of the Sound.

## INVITATION FOR FY 97

The Trustee Council expects that the following projects will be continued from FY 96 and invites proposals for work planned in FY 97. Their FY 97 costs are estimated below. Proposers should be aware that the Alaska SeaLife Center will be open for use by researchers in 1998. The facility is designed to accommodate research on fish. (See page 7 for more information.)

FY 97	\255 Kenai River Sockeye Salmon Restoration	\$100,000	
	\258 Sockeye Salmon Overescapement	\$150,000	
	\259 Coghill Lake Sockeye Salmon	\$141,000	
	<b>Total FY 97:</b>		<b>\$391,000</b>

*Other Projects.* No other projects have been identified as priorities, but proposals for additional projects are welcome.

# Cutthroat Trout and Dolly Varden

Prince William Sound is the northern- and western-most limit of the cutthroat trout's range, and this species does not exist elsewhere in the spill area. The cutthroat stocks known to exist within the Sound are few, rarely more than 1,000 fish, and are geographically isolated from each other. Studies conducted from 1989 to 1991 indicated that cutthroat trout and Dolly Varden growth rates were less in oiled than in unoiled areas.

Past restoration projects have emphasized supplementation of wild stocks of cutthroat trout to augment their small populations. In FY 96, the program focused on monitoring previously constructed habitat improvements and on research on the species' life history in order to enhance management of injured populations.

## STRATEGIES FOR FY 97 AND BEYOND

*Research and Monitor Populations (145).* In FY 96 the Trustee Council authorized the first year of a three-year program to determine the relationship between resident and anadromous cutthroat trout. The results of this research will provide information that will allow the Alaska Department of Fish and Game to better manage the species in Prince William Sound. Additional supplementation and monitoring of cutthroat and Dolly Varden populations to determine recovery are expected to await the results of this project.

## INVITATION FOR FY 97

The Trustee Council expects that Project 145 will be continued from FY 96 and invites a proposal for work planned in FY 97. Its FY 97 cost is estimated below. Proposers should be aware that the Alaska SeaLife Center will be open for use by researchers in 1998. The facility is designed to accommodate research on fish. (See page 7 for more information.)

FY 97 145 Anadromous and Resident Populations

\$200,000

### *Other Projects.*

*Population Supplementation (1043B).* Four previous projects to provide access to additional rearing habitat for cutthroat trout and Dolly Varden in Prince William Sound may require additional monitoring to determine their physical and biological success. The Trustee Council will evaluate the need for additional monitoring if a request is submitted in FY 97 or future years.

*Other.* No other projects have been identified as priorities, but proposals for additional projects are welcome. Any new supplementation proposal must comply with the Trustee Council's supplementation criteria, available from the Anchorage Restoration Office.



## Marine Mammals (harbor seals and killer whales)

Projects discussed in this section relate to harbor seals and killer whales. Although sea otters were also injured, they are discussed in the Nearshore Ecosystem section (page 33).

### STRATEGIES FOR FY 97 AND BEYOND

*Monitor Harbor Seals and Research the Decline in Harbor Seals (1001, 1064, 1170).* Harbor seal populations in Prince William Sound were declining before the oil spill, and have continued to decline since the spill at an annual rate of about six percent. The decline was greater in oiled areas than in unoiled areas. The injuries to harbor seals caused by the spill may have added to the earlier decline. In FY 95 and FY 96 the Trustee Council funded research into possible causes of the decline, including disease, reproduction, food limitations, killer whale predation, and mortality caused by humans (incidental take, subsistence harvest). The Council anticipates that field work and data analysis on the research components will continue in FY 97 and conclude in FY 98. Harbor seal monitoring will conclude in FY 99.

### INVITATION FOR FY 97

The Trustee Council expects that the following projects will be continued from FY 96 and invites proposals for work planned for FY 97. The FY 97 costs of these projects are estimated below. Proposers should be aware that the Alaska SeaLife Center will be open for use by researchers in 1998. The facility is designed to accommodate research on marine mammals. (See page 7 for more information.)

FY 97	1001 Condition and Health of Harbor Seals	\$192,300	
	1064 Monitoring of Harbor Seals in PWS	\$347,000	
	1170 Isotope Ratio Studies of Marine Mammals	\$148,000	
	Total FY 97:		\$687,300

#### *Other Projects.*

*Monitor Killer Whales (1012).* The AB pod of killer whales in Prince William Sound has not yet recovered and may never again regain its former size. Fourteen whales disappeared in 1989-90. Although four killer whale calves were added to the AB pod during 1992-94, surveys in 1994 and 1995 indicate the loss of five more whales. Continued monitoring of the AB pod can help answer questions about the long-term effect of losses of killer whales at the time of the spill. The Trustee Council has not made a multi-year commitment to killer whale monitoring, but will consider a proposal for FY 97.

*Other.* No other projects have been identified as priorities, but proposals for additional projects are welcome.





## Nearshore Ecosystem Projects

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

The nearshore ecosystem includes the community of plants and animals that inhabit the intertidal and shallow subtidal waters along shoreline. Much of the oil spilled by the *Exxon Valdez* was deposited in the nearshore ecosystem, and additional disturbances of the nearshore ecosystem occurred during clean-up activities.

Prior to FY 95, nearshore projects funded by the Trustee Council focused primarily on research and monitoring aimed at understanding the injury to and recovery status of individual nearshore species. In FY 95, many of these individual projects were integrated into an ecosystem study. The Nearshore Vertebrate Predator project, described below, takes a multi-species approach to assess potential mechanisms constraining recovery of the nearshore ecosystem.

Additional information on clams is provided in the Subsistence section (page 43). Additional information on pigeon guillemots is provided in the Seabird/Forage Fish section (page 37).

### STRATEGIES FOR FY 97 AND BEYOND

*Research Mechanisms Constraining Recovery of the Nearshore Ecosystem: Nearshore Vertebrate Predator (NVP) Project (1025).* The NVP project is examining whether or not sea otters, river otters, harlequin ducks, and pigeon guillemots are recovering and whether recruitment processes, continuing exposure to oil, or food availability are constraining recovery. The food-availability component of the project will examine population densities and size classes of the resources' prey, including mussels and clams. The project also will gather information on the numbers and distribution of several birds (black oystercatchers, glaucous-winged gulls, surfbirds, and black turnstones) and how their consumption of mussels and sea urchins affects food available to sea otters and harlequin ducks. NVP began as a pilot project in FY 95. Field work will be conducted through FY 98, with data analysis and report writing in FY 99.

Nearshore studies funded by the Trustee Council to date have found:

*Sea otters:* Surveys conducted in 1993 and 1994 found no statistically significant evidence of a population increase of sea otters since the spill. Based on the insights of local observers, it is evident that the sea otter is abundant in much of Prince William Sound. There is no evidence that recovery has occurred, however, in the heavily oiled area around northern Knight Island in Prince William Sound.

*River otters:* Studies conducted during 1989-91 found several differences between river otters in oiled and unoled areas in Prince William Sound, including biochemical evidence of exposure to hydrocarbons or other sources of stress, reduced diversity in diet, reduced body size, and increased territory size.

*Harlequin ducks:* No harlequin broods were observed in oiled areas of western Prince William Sound in FY 94 or FY 95 and there continues to be concern about poor reproduction.

*Pigeon guillemots:* Surveys of pigeon guillemots have not shown any statistically significant evidence of a post-spill population increase.

*Black oystercatchers:* In comparison with black oystercatchers on the largely unoiled Montague Island, oystercatchers at heavily oiled Green Island had reduced hatching success in 1989 and their chicks gained weight more slowly during 1991-93.

*Mussels:* At least 70 mussel beds in Prince William Sound still have oil residue, and 12 of these were manually cleaned on an experimental basis in FY 94. Monitoring of these beds in FY 95 found a 98 percent reduction in oil in the replacement sediments, compared to what had been there before. Hydrocarbon concentrations in mussel beds along the outer Kenai Peninsula coast, the Alaska Peninsula, and Kodiak Archipelago are generally lower than for sites in the Sound, but at some sites substantial concentrations persist.

*Clams:* Littleneck clams and, to a lesser extent, butter clams were killed or suffered slower growth rates as a result of the oil spill and clean-up activities.

***Monitor Individual Nearshore Species.*** The Council anticipates concluding its genetic analysis work on harlequin ducks in FY 97. The need for additional monitoring of harlequin populations will be evaluated following review of the FY 96 field season. No additional monitoring of subtidal communities is anticipated in FY 97. Studies conducted in 1993 found that differences in the size and species composition of subtidal organisms had lessened between oiled and unoiled sites.

*Genetic Analysis of Harlequin Ducks (\161).* This project will contribute to the effort to assess the population structure of harlequin ducks by conducting genetic analyses of blood samples of harlequins in the Kodiak and Alaska Peninsula regions. Understanding whether harlequins within the spill area are one population (with ducks moving among areas and interbreeding with ducks in other areas) or several distinct subpopulations will influence whether recovery can occur only as a function of recruitment or also through immigration of birds from unoiled areas. This information has direct implications for management of this harvested species. The project began in FY 96 and will conclude in FY 97.

## INVITATION FOR FY 97

The Trustee Council expects that the following projects will be continued from FY 96 and invites proposals for work planned for FY 97. The FY 97 costs of these projects are estimated below.

FY 97	\025 Nearshore Vertebrate Predators	\$1,669,400
	\161 Harlequin Genetic Stock I.D.	\$78,900
Total FY 97:		\$1,748,300

### *Other Projects.*

**Harlequin Duck Monitoring.** Since FY 92 the Trustee Council has funded the monitoring of harlequin ducks in Prince William Sound to determine reproductive success, population structure, and productivity. The need for monitoring in FY 97 and beyond will be evaluated following review of the FY 96 field season.

**Intertidal Monitoring.** The Council is interested in additional monitoring of intertidal communities. The Council is hoping to receive a cost-effective proposal that makes good use of previous studies and gives careful consideration to which species, tide levels, and geographic sites should be monitored. Studies to date have found that populations of *Fucus gardneri*, the dominant intertidal seaweed, are increasing, although populations in the upper intertidal zone remain lower at oiled sites than at unoiled sites. Numbers of many other species of intertidal invertebrate fauna also have increased since the spill.

**Black Oystercatcher Monitoring.** The Council will consider additional monitoring of black oystercatchers in FY 98, following a review of the boat surveys being conducted in FY 96 and the results-to-date of the NVP project.

**Other.** No other projects have been identified as priorities, but proposals for additional projects are welcome.



## Seabird/Forage Fish & Related Bird Projects

(bald eagles, common murres, marbled murrelets, pigeon guillemots)

There is evidence that populations of several fish-eating marine birds and mammals, including marbled murrelets, pigeon guillemots, and harbor seals, had declined in Prince William Sound and the Gulf of Alaska before the oil spill. The injuries to these species caused by the spill added to the earlier declines, but it is the underlying causes of the pre-spill declines that may now be limiting their recovery from the spill. The causes of the pre-spill declines are not known, but changes in the availability and quality of the small fish on which these species forage are a possibility.

The Trustee Council is sponsoring two studies that investigate whether food is limiting recovery--the Apex Predator Experiment (163) and the Nearshore Vertebrate Predator Project (1025; see page 33). Both of these projects include a strong focus on the pigeon guillemot. In addition, the Council has sponsored related projects monitoring populations and productivity of common murres, marbled murrelets, Kittlitz's murrelets, and bald eagles.

### STRATEGIES FOR FY 97 AND BEYOND

***Research the Link Between Forage Fish and Seabird Productivity: Apex Predator Experiment (APEX, 163).*** A pilot study on the distribution of forage fish in relation to foraging seabirds was funded in FY 94 and expanded in FY 95 to include measures of productivity in seabirds in Prince William Sound and lower Cook Inlet. These pilot studies showed that the availability and quality of forage fish were correlated with productivity of guillemots and other seabirds. Biologists also have analyzed long-term trawl data from the northern Gulf of Alaska that suggest in the late 1970s there was a major change from an ecosystem dominated by shrimp to one dominated by predatory fish (e.g., pollock and cod). This information could be extremely helpful in understanding changes in populations of marine birds and marine mammals throughout the region. On the basis of these preliminary successes, the Council provided full funding for the APEX Project in FY 96 and anticipates doing so through FY 99.

***Monitor Bird Populations.*** The Trustee Council anticipates monitoring common murres in FY 97. Additional monitoring of bald eagles is not anticipated, as FY 95 surveys in Prince William Sound found that numbers of nesting bald eagles equalled or exceeded pre-spill levels. The Council believes that further field work on marbled murrelets should be integrated with the APEX project (see above), and anticipates that subsequent murrelet work will be proposed on that basis.

***Common Murre Population Monitoring (144).*** Productivity of common murres nesting in the Barren Islands was within normal bounds by 1993, but there has not been a comprehensive survey of numbers of adults at these colonies since 1994. The status of the common murre is of great interest, not only because large numbers were killed by the oil spill, but also because changes in the numbers and productivity of this species can provide important insights into the "is it food" hypothesis being tested by the APEX Project. The Trustee Council funded surveys of common murre populations in the Barren Islands in FY 96 and expects to repeat that survey in FY 97. Beyond FY 97, there probably is need to

once again survey populations and productivity at other index colonies, such as the Chiswell and Triplet islands, and at Puale Bay.

*Prince William Sound Marine Bird Surveys (1159).* The Trustee Council funded another set of March and July boat surveys of marine birds and sea otters in Prince William Sound in FY 96. These surveys provide basic monitoring data on an entire suite of marine birds (plus sea otters), and the U.S. Fish and Wildlife Service has proposed conducting such surveys every other year. The Council will evaluate the need for additional surveys following analysis of the FY 96 results. Closeout funding for the FY 96 project is anticipated for FY 97.

#### INVITATION FOR FY 97

The Trustee Council expects that the following projects will be continued from FY 96 and invites proposals for work planned in FY 97. The FY 97 costs of these projects are estimated below. Proposers should be aware that the Alaska SeaLife Center will be open for use by researchers in 1998. The facility is designed to accommodate research on marine birds. (See page 7 for more information.)

FY 97	\144 Common Murre Population Monitoring	\$70,500	
	\159 Prince William Sound Marine Bird Surveys	\$25,000	
	\163 APEX Predator Experiment	\$1,750,700	
	<b>Total FY 97:</b>		<b>\$1,846,200</b>

#### *Other Projects.*

*Status and Ecology of Kittlitz's Murrelet (1142).* In FY 95, the Trustee Council added the Kittlitz's murrelet to the list of resources injured by the oil spill and funded a pilot study on the distribution and ecology of this little-known marine bird in Prince William Sound. No recovery objective has been identified for the Kittlitz's murrelet at this time, and it is hoped that the initial studies will suggest directions for future restoration work, if any. A decision on funding work on the Kittlitz's murrelet for FY 97 and beyond will be made following review of the preliminary results from FY 96.

*Bird Genetics.* The Council has expressed interest in proposals for work on the genetics of common murre, marbled murrelets, and pigeon guillemots. Genetic studies on these species, like those underway for salmon and herring, are useful to help understand the relationship between different populations. There is particular interest in achieving a better understanding of the geographic origins of the birds killed by the oil spill, and thus the linkages to populations of marine birds in the Aleutian Islands and other regions beyond the area directly affected by the oil spill.

*Other.* Proposals for other new projects are welcome, but no other projects have been identified as priorities.



## Sediments (shoreline and subtidal oil)

Since the cleanup ended in 1992, the Trustee Council has continued to monitor the degradation of oil on the beaches (shoreline oil) and oil in subtidal sediments. The last comprehensive shoreline survey of Prince William Sound was conducted in 1993. That survey indicated that surface oil decreased by 50% from 1991, and that subsurface oil decreased by at least that much. Surveys have also indicated that remaining shoreline oil in the Sound is relatively stable, and at this point, seven years after the spill, is likely to decrease slowly. In 1995, a survey team visited sites in the Kodiak area. The team focused on important community sites and those that were heavily oiled in 1989. The team found no subsurface oil, and at a very few locations found traces of tar splatter and a few small patches of weathered, scattered surface oil. Evidence from previous surveys on the Kenai and Alaska peninsulas shows a few areas of persistent surface and subsurface oil.

In the five years following the spill, subtidal sediments were sampled at various locations in Prince William Sound and the Gulf of Alaska to determine the distribution and characteristics of oil in subtidal sediments. Initially, scientists found the greatest concentration of oil at shallow depths and little evidence of oil at depths greater than 40 meters. After five years, the oil concentrations even at shallow depths had decreased to approximately background levels except offshore of heavily oiled beaches. No further subtidal monitoring is expected.

### STRATEGIES FOR FY 97 AND BEYOND

***Treat Shorelines.*** Residents of Chenega Bay have repeatedly indicated the presence of residual oil on shorelines in Prince William Sound is a significant problem for the community. They have asked the Trustee Council to fund projects to remove the remaining oil. In November 1995, the Trustee Council sponsored a workshop on Residual Shoreline Oil to answer the significant financial, environmental, social, and technical questions surrounding the issue. A report on the workshop is available from the Anchorage Restoration Office. The recommendations of the workshop will be considered by the Council in the early spring of 1996.

***Maintain the Hydrocarbon Database (1290).*** The hydrocarbon database catalogues hydrocarbon samples taken by damage assessment and restoration projects. The database provides a record of 5,400 tissue, 4,000 sediment, 350 water, and 650 other samples collected since 1989 and analyzed for the presence of hydrocarbons. Funding for the database is expected to continue throughout the life of the restoration effort. An electronic copy of the database and a user guide is available to the public, including an introductory guide to interpretation of hydrocarbon data. If you would like more information or want to access the database, contact the Auke Bay Fisheries Laboratory, National Marine Fisheries Service, National Oceanic and Atmospheric Administration, 11305 Glacier Highway, Juneau Alaska 99801; (907) 789-6600.

## INVITATION FOR FY 97

The Trustee Council expects that Project \290 will be continued from FY 96 and invites a proposal for work planned in FY 97. Its FY 97 cost is estimated below.

FY 97 \290 Hydrocarbon Database

\$121,000

### *Other Projects.*

*Monitoring of Shoreline Oil.* Proposals for further shoreline monitoring should be consistent with recommendations from the Residual Oiling Workshop. The workshop report is available from the Anchorage Restoration Office.

*Other.* Proposals for additional projects are welcome, but no other projects have been identified as priorities.

## 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 injured 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 1995, data was recovered from two injured sites in Prince William Sound, SEW-440 on Eleanor Island and SEW-488 on Knight Island. These data will provide significant insights into early occupants of the Sound.

### STRATEGIES FOR FY 97 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. If injuries have diminished to an insignificant level by FY 98, the monitoring project will be terminated. If the monitoring program reveals continuing injury, proposals for data recovery or site stabilization may be submitted.

*Site Stewardship (\149).* For FY 96, the Trustee Council approved a three-year program for Kachemak Bay, Uganik Bay, Uyak Bay, and the Chignik area of the Alaska Peninsula. The program will provide training and coordination for volunteers to monitor vandalized archaeological sites in these areas. What is learned from the project will help in the design of similar volunteer programs elsewhere in the spill area. After FY 98 expenses will be assumed by either volunteer stewards or agency budgets.

## INVITATION FOR FY 97

The Trustee Council expects that the following projects will be continued from FY 96 and invites proposals for work planned for FY 97. The FY 97 costs of these projects are estimated below.

FY 97	\007A Archaeological Site Monitoring	\$135,000	
	\149 Archaeological Site Stewardship	\$60,000	
	<b>Total FY 97:</b>		<b>\$195,000</b>

### *Other Projects.*

**Implementation of the Comprehensive Plan for Prince William Sound and Lower Cook Inlet (1154).** Residents of the spill area have expressed a strong interest in having artifacts returned to the spill area. Artifacts uncovered during the spill cleanup are presently stored at the University of Alaska-Fairbanks by agreement with landowners and Exxon Corporation. In FY 96, the Council funded Project 96154 to develop a comprehensive plan for monitoring and restoring archaeological resources in Prince William Sound and lower Cook Inlet, including strategies for storing and displaying artifacts at appropriate facilities within these areas. Chugach Heritage Foundation, the contractor for the project, expects to release a draft plan by July 15, 1996. Once the plan has been finalized and presented to the Trustee Council, the Council may issue a **separate invitation** to implement all or part of the plan. Proposals submitted in response to this future invitation must show the relationship of the proposed project to the approved plan and also demonstrate the sponsor's financial and institutional ability to maintain any facility or program proposed. **Please do not submit proposals for these activities at this time.**

**Archaeological Restoration Projects on Kodiak Island.** In FY 96, the Council received a proposal to construct a cultural center in Onzinkie on Kodiak Island. A major reason the proposal was not funded was because it needed to be better coordinated with the Alutiiq Archaeological Repository. Funding for the repository was due in part to a commitment by its sponsors to an ongoing stewardship program and to providing artifact storage and display services for the entire Kodiak region. For this reason, the Trustee Council does **not** expect new proposals for archaeological restoration on Kodiak Island. However, if proposals are submitted for site stewardship programs or artifact storage and display facilities, they must be coordinated with the Alutiiq Archaeological Repository. To coordinate with the repository, contact Philomena Knecht at (907) 486-7004 in Kodiak.

**Other.** No other projects have been identified as priorities, but proposals for additional projects are welcome. No data recovery efforts are planned for future years, although the monitoring program 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. The estimated size of the subsistence harvest in pounds per person now appears to have returned to prespill levels in some communities, according to subsistence users through household interviews conducted by the Alaska Department of Fish and Game. However, the interviews show that the relative contributions of certain important subsistence resources remain unusually low. Subsistence users also report 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 97 AND BEYOND

*Restore Injured Resources Used for Subsistence (1009).* The most important strategy for subsistence is restoration of the injured resources that are important to subsistence. In that sense, all projects which address resources used by subsistence harvesters are subsistence restoration projects. Project \009 is a project not described elsewhere that is of particular interest to subsistence users. To address the concern that octopus were depleted by the oil spill, Project \009 will determine the local density of octopus and identify the characteristics of good nearshore octopus habitat. This project began in FY 95 and is expected to close out in FY 97.

*Enhance/Replace Subsistence Resources (\127, \131, \220, \222, \225, \272).* Project \131 is aimed at reestablishing local clam populations. The other projects are aimed at increasing the availability of salmon near subsistence communities as a replacement resource for subsistence resources injured by the spill.

*Chugach Region Clam Restoration (\131).* This pilot project is designed to reestablish local populations of littleneck clams near Port Graham, Nanwalek, Tatitlek, Chenega Bay, and Ouzinkie. While the project is expected to continue through FY 99, a final decision on next year's funding will be made following an assessment of the work being done in FY 96 and a review of progress on the new shellfish hatchery. The hatchery, currently in the design phase, is funded through the Alaska Department of Fish and Game with monies from the criminal settlement with Exxon Corporation.

*Remote Release of Salmon (\127, \272).* Project \127 will create a coho salmon run near Tatitlek through the remote release of 20,000 smolt in Boulder Bay. Trustee Council funding is expected through one coho life cycle (through FY 99). Project \272 will create a chinook salmon run near the community of Chenega Bay through the remote release of 50,000 smolt in Crab Bay. Council funding is expected through one chinook life cycle (through FY 97).

*Instream Habitat Improvement Structures (\220, \222).* Project \220 will increase wild salmon production in eastern Prince William Sound through instream fisheries habitat improvement techniques, primarily the installation of log structures. The project is expected to continue in FY 97, with closeout funding in FY 98. Project \222 will open

up additional spawning and rearing habitat for salmon by installing a fish pass on a barrier falls on Anderson Creek near the village of Chenega Bay. Work will be completed on the project in FY 97.

*Port Graham Pink Salmon Project (\225).* This project will supply 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.

***Increase the Involvement of Subsistence Users in the Restoration Process.*** Over the last few years, the Council has taken steps to increase the involvement of spill-area communities in the restoration process. These steps include: holding meetings in spill-area communities to solicit ideas and priorities for restoration of subsistence resources (94/95428); hiring community facilitators in Tatitlek, Chenega Bay, and Port Graham (95052); hiring a spill-area-wide community coordinator and providing funds to hire community facilitators in Nanwalek, Cordova, Seward, Valdez, Kodiak region, and Alaska Peninsula region (96052); sponsoring a Community Conference on Subsistence and the Oil Spill (95138); funding an effort to involve subsistence hunters in harbor seal management (94/95/96244); funding a pilot program to involve students of the Chugach School District in restoration projects (96210); and funding production of a documentary presenting an indigenous hunter's perspective on harbor seal ecology (96214). In addition, the theme of the 1996 Annual Restoration Workshop was integrating traditional ecological knowledge and western science.

These projects, or projects with similar objectives, are expected to continue throughout the life of the restoration program.

***Test for Food Safety.*** Results of tests on food samples conducted during 1989-94 indicated that most resources contained no or very low concentrations of petroleum hydrocarbons (that is, levels that pose no risk to human health). However, residual oil exists on some beaches near subsistence communities, and users continue to voice concerns about the safety of subsistence foods. In FY 95, volunteers were trained in 19 communities in the spill area to preserve and ship samples of abnormal resources (animals that appear diseased or malformed) to participating scientists for analysis (95279). In addition, a resource abnormalities hotline was established at the Alaska Department of Fish and Game. In FY 96, funding was provided to continue the hotline, the shipment of samples, and the replacement of sampling kit components (96052). The need for funding in FY 97 and beyond will be determined following a review of the FY 96 project.

## INVITATION FOR FY 97

The Trustee Council expects that the following projects will be continued from FY 96 and invites proposals for work planned for FY 97. The FY 97 costs of these projects are estimated below.

FY 97	\009 Octopus Survey	\$40,900	
	\052 Community Involvement/TEK	\$250,000	
	\127 Tatitlek Coho Release	\$15,900	
	\131 Clam Restoration	\$413,600	
	\210 Youth Area Watch	\$100,000	
	\220 Eastern PWS Habitat Restoration	\$115,000	
	\222 Anderson Creek Salmon Restoration	\$56,400	
	\225 Port Graham Pink Salmon Project	\$83,100	
	\244 Community-Based Harbor Seal Mgt.	\$100,000	
	\272 Chenega Chinook Release	\$51,100	
	<b>Total FY 97:</b>		<b>\$1,226,000</b>

### *Other Projects.*

**Sockeye Salmon Stocking.** Depending on the results of a feasibility study funded in FY 96 (\256), the Trustee Council may consider a proposal to stock Columbia and Solf lakes with sockeye salmon. Columbia Lake is located in Heather Bay near the Columbia Glacier. Solf Lake is located in Herring Bay on Knight Island.

**Other.** The Council anticipates submittal of additional projects from spill area communities as a result of community outreach underway through Project \052.





# Reduction of Marine Pollution

Reducing marine pollution can remove a source of stress that may delay natural recovery. One project (\115) to reduce marine pollution was funded in FY 95 and FY 96.

## STRATEGIES FOR FY 97 AND BEYOND

**Reduce Marine Pollution.** The *Restoration Plan* allows consideration of projects to reduce marine pollution if:

- the marine pollution is likely to affect the recovery of a part of the injured marine ecosystem, or of injured resources or services; and
- the project will not duplicate existing agency activities.

Expenditures for most activities designed to prevent catastrophic oil spills or to plan for their cleanup are not allowed by the terms of the civil settlement.

## INVITATION FOR FY 97

### *Other Projects.*

**Sound Waste Management Plan.** Project 96115 completes the second and final year of development of a comprehensive plan to identify and remove the major sources of marine pollution and solid waste in Prince William Sound that may be affecting recovery of resources and services injured by the spill. Implementation of many of the solutions to remove the waste will be funded from sources other than the Trustee Council. However, the Trustee Council anticipates that a proposal to implement some of the recommendations of the Sound Waste Management Plan will be submitted and evaluated for FY 97.

**Other.** No other projects have been identified as priorities, but proposals for additional projects are welcome.



# Habitat Improvement

The primary way the Trustee Council protects the habitat of injured resources and services is by acquiring land that would otherwise be used in ways that might hinder recovery. However, there are other ways of protecting and improving habitat. For example, habitat along fish spawning streams could be improved by diverting foot traffic or by revegetating trampled shorelines. The 1995 landowner assistance project (95058) identified other potential efforts that may have restoration value and mitigate impacts from development.

Projects in this cluster protect habitat by means other than buying land. In FY 96, the Council approved the first year of a three-year project to restore habitat along the Kenai River.

## STRATEGIES FOR FY 97 AND BEYOND

*Restore Habitat and Enhance Recreation along the Kenai River (180).* This project, approved by the Trustee Council in FY 96, addresses degraded shoreline on public land along the Kenai River. The project will protect and restore injured fish habitat needed for maintenance of a healthy salmon run. The project will also enhance and direct recreational use of the riverbanks. Techniques include revegetation, streambank restoration, elevated boardwalks, floating docks, access stairs, fencing, signs, and interpretive displays. In FY 96, the emphasis is on planning, design, and compliance with the National Environmental Policy Act. In FY 97 and FY 98, the emphasis will be on construction and implementation.

## INVITATION FOR FY 97

The Trustee Council expects that the following project will be continued from FY 96 and invites a proposal for work planned for FY 97. The FY 97 cost of this project is estimated below.

FY 97    \180 Kenai Habitat Restoration/Recreation

\$879,600

*Other Projects:* No other projects have been identified as priorities, but proposals for additional projects are welcome.



# Recreation and Tourism

In the years since the spill, there has been a marked increase in visitation to the spill area. At the 1996 Restoration Workshop, some residents of spill-area communities expressed concern that the increase in visitation has placed stress on injured resources through, for example, noise and marine pollution from tour boats. Proposals to address the adverse effects of recreation and tourism will be considered if they are likely to aid the recovery of injured resources.

## STRATEGIES FOR FY 97 AND BEYOND

The restoration strategies for recreation and tourism, as detailed in the *Restoration Plan*, are: 1) preserve or improve the recreational and tourism values of the spill area, 2) remove or reduce residual oil if treatment is cost effective and less harmful than leaving the oil in place, and 3) monitor recovery. The Trustee Council has helped restore recreation and tourism primarily by acquiring thousands of acres of land with exceptional values for these services. In FY 96, the Council also approved a three-year project to restore habitat and enhance recreation along the Kenai River (see the Habitat Improvement section, page 49.)

In addition to the efforts of the Trustee Council, the State Legislature appropriated an estimated \$10.75 million from the State's criminal settlement with Exxon Corporation to the Alaska Department of Natural Resources for restoring recreational services. The department established the Marine Recreation Project to accomplish this task. Under this project, in March 1995 the Governor authorized work to begin on 44 projects throughout the spill area. Projects include trails, interpretive displays, camp sites, cabins, mooring buoys, boat launches, and boardwalks. These projects are expected to be completed by December 1998. For more information contact Ron Crenshaw at the Department of Natural Resources in Anchorage, (907) 269-8704.

## INVITATION FOR FY 97

**Other Projects.** No recreation projects have been identified as priorities. However, consideration will be given to proposals that are consistent with the *Restoration Plan*, which says that projects designed to restore or enhance an injured service, such as recreation and tourism:

- must have a sufficient relationship to an injured resource,
- must benefit the same user group that was injured, and
- should be compatible with the character and public uses of the area.



## Ecosystem Synthesis

The restoration program has reached the stage where it is appropriate to integrate and synthesize what is being learned from different research and monitoring projects. These efforts will enable the Trustee Council to view the effects of the oil spill and the long-term restoration and management of injured resources and services from an ecosystem-level perspective. This is particularly important now that there are three large-scale projects underway (the Sound Ecosystem Assessment\320, the Nearshore Vertebrate Predator Project\025, and the Apex Predator Experiment\163) and many of the projects on individual species are mature and producing solid results. As we approach the year 2001 and the final installment of payments from the Exxon Corporation, the restoration program will increasingly focus on an integrated, ecological approach. To that end, the Trustee Council has identified a possible need for a simple, cost-effective ecosystem model, which is described below. Other needs for synthesis work may be identified in future years.

### INVITATION FOR FY 97

*Modeling Trophic Balances in the Prince William Sound Ecosystem.* Research sponsored by the Trustee Council has produced many data sets on the distribution, abundance, and productivity of many species and ecological communities in the northern Gulf of Alaska and Prince William Sound. These data need to be integrated in a simple model to benefit long-term resource management. This modeling effort, which could be based on the stocks and flows of carbon or energy, would allow natural resource managers to verify the accuracy of existing information on the relative sizes of the various stocks in the ecosystem, as they should be in balance. The model may also allow preliminary examination of the potential impacts of large-scale perturbations such as the major decline in the population of Pacific herring. The Trustee Council is potentially interested in a simple, inexpensive modelling effort along these or related lines.





## OTHER TRUSTEE COUNCIL ACTIVITIES

---

### Habitat Protection and Acquisition

The Trustee Council funds the acquisition of land and conservation easements 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 December 1995, the Council had committed \$161.5 million to protect habitat on 361,048 acres of land. This includes acquisition of 23,800 acres of private inholdings within Kachemak Bay State Park, timber rights on 2,052 acres of land in Orca Narrows near Cordova, and 278,890 acres of land in the Kodiak Island group (Kodiak, Shuyak, and Afognak islands). Also included is a conservation easement to protect 56,048 acres through the year 2001, by agreement with Koniag, Inc.

In late 1995, the Council authorized \$15.6 million for offers to acquire 22 small parcels of land (each under 1,000 acres). If all these offers are accepted, 17,645 acres of habitat on small parcels of land will be protected, including 2,500 acres of habitat along the Kenai River.

Negotiations are underway for protection of an additional 415,000 acres. Negotiations are continuing with Chenega Corp., Tatitlek Corp., Afognak Joint Ventures, Eyak Corp., English Bay Corp., and Port Graham Corp. Negotiations are also continuing with Koniag, Inc., for acquisition of fee interest in the 56,048 acres covered by the conservation easement mentioned above. Additional small parcels may be acquired in the future.

Support activities for the habitat protection program include negotiating, surveying, appraising, clearing title, conducting hazardous materials surveys, and recording court documents. Funds are provided by the Council for these activities (Project \126).

## Public Information/Science Management/Administration

This project (\100) provides the management and administration necessary to efficiently implement the restoration program developed by the Trustee Council. Funding is needed to prepare annual work plans, provide independent scientific review, allow for meaningful public participation, and communicate the progress of the restoration effort to the public.

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, 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;
- Coordination of the Council's habitat acquisition and protection process;
- The Oil Spill Public Information Center (OSPIC), whose collection -- including restoration project reports, meeting transcripts, work plans, and public comments -- is cataloged in the online database of the Western Library Network and available on SLED (Statewide Library Electronic Doorway), the World Wide Web, and the Internet;
- Publications, including the annual invitation to submit restoration projects; annual work plans; the *Restoration Update*, a bi-monthly newsletter distributed to a mailing list of approximately 2,500 people; and the *Annual Status Report*, which reports to the public on the recovery of injured resources and the progress of restoration;
- Workshops, including the Annual Restoration Workshop (which is attended by all Trustee Council researchers, as well as agency staff 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 and other topics of interest to the general public;
- Development of a geobibliography of Council-funded databases and an electronic database of all studies funded by the Council;
- Additional communication efforts, such as a pilot radio series being prepared in FY 96 on restoration efforts, and the planned preparation of a series of papers describing the results of scientific studies conducted to date on each injured resource;
- An annual financial audit (beginning with FY 95) of expenditures from the trust fund; results of the audit of FY 95 expenditures will be available March 1, 1996.

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 renewable contracts. Printing of publications, some 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. If you are interested in being contacted regarding these services in the future, please call the Anchorage Restoration Office.

It is anticipated that most of the activities described above will continue at some level throughout the life of the restoration effort. As initial planning and implementation activities are completed, the current goal of the Council is to reduce the amount of funds spent on this component while continuing to provide high quality service to the public. The Council forecasts the funding needs as follows:

FY 97	\100 Public Information/Science Mgmt./Administration	\$3,200,000	
FY 98	\100 Public Information/Science Mgmt./Administration	\$2,800,000	
FY 99	\100 Public Information/Science Mgmt./Administration	\$2,500,000	
FY 00	\100 Public Information/Science Mgmt./Administration	\$1,700,000	
FY 01	\100 Public Information/Science Mgmt./Administration	\$1,500,000	
FY 02	\100 Public Information/Science Mgmt./Administration	\$1,500,000	
	<b>Total FY 97-02:</b>		<b>\$13,200,000</b>

## Restoration Reserve

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

The exact amount placed into the Reserve each year will be 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 three years (FY 94, FY 95, and FY 96). It is anticipated that \$12 million will be allocated to the Reserve in FY 97 and in each of the six years remaining through 2001. If so, \$108 million plus interest would be available for funding restoration activities after Exxon's payments end.

<i>Allocations through FY 96:</i>			\$36,000,000
FY 97	\424 Exxon Valdez Restoration Reserve Fund	\$12,000,000	
FY 98	\424 Exxon Valdez Restoration Reserve Fund	\$12,000,000	
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	
<i>Subtotal FY 97-02:</i>			\$72,000,000
<b>Total FY 97-02:</b>			<b>\$108,000,000</b>

Totals do not include interest.

## Appendix A

# INSTRUCTIONS FOR PREPARING DETAILED PROJECT DESCRIPTIONS

---

This appendix provides guidelines for preparing Detailed Project Descriptions (DPDs). For your project to be considered by the Trustee Council, you must provide three written copies and an electronic copy of a DPD by **April 15, 1996**. The electronic copy must be formatted in WordPerfect for Windows or WordPerfect for DOS.

All proposals should be sent to:

Anchorage Restoration Office  
645 G Street, Suite 401  
Anchorage, AK 99501  
Telephone (907) 278-8012  
(Toll free within Alaska 1-800-478-7745; outside Alaska 1-800-283-7745)

The electronic copy may be sent by e-mail to Sandra Schubert at the following address:  
ospic@alaska.net

**NO FAXES PLEASE**

If you are submitting your project under the Broad Agency Announcement, a written copy of the DPD must also be sent by **April 15, 1996** to:

NOAA, WASC, Procurement Division, WC33  
7600 Sand Point Way NE, Bin C15700  
Seattle, WA 98115  
Telephone (206) 526-6262

This appendix also provides general formatting instructions for DPDs. Following these instructions will facilitate proposal review and assist Trustee Council staff in compiling the DPDs for publication in the FY 97 Final Work Plan.

**FOR PROJECT PROPOSERS WHO ARE EMPLOYEES OF TRUSTEE COUNCIL AGENCIES:** Please be advised that your agency may have additional, internal requirements related to the preparation and submittal of DPDs. Contact your agency liaison about internal requirements.

## GENERAL FORMATTING INSTRUCTIONS

- WordPerfect for Windows or WordPerfect for DOS, IBM compatible
- Font Times Roman 12 point or similar font
- Top and bottom margins 0.75"; left and right margins 1.0"
- Justify left
- No headers
- Footer on each page -- date prepared, page number, project number. Use the format illustrated on the following page.
- *Exxon Valdez* in italics
- Cover letters will be accepted, but will not be published
- The first page of the DPD must be a stand-alone page. The information on the first page will be entered into the Restoration Office database so that it can 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 project proposed by a non-Trustee agency, when budget numbers are revised, or when a change in the project's objectives necessitate a change in the abstract. Staff will then produce an up-to-date first page when needed -- for example, when publishing the Final FY 97 Work Plan.
- Put personnel information and literature citations on a separate page at the end of the DPD. These pages may be detached from the DPD prior to its publication in the FY 97 Final Work Plan.

**Project Title (Descriptive; Maximum 80 Characters); if the Project is Submitted Under the Broad Agency Announcement, add "Submitted Under the BAA" to the Title**

Bold;  
large  
font

↓ 2 carriage returns

Project Number:	(For continuing projects, the last three digits of the 1996 project number preceded by "97"; otherwise, 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 that will receive funding under the project in FY 97; if not known, leave blank)
Alaska SeaLife Center:	(Type "yes" if this project intends to use the Alaska SeaLife Center in FY 98 or future years; otherwise, leave blank)
Duration:	(What year in the project's life FY 97 is, and the number of federal fiscal years -- October 1st to September 30th -- during which funding has been received or is being requested from the Trustee Council: for example, "2nd year, 3-year project" or "1st year, 1-year project")
Cost FY 97:	(The amount of funding requested for expenditure in FY 97; show all dollar amounts in \$000,000 format)
Cost FY 98:	(An estimate of the amount of funding, if any, that will be requested for expenditure in FY 98)
Cost FY 99:	(An estimate of the amount of funding, if any, that will be requested for expenditure in FY 99)
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 1 for a list of injured resources and services)

indent over so in alignment

Headings  
in all caps;  
bold  
(ABSTRACT

↓ 2 carriage returns

↓ 1 carriage return

Provide a brief (8 lines or less) abstract of the project -- basically, what the project would 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 96, a description of the proposed FY 97 project, and the work planned for the future (each year until project completion). Also identify any other restoration projects to which the proposal is linked. Provide other background necessary to understanding the project.

↓ 2 carriage returns before each heading

## NEED FOR THE PROJECT

TAB ↓ 1 carriage return before each sub-heading  
A. ↓ Statement of Problem > sub-headings in bold

What is the problem the project is designed to address? Discuss what injured resource or service the project is designed to restore. (See Table 1 on page 3 for a list of injured resources and services.) Include a brief summary of the status of the resource/service and the rate or degree of recovery, if known.

TAB  
B. ↓ Rationale/Link to Restoration

Why should the work be done? Discuss how the project would address the problem -- that is, help recovery. For research projects, 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.

TAB  
C. ↓ Location

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

↓ 2

**COMMUNITY INVOLVEMENT** (Please read the discussion of community involvement on page 6 before beginning this section.)

↓ 1

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

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 have questions about this section of the DPD or would like assistance in working with a particular community or incorporating traditional or local knowledge into your project, contact Martha Vlasoff, Community Involvement Coordinator, at the Anchorage Restoration Office (telephone: 907-278-8012; e-mail: marthav@evro.usa.com).

↓ 2

## PROJECT DESIGN

### TAB A. ↓ Objectives

↓ 1

What are the project's research/restoration objectives, both for FY 97 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. indent Determine the foraging range of common murre.
2. indent Measure abundance and distribution of intertidal invertebrates that prey on herring eggs.
3. indent Determine the age and sex distribution of harlequin ducks.

### TAB B. ↓ Methods

↓ 1

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 97, what methods will be used to generate the data? Include a 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 97, include a description of

scientific methods, field sites, data sets to be generated, a description of the statistical procedures that will be used to test performance, and the time over which results will be measured.

For projects that would 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 considering supplementation proposals for funding are available from the Anchorage Restoration Office (907-278-8012).

For projects that would involve the lethal collection of birds or mammals, contact the Anchorage Restoration Office (907-278-8012) for a copy of the Trustee Council policy on collections. Your project's compliance with the collections policy should be addressed in a memo and submitted with your DPD.

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

TAB ↓ 1  
C. Cooperating Agencies, Contracts, and Other Agency Assistance

If more than one Trustee agency is requesting funds for this 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 what tasks will be contracted and why.

Which components of the project will require contracts for services with other governmental agencies, including universities? Describe each contract, including what tasks will be contracted and why.

↓ 2

## SCHEDULE

TAB ↓ 1  
A. Measurable Project Tasks for FY 97 (October 1, 1996 - September 30, 1997)

When in FY 97 will major project tasks (for example, NEPA compliance, development of contract proposals and evaluation of bids, community meetings, sample collection, data analysis, etc.) be undertaken? Include a schedule of work for FY 97 that specifies the dates for major tasks. This information will be used by Trustee Council staff to track project progress in order to prepare a quarterly project status report for presentation to the Trustees.

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

↓ 1 remember the colon  
Oct. 1- December 31: indent Prepare NEPA compliance documents  
January 22-25: indent Attend Annual Restoration Workshop  
February 1-March 15: indent Arrange logistics (boats, equipment, contracts, etc.)  
March 15 - April 10: indent Consult with subsistence harvesters

April 15:	<div style="border: 1px solid black; padding: 2px;">indent</div>	Submit annual report (FY 96 findings)
May 14 - 20:	<div style="border: 1px solid black; padding: 2px;">indent</div>	Conduct initial surveys
June 5 - 16:	<div style="border: 1px solid black; padding: 2px;">indent</div>	Expert consultation and second surveys
July - September:	<div style="border: 1px solid black; padding: 2px;">indent</div>	Analysis of field data

<sup>TAB</sup>  
**B. ↓ Project Milestones and Endpoints**

↓ 1

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 97 and beyond). This information will be used by project reviewers to assess whether projects are meeting their objectives and suitable for continued funding.

<sup>TAB</sup>  
**C. ↓ Completion Date**

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

↓ 2

**PUBLICATIONS AND REPORTS**

↓ 1

What manuscripts do you plan to submit for publication in FY 97, if any? Provide the subject/title of each manuscript, the name of the peer-reviewed journal to which you plan to submit it, and when the manuscript will be submitted.

The Trustee Council strongly encourages publication of project results in peer-reviewed journals as soon as scientifically appropriate and logistically possible. Toward this end, the Council will support page costs of publications anticipated to appear in print within a given fiscal year. 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 the budget instructions in Appendix B for more detailed 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 (907-278-8012) 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 close-out project. These reports are due on April 15 of the year following the year in which the research project or restoration activity takes place. (For a copy of the council's *Procedures for the Preparation and Distribution of Reports*, contact the Anchorage Restoration Office.) With approval of the Chief Scientist and the Executive Director, on a project-by-project basis, the publications referenced above may satisfy a portion of the report requirements.

↓ 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 97, 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 Trustee Council that government agencies be funded 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? Without the project, will there be additional injury to a resource or service that has not recovered from the oil spill? Is the project necessary in order for the Trustee Council to fully document recovery of an injured resource or service? Will the project permanently improve management of an injured resource, and if so, what are the prospects for obtaining longer-term funding support from sources other than the Trustee Council in the near future?

↓ 2

**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 matching 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 96 should skip this section)**

↓ 1

How do the PROJECT DESIGN and SCHEDULE described in this DPD differ from the DPD approved by the Trustee Council for FY 96? 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.).

**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.*

**PERSONNEL**

↓ 1

What are the qualifications of the proposed Principal Investigator? Also provide a list of key personnel who will be working on the project in FY 97 and what their responsibilities will be.

↓ 2

**LITERATURE CITED**

↓ 1

If appropriate, include literature citations here.

## Appendix B

# BUDGET INSTRUCTIONS FOR FEDERAL FISCAL YEAR 1997

---

The budget instructions consist of three parts:

- Part I. General Instructions: Pages B1 - B3
- Part II. Additional Trustee Agency Instructions: Pages B4 - B10
- Part III. Additional Non-Trustee Organization Instructions: Pages B11 - B16

## PART I. GENERAL INSTRUCTIONS

For your project to be considered by the Trustee Council, you must provide three written copies and an electronic copy of the required budget forms to the address below by **April 15, 1996**. A complete set of the budget forms and a diskette is available from the Anchorage Restoration Office.

Anchorage Restoration Office  
645 G Street, Suite 401  
Anchorage, AK 99501  
Telephone (907) 278-8012  
(Toll free within Alaska 1-800-478-7745; outside Alaska 1-800-283-7745)

The electronic copy may be sent by e-mail to Sandra Schubert at the following address:  
ospic@alaska.net

### NO FAXES PLEASE

#### Fiscal Year

The Trustee Council operates on the federal fiscal year (FFY). The FFY 97 budget is for the period October 1, 1996 through September 30, 1997.

#### The Forms

**Multi-Trustee Agency Summary (Form 2A)** - This form is used when multiple Trustee Agencies are cooperating on a project. It summarizes and represents the total funds requested for the project.

**Trustee Agency Summary (Form 3A)** - This form summarizes the proposed expenditures contained on the Trustee Agency Detail Forms.

**Trustee Agency Detail (Form 3B)** - These forms are used by individual Trustee Agencies to provide detailed expenditure information on personnel, travel, contractual, supplies, and equipment.



**Non-Trustee Organization Summary (Form 4A)** - This form summarizes the proposed expenditures contained on the Non-Trustee Organization Detail Forms.

**Non-Trustee Organization Detail (Form 4B)** - These forms are used by Non-Trustee Organizations to provide detailed expenditure information on personnel, travel, contractual, supplies, and equipment.

#### Project Number

Each project is assigned a unique number. For continuing projects, the last three digits of the 1996 project number preceded by "97" should be used. For new projects, you should leave the number blank.

#### Rules for Numbers

1. Unless otherwise noted, the costs should be stated in thousands of dollars. Therefore, \$1,869,489 should be \$1,869.5.
2. When the number "5" is the digit to be rounded, the number should be rounded to the higher rather than the lower amount.
3. Personnel months budgeted should be stated in whole numbers, with partial months reflected with one digit to the right of the decimal point. For example, one-and-a-half months would be 1.5.

#### Direct Project Costs

Direct costs are those costs that are identified with or linked to a particular objective of a specific project. Direct costs include:

- a. Compensation of employees for the time and effort devoted specifically to the execution of a project as outlined in the Detailed Project Description.
- b. Cost of materials acquired, consumed, or expended specifically for the purposes outlined in the Detailed Project Description.
- c. Cost of equipment required specifically for the purposes outlined in the Detailed Project Description.
- d. Cost of specialized communication technologies required specifically for the purposes outlined in the Detailed Project Description.
- e. Contractual costs required specifically for the purposes outlined in the Detailed Project Description.
- f. Costs attributable to production of the annual or final report for a project.
- g. Cost of travel incurred specifically for the purposes outlined in the Detailed Project Description, including travel to the Annual Restoration Workshop and any technical workshops.

NOTE: Normal office expenses, such as phones, faxes, paper clips, copying, and similar items are typically indirect costs. They may be charged as direct costs only if you keep account of which items are used for the project, and can demonstrate to a financial auditor that the items were used for the project.

#### Indirect Costs

Indirect costs are those costs that are (a) incurred for a common or joint purpose benefiting more than one project, (b) not identified with or linked to a particular objective of a specific

project, or (c) support services. Indirect costs include:

- a. The cost of basic office supplies which are consumed by multiple individuals working on various projects.
- b. The cost of payroll and personnel functions, maintenance and operation of space, data processing, clerical support, various levels of administrative supervision, administrative contract monitoring, accounting, budgeting, auditing, mail and messenger services, and other incidental costs. Other incidental costs include expenses required to carry out the overall responsibilities of the organization, such as incidental long distance charges, incidental fax charges, and miscellaneous copying charges.

#### Items That Must be Included

Each project must include the costs associated with NEPA (National Environmental Policy Act) compliance, community involvement, report writing, and attendance of the principal investigator at two workshops in Anchorage for approximately six days total. Explain how much has been included for each of these items in the comments field of the appropriate Summary Forms.

#### Diskettes

The forms have been created in Excel 4.0, but can be saved in Excel 5.0.

Where appropriate, the forms contained on the diskette have been linked. This means that as data in one form is updated or changed, it will automatically be updated in the related forms. The only exception is the Proposed FFY 1997 Trustee Agency Total, located on the Multi-Trustee Agency Summary Form (2A). If more than one Trustee Agency is participating, the agencies will have to link this field in the documents themselves.

The comments field, the fiscal year, the project identification field, and the form name are text boxes. To input information, click the box and start typing. The text wraps within the box. The return key should only be used to separate paragraphs.

**If you have any questions about these instructions or any difficulty following them, or if you do not have access to Excel, contact the Anchorage Restoration Office (907-278-8012) before April 15, 1996. Please do not alter the Excel forms in any way.**

**FOR PROJECT PROPOSERS WHO ARE EMPLOYEES OF TRUSTEE COUNCIL AGENCIES:** Please be advised that your agency may have additional, internal requirements related to the preparation and submittal of budgets. Contact your agency liaison about internal requirements.

## PART II. ADDITIONAL INSTRUCTIONS FOR TRUSTEE AGENCIES

This section applies to Trustee Agencies. Non-Trustee Organizations should skip this section and continue on to page B11.

### Rules for Names

The following agency abbreviations should be used:

AK Dept. of Environmental Conservation	ADEC
AK Dept. of Fish & Game	ADF&G
AK Dept. of Natural Resources	ADNR
Dept. of Agriculture, Forest Service	USFS
Dept. of Interior	DOI
Dept. of Interior, Fish & Wildlife Service	DOI-FWS
Dept. of Interior, National Biological Service	DOI-NBS
Dept. of Interior, National Park Service	DOI-NPS
National Oceanic & Atmospheric Admin	NOAA

### General Administration Formula

Per the Trustee Council's Financial Operating Procedures, the general administration formula allows agencies to recover indirect costs, as defined on page B2. The formula consists of 15% of each project's personnel costs and 7% of the first \$250,000 of each project's contractual costs, plus 2% of contractual costs in excess of \$250,000.

### Project Management Costs

An important change from last year's budget procedures is that project management costs are not to be included in this budget. Rather, each Trustee Council agency will submit at a later date a separate budget request for the agency's project management activities. **Do not include project management costs in this budget.**

### Equipment

Equipment previously purchased by the Trustee Council should be used to the maximum extent possible. Before requesting new equipment, the principal investigator should contact their agency's Trustee Council liaison to determine if similar equipment is available.

### Report Writing Costs

Budget report writing costs in the fiscal year the expense is planned to occur.

### Publication Costs

Budget publication costs in the fiscal year the expense is planned to occur. For budgeting purposes, the page cost of publications should not exceed \$1,000 per project and the personnel cost associated with preparation of a manuscript for publication should not exceed one and a half months.



## 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 FFY 1996* - If the project was funded in FFY96, enter the total authorized by line-item, otherwise leave blank.
2. *Proposed FFY 1997* - All the information, through the FTE line, is linked to the Detail Forms. No input is required.
3. *Other Funds* - Enter the amount of funds from other sources that the project leverages and any agency contribution.
4. *Long Range Fund Requirements* - Estimate future years' costs through FFY 2002 or the end of the project, whichever comes first.
5. *Comments* - At a minimum address the following:
  - If the project was funded previously under a different number, note the old number;
  - Identify what portion of the project cost is for NEPA compliance, report writing, publications, community involvement, and workshop attendance;
  - If other funds are anticipated, explain the source of the funding, any matching requirement, and any conditions tied to these other funds;
  - Explain anything that is out of the ordinary.
6. *Project Identification Field* - Enter the project number, title, and agency.
7. *Prepared* - Enter the date this budget was prepared.

Budget Category:	Authorized FFY 1996	Proposed FFY 1997						
Personnel								
Travel								
Contractual								
Commodities								
Equipment								
Subtotal			LONG RANGE FUNDING REQUIREMENTS - 4 -					
General Administration			Estimated FFY 1998	Estimated FFY 1999	Estimated FFY 2000	Estimated FFY 2001	Estimated FFY 2002	
Project Total								
Full-time Equivalents (FTE)								
Dollar amounts are shown in thousands of dollars.								
Other Funds - 3 -								
Comments:   EXAMPLE								

- 5 -

1997

Prepared: - 7 -

Project Number:  
Project Title:  
Agency: TRUSTEE AGENCY

- 6 -

FORM 3A  
AGENCY  
PROJECT  
DETAIL

## 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.

### DEFINITIONS

"Personnel" includes compensation of employees and their benefits for the time and effort devoted specifically to the execution of the project.

"Travel" includes 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, enter only the total number of positions requested (names are not required).
2. *Position Title* - Provide 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 total of salaries and benefits by position.
6. *Overtime* - Enter the overtime costs estimated for each position.
7. *Proposed FFY 1997 Personnel Costs* - The form is set up to calculate based on the following formula. No input is necessary.  
$$(\text{months budgeted} \times \text{monthly costs}) + \text{overtime} = \text{Proposed FFY 1997 Personnel Costs}$$
8. *Travel Description* - Include the destination and the 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.

- (Ticket Price x Round Trips) + (Total Days \* Daily Per Diem) =  
Proposed FFY 1997 Travel Costs**

<p>1997</p> <p>Prepared: - 15 -</p>	<p>Project Number:</p> <p>Project Title: - 14 -</p> <p>Agency: TRUSTEE AGENCY</p>	<p>FORM 3B</p> <p>Personnel</p> <p>&amp; Travel</p> <p>DETAIL</p>
-------------------------------------	---	---

## 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.

### DEFINITIONS

"Contractual" covers such items as communication, printing, advertising, charters, equipment rental or lease, equipment repair and maintenance, and professional services.

"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.

**The Non-Trustee Organization forms must also be submitted if a significant portion of the project will be contracted.**

2. *Proposed FFY 1997* - Enter the proposed FFY 1997 contractual cost.
3. *Commodities Description* - Describe what is being purchased and its purpose.
4. *Proposed FFY 1997* - Enter the proposed FFY 1997 commodities cost.
5. *Project Identification Field* - Enter the project number, title, and agency.
6. *Prepared* - Enter the date this budget was prepared.

<b>Contractual Costs:</b>		Proposed
Description		FFY 1997
- 1 -		- 2 -
When a non-trustee organization is used, the form 4A is required.		Contractual Total
		\$0.0
<b>Commodities Costs:</b>		Proposed
Description		FFY 1997
- 3 -		- 4 -
		Commodities Total
		\$0.0

1997

Prepared: - 6 -

Project Number:  
 Project Title:  
 Agency: TRUSTEE AGENCY

- 5 -

FORM 3B  
 Contractual &  
 Commodities  
 DETAIL



## Trustee Agency Detail (Form 3B) Equipment

### HOW THE FORM WILL BE USED

This form documents the equipment costs of the proposed project. **Equipment previously purchased by the Trustee Council should be used to the maximum extent possible.**

### DEFINITIONS

"Equipment" is defined as a non-consumable item having an estimated life of more than one year or a unit value greater than \$500.

### 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 its purpose.
3. *Number of Units* - Enter the number of units. Use whole numbers.
4. *Unit Price* - Enter the unit price.
5. *Proposed FFY 1997 New Equipment* - The form is set up to calculate based on the following formula. No input is necessary.  

$$(\text{Number of Units} \times \text{Unit Price}) = \text{Proposed FFY 1997 New Equipment}$$
6. *Existing Equipment Usage Description* - Describe existing equipment which will be used for the project and its purpose.
7. *Number of Units* - Enter the number of existing units which will be used. Use whole numbers.
8. *Inventory Agency* - Enter the agency which has the existing equipment on inventory.
9. *Project Identification Field* - Enter the project number, title, and agency.
10. *Prepared* - Enter the date this budget was prepared.

New Equipment Purchases:		Number of Units	Unit Price	Proposed FFY 1997
Description				
- 1 -	- 2 -	- 3 -	- 4 -	0.0
				0.0
				0.0
				0.0
				0.0
				0.0
				0.0
				0.0
Those purchases associated with replacement equipment should be indicated by placement of an R. <span style="float: right;">New Equipment Total</span>				- 5 -
Existing Equipment Usage:		Number of Units	Inventory Agency	
Description				
- 6 -		- 7 -	- 8 -	

1997

Project Number:  
Project Title: - 9 -  
Agency: TRUSTEE AGENCY

FORM 3B  
Equipment  
DETAIL

Prepared: - 10 -

### **PART III. ADDITIONAL INSTRUCTIONS FOR NON-TRUSTEE ORGANIZATIONS**

The definition of a non-Trustee organization is any state, federal, private or non-profit organization not listed on page B4 "Rules for Names". The University of Alaska is considered a non-Trustee organization. Non-Trustee organizations must submit the 4A and 4B forms.

#### Broad Agency Announcement

If you are submitting your project under the Broad Agency Announcement (see page 10), a copy of your budget forms and the Detailed Project Description must be submitted to the address below, as well as to the Anchorage Restoration Office, by **April 15, 1996**:

NOAA, WASC Procurement Division, WC33  
7600 Sand Point Way NE, Bin C15700  
Seattle, WA 98115  
Telephone (206) 526-6262

#### Lead Trustee Agency

Each project will be assigned a Lead Trustee Agency. You will be notified of whom the Lead Trustee Agency is after all requests have been received. Do not include any Lead Trustee Agency costs in your budget.

#### Report Writing Costs

When developing a proposal and associated budget, you should be aware of the report writing requirements of the Trustee Council. Each budget should include the cost of performing the project and preparing the required report. For further information, please contact the Anchorage Restoration Office and request a copy of the publication titled *Procedures for the Preparation & Distribution of Reports*.

#### Publication Costs

If your proposal includes the publication of results in a peer reviewed journal, the cost of page charges and the personnel cost associated with preparation of the manuscript should be clearly identified in the budget. For budgeting purposes, the page cost of publications should not exceed \$1,000 and the personnel cost associated with preparation of the manuscript should not exceed one and a half months.

## 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 FFY 1996* - If the project was funded in FFY96, enter the total authorized by line-item, otherwise leave blank.
2. *Proposed FFY 1997* - All the information, through the FTE line, is linked to the Detail Forms. No input is required.
3. *Indirect* - Input the proposed indirect project costs. Explain the amount and rate in the comments field.
4. *Other Funds* - Enter the amount of funds from other sources that the project leverages.
5. *Long Range Fund Requirements* - Estimate future years' costs through FFY 2002 or the end of the project, whichever comes first.
6. *Comments* - At a minimum address the following:
  - An explanation of the indirect costs;
  - If other funds are anticipated, explain the source of the funding, any matching requirement, and any conditions tied to these other funds;
  - Identify what portion of the project cost is for report writing, publications, community involvement, and workshop attendance;
  - Explain anything that is out of the ordinary.
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 FFY 1996	Proposed FFY 1997						
Personnel								
Travel								
Contractual								
Commodities								
Equipment								
Subtotal			LONG RANGE FUNDING REQUIREMENTS - 5 -					
Indirect			Estimated FFY 1998	Estimated FFY 1999	Estimated FFY 2000	Estimated FFY 2001	Estimated FFY 2002	
Project Total								
Full-time Equivalents (FTE)								
Dollar amounts are shown in thousands of dollars.								
Other Funds - 4 -								
Comments:								
EXAMPLE								

- 6 -

**1997**

Prepared: - 8 -

Project Number:  
 Project Title: - 7 -  
 Name: NON-TRUSTEE OR BAA PROPOSER

FORM 4A  
Non-Trustee  
DETAIL

## 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.

### DEFINITIONS

"Personnel" includes compensation of employees and their benefits for the time and effort devoted specifically to the execution of the project and includes tuition for students.

"Travel" includes 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 Title* - Provide the position title.
3. *Months Budgeted* - Enter the number of months for each position.
4. *Monthly Costs* - Enter the total salaries and benefits by position.
5. *Overtime* - Enter the overtime costs estimated for each position.
6. *Proposed FFY 1997 Personnel Costs* - The form is set up to calculate based on the following formula. No input is necessary.  
$$(\text{months budgeted} \times \text{monthly costs}) + \text{overtime} = \text{Proposed FFY 1997 Personnel Costs}$$
7. *Travel Description* - Include the destination and the 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 FFY 1997 Travel Costs* - The form is set up to calculate based on the following formula. No input is necessary.  

$$(\text{Ticket Price} \times \text{Round Trips}) + (\text{Total Days} \times \text{Daily Per Diem}) = \text{Proposed FFY 1997 Travel Costs}$$
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 FFY 1997
Name	Position Description					
- 1 -	- 2 -		- 3 -	- 4 -	- 5 -	0.0
						0.0
						0.0
						0.0
						0.0
						0.0
						0.0
						0.0
						0.0
						0.0
						0.0
Subtotal			0.0	0	0	
Personnel Total						- 6 -
Travel Costs:			Ticket Price	Round Trips	Total Days	Daily Per Diem
Description						Proposed FFY 1997
- 7 -			- 8 -	- 9 -	- 10 -	- 11 -
						0.0
						0.0
						0.0
						0.0
						0.0
						0.0
						0.0
						0.0
						0.0
						0.0
						0.0
Travel Total						- 12 -

1997

Prepared: - 14 -

Project Number:  
 Project Title: - 13 -  
 Name: NON-TRUSTEE OR BAA PROPOSER

FORM 4B  
 Personnel  
 & Travel  
 DETAIL

U

## 5

4

4

9

# Non-Trustee Organization Detail (Form 4B) Equipment

## HOW THE FORM WILL BE USED

This form documents the equipment costs of the proposed project.

## DEFINITIONS

"Equipment" is defined as a non-consumable item having an estimated life of more than one year and a unit value greater than \$500. All equipment purchased remains the property of the contracting 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 its purpose.
3. *Number of Units* - Enter the number of units. Use whole numbers.
4. *Unit Price* - Enter the unit price.
5. *Proposed FFY 1997 New Equipment* - The form is set up to calculate based on the following formula. No input is necessary.  

$$(\text{Number of Units} \times \text{Unit Price}) = \text{Proposed FFY 1997 New Equipment}$$
6. *Existing Equipment Usage* - Describe existing equipment which will be used on the project and its purpose.
7. *Number of Units* - Enter the number of existing units which will be used. Use whole numbers.
8. *Project Identification Field* - Enter the project number, title, and your organization's name.
9. *Prepared* - Enter the date this budget was prepared.

New Equipment Purchases:		Number of Units	Unit Price	Proposed FFY 1997
Description				
- 1 -	- 2 -	- 3 -	- 4 -	0.0
				0.0
				0.0
				0.0
				0.0
				0.0
				0.0
				0.0
Those purchases associated with replacement equipment should be indicated by placement of an R.			<b>New Equipment Total</b>	- 5 -
Existing Equipment Usage:		Number of Units		
Description				
- 6 -		- 7 -		

<div style="border: 1px solid black; padding: 5px; display: inline-block;">1997</div>	<div style="border: 1px solid black; padding: 5px;"> Project Number:  Project Title: <span style="float: right;">- 8 -</span>  Name: NON-TRUSTEE OR BAA PROPOSER </div>	<div style="border: 1px solid black; padding: 5px; display: inline-block;">FORM 4B Equipment DETAIL</div>
---	---	---

Prepared: - 9 -

## Appendix C

### RESTORATION PROJECT COSTS: FY 92-99 and BEYOND

---

This appendix consists of two tables that summarize the cost of restoration projects undertaken since the civil settlement. Table C-1 presents actual and projected costs for previously funded monitoring, research, and general restoration projects. This table does not list new projects for FY 97. Table C-2 presents costs for public information/science management/administration and habitat protection and acquisition support.

These tables record the history of funding allocations to each project and each resource cluster. For example, Table C-1 shows that the Sound Ecosystem Assessment (SEA) began in FY 94, received about \$15 million between FY 92 and FY 96, and is expected to cost an additional \$6 million in FY 97 and FY 98.

The tables in this appendix also estimate future costs for projects expected to continue from FY 96. For example, Table C-1 indicates that monitoring, research, and general restoration projects expected to continue from FY 96 are estimated to cost about \$14 million in FY 97 and \$10 million in FY 98. The amount of funding allocated to these projects will be determined each year by the Trustee Council through the 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, 1994. Thereafter, the funding cycle for restoration activities has been the federal fiscal year which begins on October 1 and ends on September 30.

**FY 92-95: Unaudited Expenditures.** The figures for FY 92-95 are unaudited expenditures on restoration projects, which in most cases are less than the amounts authorized by the Trustee Council. Expenditures reported for FY 92 in Table C-1 are only a fraction of the amount authorized because they do not include \$6.8 million that was spent that year to conclude damage assessment studies. An audit of the civil settlement fund is underway and is expected to be completed in March 1996. Appropriate adjustments to Table C-1 will be made in the Draft Work Plan.

**FY 96: Authorized Amount.** The figures for FY 96 are the amounts authorized by the Trustee Council in August and December 1995.

**FY 97-99+: Estimated Costs.** The figures for FY 97-99 and beyond are estimates of future costs of continuing projects. A blank space in the table means the Trustee Council has not yet determined anticipated funding for that year either because the proposer does not know probable future costs or because continuation of the project needs further review. Although the estimates for continuing projects in FY 97 are probably realistic, cost estimates for FY 98 and FY 99 and beyond are less certain.





# DRAFT

**Table C-1. RESTORATION PROJECT COSTS: FY 92 - 99 and Beyond  
Monitoring, Research, and General Restoration**

<u>Project</u>	<u>FY92</u>	<u>FY93</u>	<u>FY94</u>	<u>FY95</u>	<u>FY96</u>	<u>FY97</u>	<u>FY98</u>	<u>FY99 +</u>	<u>Subtotal FY92-96</u>	<u>Subtotal FY97-99</u>	<u>Total FY92-99</u>
<b>Pink Salmon</b>	<b>\$1,834.7</b>	<b>\$847.6</b>	<b>\$1,513.5</b>	<b>\$2,283.0</b>	<b>\$2,017.5</b>	<b>\$1,887.5</b>	<b>\$1,010.2</b>	<b>\$163.8</b>	<b>\$8,496.3</b>	<b>\$3,061.5</b>	<b>\$11,557.8</b>
076 / Effect of Oiled Incubation Substrate on Wild Pink Salmon (lab)	\$0.0	\$0.0	\$0.0	\$178.3	\$393.8	\$619.0	\$235.0	\$0.0	\$572.1	\$854.0	\$1,426.1
093 / PWSAC: Pink Salmon Restoration	\$0.0	\$0.0	\$0.0	\$57.2					\$57.2		\$57.2
139 / Salmon Instream Habitat Restoration	\$0.0	\$0.0	\$222.1	\$36.0					\$258.1		\$258.1
139-A1 / Little Waterfall Barrier Byp-ass Improvement	\$0.0	\$0.0	\$0.0	\$92.1	\$55.0	\$35.0	\$15.0	\$0.0	\$147.1	\$50.0	\$197.1
139-A2 / Port Dick Creek Spawning Channel	\$0.0	\$0.0	\$0.0	\$17.6	\$230.5	\$37.0	\$23.2	\$30.0	\$248.1	\$90.2	\$338.3
139-C1 / Montague Riparian Rehabilitation Monitoring Program	\$0.0	\$0.0	\$0.0	\$49.3	\$9.7	\$0.0	\$0.0	\$0.0	\$59.0	\$0.0	\$59.0
186 / Coded-wire Tag Recoveries from Pink Salmon in PWS	\$1,421.8	\$148.6	\$237.7	\$264.7	\$254.9	\$260.5	\$260.5	\$85.0	\$2,327.7	\$606.0	\$2,933.7
188 / Otolith Thermal Mass Marking of Hatchery Reared Pink Salmon	\$0.0	\$0.0	\$48.9	\$635.7	\$93.2	\$100.5	\$100.5	\$48.8	\$777.8	\$249.8	\$1,027.6
190 / A Linkage Map for the Pink Salmon Genome	\$0.0	\$0.0	\$0.0	\$0.0	\$167.7	\$250.0			\$167.7	\$250.0	\$417.7
191 / Oil-Related Egg and Alevin Mortalities	\$412.9	\$699.0	\$824.4	\$732.6	\$634.2	\$407.0	\$246.0	\$0.0	\$3,303.1	\$653.0	\$3,956.1
196 / Genetic Structure of Pink Salmon	\$0.0	\$0.0	\$180.4	\$219.5	\$178.5	\$178.5	\$130.0	\$0.0	\$578.4	\$308.5	\$886.9

**NOTES:** 1) Figures for FY 92-95 are unaudited expenditures on restoration projects; an additional \$6.8 million was spent on damage assessment studies in FY 92.  
2) Costs projected for FY 97-99 are for planning purposes and have not yet been approved by the Trustee Council.  
3) A blank space means the Trustee Council has not yet forecast anticipated funding for that year.

<u>Project</u>	<u>FY92</u>	<u>FY93</u>	<u>FY94</u>	<u>FY95</u>	<u>FY96</u>	<u>FY97</u>	<u>FY98</u>	<u>FY99 +</u>	<u>Subtotal FY92-96</u>	<u>Subtotal FY97-99</u>	<u>Total FY92-99</u>
<b>Herring</b>	\$0.0	\$0.0	\$515.4	\$1,310.8	\$1,323.0	\$930.6	\$708.7	\$0.0	\$3,149.2	\$1,639.3	\$4,788.5
074 / Herring Reproductive Impairment	\$0.0	\$0.0	\$0.0	\$398.2	\$140.0	\$0.0	\$0.0	\$0.0	\$538.2	\$0.0	\$538.2
162 / Disease Affecting Declines of Herring Populations	\$0.0	\$0.0	\$86.4	\$387.1	\$635.0	\$510.6	\$461.7	\$0.0	\$1,108.5	\$972.3	\$2,080.8
165 / Genetic Discrimination of PWS Herring Populations	\$0.0	\$0.0	\$6.4	\$95.0	\$103.9	\$120.0	\$97.0	\$0.0	\$205.3	\$217.0	\$422.3
166 / Herring Natal Habitats	\$0.0	\$0.0	\$422.6	\$430.5	\$444.1	\$300.0	\$150.0	\$0.0	\$1,297.2	\$450.0	\$1,747.2
<b>Sound Ecosystem Assessment</b>	\$0.0	\$0.0	\$5,773.9	\$4,473.2	\$4,648.2	\$3,685.0	\$2,685.0	\$170.0	\$14,895.3	\$6,540.0	\$21,435.3
195 / Pristane Monitoring	\$0.0	\$0.0	\$0.0	\$0.0	\$114.8	\$85.0	\$85.0	\$170.0	\$114.8	\$340.0	\$454.8
320 / Sound Ecosystem Assessment (SEA)	\$0.0	\$0.0	\$5,773.9	\$4,473.2	\$4,533.4	\$3,600.0	\$2,600.0		\$14,780.5	\$6,200.0	\$20,980.5
<b>Sockeye Salmon</b>	\$1,052.6	\$1,466.3	\$1,629.8	\$1,349.7	\$1,286.2	\$391.0	\$0.0	\$0.0	\$6,784.6	\$391.0	\$7,175.6
048 / Historical Analysis of Sockeye Salmon Growth	\$0.0	\$0.0	\$0.0	\$0.0	\$116.9	\$0.0	\$0.0	\$0.0	\$116.9	\$0.0	\$116.9
255 / Kenai River Sockeye Salmon Restoration	\$687.4	\$405.2	\$358.8	\$416.5	\$307.0	\$100.0	\$0.0	\$0.0	\$2,174.9	\$100.0	\$2,274.9
258 / Sockeye Salmon Overescapement	\$0.0	\$621.9	\$762.4	\$669.1	\$596.6	\$150.0	\$0.0	\$0.0	\$2,650.0	\$150.0	\$2,800.0
259 / Restoration of Coghill Lake Sockeye Salmon	\$0.0	\$145.1	\$245.7	\$264.1	\$265.7	\$141.0	\$0.0	\$0.0	\$920.6	\$141.0	\$1,061.6
504 / Genetic Stock ID of Kenai River Sockeye	\$310.9	\$294.1	\$262.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$867.9	\$0.0	\$867.9

**NOTES:** 1) Figures for FY 92-95 are unaudited expenditures on restoration projects; an additional \$6.8 million was spent on damage assessment studies in FY 92.  
2) Costs projected for FY 97-99 are for planning purposes and have not yet been approved by the Trustee Council.  
3) A blank space means the Trustee Council has not yet forecast anticipated funding for that year.

# DRAFT

<u>Project</u>	<u>FY92</u>	<u>FY93</u>	<u>FY94</u>	<u>FY95</u>	<u>FY96</u>	<u>FY97</u>	<u>FY98</u>	<u>FY99 +</u>	<u>Subtotal FY92-96</u>	<u>Subtotal FY97-99</u>	<u>Total FY92-99</u>
R113 / Red Lake Sockeye Salmon Restoration	\$54.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$54.3	\$0.0	\$54.3
<b>Cutthroat and Dolly Varden</b>	<b>\$132.1</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$136.9</b>	<b>\$229.6</b>	<b>\$200.0</b>	<b>\$100.0</b>	<b>\$0.0</b>	<b>\$498.6</b>	<b>\$300.0</b>	<b>\$798.6</b>
043-B / Monitoring of Cutt. Trout and D. Varden Habitat Improvements	\$0.0	\$0.0	\$0.0	\$136.9	\$29.6				\$166.5		\$166.5
145 / Cutthroat Trout and D. Varden: Anadromous and Resident Forms	\$0.0	\$0.0	\$0.0	\$0.0	\$200.0	\$200.0	\$100.0	\$0.0	\$200.0	\$300.0	\$500.0
R106 / Dolly Varden Restoration	\$37.9	\$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	\$94.2	\$0.0	\$94.2
<b>Marine Mammals</b>	<b>\$24.7</b>	<b>\$332.8</b>	<b>\$282.4</b>	<b>\$848.4</b>	<b>\$812.8</b>	<b>\$687.3</b>	<b>\$275.1</b>	<b>\$25.0</b>	<b>\$2,301.1</b>	<b>\$987.4</b>	<b>\$3,288.5</b>
001 / Condition and Health of Harbor Seals	\$0.0	\$0.0	\$0.0	\$169.5	\$214.1	\$192.3	\$48.1	\$0.0	\$383.6	\$240.4	\$624.0
012 / Comprehensive Killer Whale Investigation	\$0.0	\$113.5	\$30.8	\$289.3	\$101.0				\$534.6		\$534.6
064 / Monitoring, Habitat Use, and Trophic Interactions of Harbor Seals	\$24.7	\$219.3	\$251.1	\$295.0	\$347.3	\$347.0	\$100.0	\$25.0	\$1,137.4	\$472.0	\$1,609.4
117-BAA / Harbor Seals and EVOS: Blubber and Lipids as Indicaes	\$0.0	\$0.0	\$0.0	\$94.6	\$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	\$150.4	\$148.0	\$127.0	\$0.0	\$150.4	\$275.0	\$425.4
425 / Marine Mammal Book Publication	\$0.0	\$0.0	\$0.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.5	\$0.0	\$0.5

**NOTES:** 1) Figures for FY 92-95 are unaudited expenditures on restoration projects; an additional \$6.8 million was spent on damage assessment studies in FY 92.  
2) Costs projected for FY 97-99 are for planning purposes and have not yet been approved by the Trustee Council.  
3) A blank space means the Trustee Council has not yet forecast anticipated funding for that year.

<u>Project</u>	<u>FY92</u>	<u>FY93</u>	<u>FY94</u>	<u>FY95</u>	<u>FY96</u>	<u>FY97</u>	<u>FY98</u>	<u>FY99 +</u>	<u>Subtotal FY92-96</u>	<u>Subtotal FY97-99</u>	<u>Total FY92-99</u>
<b>Nearshore Ecosystem</b>	\$1,725.4	\$1,436.6	\$1,794.5	\$2,233.2	\$2,833.3	\$1,748.3	\$1,669.4	\$450.0	\$10,023.0	\$3,867.7	\$13,890.7
025 / Nearshore Vertebrate Predator Package	\$0.0	\$0.0	\$0.0	\$710.5	\$1,859.9	\$1,669.4	\$1,669.4	\$450.0	\$2,570.4	\$3,788.8	\$6,359.2
086-C / Herring Bay Experimental and Monitoring Studies	\$0.0	\$504.6	\$725.8	\$732.6	\$173.0	\$0.0	\$0.0	\$0.0	\$2,136.0	\$0.0	\$2,136.0
090 / Mussel Bed Monitoring	\$769.3	\$318.6	\$446.0	\$434.4	\$205.1	\$0.0	\$0.0	\$0.0	\$2,173.4	\$0.0	\$2,173.4
106 / Eelgrass Monitoring	\$0.0	\$0.0	\$0.0	\$196.7	\$253.1	\$0.0	\$0.0	\$0.0	\$449.8	\$0.0	\$449.8
161 / Differentiation and Interchange of Harlequin Populations in N. Pacific	\$0.0	\$0.0	\$0.0	\$0.0	\$81.1	\$78.9	\$0.0	\$0.0	\$81.1	\$78.9	\$160.0
427 / Harlequin Monitoring	\$470.5	\$194.3	\$133.1	\$159.0	\$261.1				\$1,218.0		\$1,218.0
Black Oystercatcher Projects	\$0.0	\$109.1	\$75.3	\$0.0	\$0.0	\$0.0	\$0.0		\$184.4	\$0.0	\$184.4
Pigeon Guillemot Projects	\$0.0	\$165.9	\$225.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$391.6	\$0.0	\$391.6
R102 / Intertidal/Subtidal Monitoring (Coastal Habitat Restoration)	\$485.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$485.6	\$0.0	\$485.6
Sea Otter Projects	\$0.0	\$144.1	\$188.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$332.7	\$0.0	\$332.7
<b>Seabird/Forage Fish and Related Projects</b>	\$743.4	\$441.7	\$1,242.7	\$2,122.5	\$2,411.0	\$1,846.2	\$1,821.2	\$70.5	\$6,961.3	\$3,737.9	\$10,699.2
021 / Seasonal Movements by Common Murres	\$0.0	\$0.0	\$0.0	\$54.0	\$0.0	\$0.0	\$0.0	\$0.0	\$54.0	\$0.0	\$54.0
029 / Population Survey of Bald Eagles in PWS	\$0.0	\$0.0	\$49.3	\$48.7	\$0.0	\$0.0	\$0.0	\$0.0	\$98.0	\$0.0	\$98.0
031 / Reproductive Success of Murrelets in PWS	\$0.0	\$0.0	\$0.0	\$312.5	\$77.6				\$390.1		\$390.1

NOTES: 1) Figures for FY 92-95 are unaudited expenditures on restoration projects; an additional \$6.8 million was spent on damage assessment studies in FY 92.  
 2) Costs projected for FY 97-99 are for planning purposes and have not yet been approved by the Trustee Council.  
 3) A blank space means the Trustee Council has not yet forecast anticipated funding for that year.

# DRAFT

<u>Project</u>	<u>FY92</u>	<u>FY93</u>	<u>FY94</u>	<u>FY95</u>	<u>FY96</u>	<u>FY97</u>	<u>FY98</u>	<u>FY99 +</u>	<u>Subtotal FY92-96</u>	<u>Subtotal FY97-99</u>	<u>Total FY92-99</u>
038 / Publication of Seabird Restoration Workshop	\$0.0	\$0.0	\$0.0	\$0.0	\$22.2	\$0.0	\$0.0	\$0.0	\$22.2	\$0.0	\$22.2
038 / Symposium on Seabird Restoration	\$0.0	\$0.0	\$0.0	\$74.5	\$0.0	\$0.0	\$0.0		\$74.5	\$0.0	\$74.5
039-B / Common Murre Productivity Monitoring	\$0.0	\$0.0	\$0.0	\$27.0	\$0.0	\$0.0			\$27.0	\$0.0	\$27.0
041 / Introduced Predator Removal	\$0.0	\$0.0	\$77.0	\$51.2	\$0.0	\$0.0	\$0.0	\$0.0	\$128.2	\$0.0	\$128.2
101 / Removal of Introduced Foxes from Islands	\$0.0	\$0.0	\$0.0	\$0.0	\$8.4	\$0.0	\$0.0	\$0.0	\$8.4	\$0.0	\$8.4
102 / Murrelet Prey and Foraging Habitat	\$428.5	\$0.0	\$239.7	\$53.0	\$0.0	\$0.0	\$0.0	\$0.0	\$721.2	\$0.0	\$721.2
121 / Fatty Acid Signatures of Forage Fish	\$0.0	\$0.0	\$0.0	\$30.8	\$0.0	\$0.0	\$0.0	\$0.0	\$30.8	\$0.0	\$30.8
142 / Status and Ecology of Kittlitz's Murrelet	\$0.0	\$0.0	\$0.0	\$0.0	\$168.7				\$168.7		\$168.7
144 / Common Murre Population Monitoring	\$314.9	\$181.0	\$250.0	\$0.0	\$70.5	\$70.5	\$70.5	\$70.5	\$816.4	\$211.5	\$1,027.9
159 / Marine Bird and Sea Otter Boat Surveys	\$0.0	\$260.7	\$142.8	\$0.0	\$262.9	\$25.0			\$666.4	\$25.0	\$691.4
163 / APEX: Apex Predator Ecosystem Experiment	\$0.0	\$0.0	\$483.9	\$1,470.8	\$1,800.7	\$1,750.7	\$1,750.7		\$3,755.4	\$3,501.4	\$7,256.8
<b>Sediments</b>	\$0.0	\$1,319.7	\$882.7	\$753.7	\$155.9	\$121.0	\$120.0	\$470.0	\$3,112.0	\$711.0	\$3,823.0
026 / Hydrocarbon Monitoring	\$0.0	\$0.0	\$0.0	\$143.1	\$0.0	\$0.0	\$0.0	\$0.0	\$143.1	\$0.0	\$143.1
027 / Kodiak Shoreline Assessment	\$0.0	\$0.0	\$0.0	\$188.2	\$39.8	\$0.0	\$0.0	\$0.0	\$228.0	\$0.0	\$228.0
038 / PWS Shoreline Assessment	\$0.0	\$316.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$316.8	\$0.0	\$316.8
266 / Experimental Oil Removal	\$0.0	\$0.0	\$185.8	\$148.6	\$0.0	\$0.0	\$0.0	\$0.0	\$334.4	\$0.0	\$334.4

**NOTES:** 1) Figures for FY 92-95 are unaudited expenditures on restoration projects; an additional \$6.8 million was spent on damage assessment studies in FY 92.  
2) Costs projected for FY 97-99 are for planning purposes and have not yet been approved by the Trustee Council.  
3) A blank space means the Trustee Council has not yet forecast anticipated funding for that year.

<u>Project</u>	<u>FY92</u>	<u>FY93</u>	<u>FY94</u>	<u>FY95</u>	<u>FY96</u>	<u>FY97</u>	<u>FY98</u>	<u>FY99 +</u>	<u>Subtotal FY92-96</u>	<u>Subtotal FY97-99</u>	<u>Total FY92-99</u>
285 / Subtidal Monitoring	\$0.0	\$882.8	\$583.4	\$118.4	\$0.0	\$0.0	\$0.0	\$0.0	\$1,584.6	\$0.0	\$1,584.6
290 / Hydrocarbon Data Analysis, Interpretation and Database Mgmt.	\$0.0	\$120.1	\$113.5	\$155.4	\$116.1	\$121.0	\$120.0	\$470.0	\$505.1	\$711.0	\$1,216.1
<b>Archaeological Resources</b>	<b>\$123.3</b>	<b>\$1,581.9</b>	<b>\$247.7</b>	<b>\$291.4</b>	<b>\$504.2</b>	<b>\$195.0</b>	<b>\$195.0</b>	<b>\$135.0</b>	<b>\$2,748.5</b>	<b>\$525.0</b>	<b>\$3,273.5</b>
007-A / Archaeological Site Monitoring	\$0.0	\$81.9	\$247.7	\$179.4	\$145.1	\$135.0	\$145.0	\$135.0	\$654.1	\$415.0	\$1,069.1
007-B / Completion of Artifact Curation - SEW-440/488	\$0.0	\$0.0	\$0.0	\$112.0	\$78.4	\$0.0	\$0.0	\$0.0	\$190.4	\$0.0	\$190.4
066 / Alutiiq Archaeological Repository	\$0.0	\$1,500.0	\$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	\$74.4	\$60.0	\$50.0	\$0.0	\$74.4	\$110.0	\$184.4
154 / Community Plan - Restoration of Archaeological Resources	\$0.0	\$0.0	\$0.0	\$0.0	\$206.3				\$206.3		\$206.3
R104-A / Site Stewardship	\$123.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$123.3	\$0.0	\$123.3
<b>Subsistence</b>	<b>\$0.0</b>	<b>\$241.7</b>	<b>\$430.8</b>	<b>\$869.9</b>	<b>\$1,352.2</b>	<b>\$1,226.0</b>	<b>\$957.5</b>	<b>\$1594.8</b>	<b>\$2,894.6</b>	<b>\$3,778.3</b>	<b>\$6,672.9</b>
009-D / Survey of Octopuses in Intertidal Habitats	\$0.0	\$0.0	\$0.0	\$125.0	\$142.3	\$40.9	\$0.0	\$0.0	\$267.3	\$40.9	\$308.2
052 / Community Involvement / Traditional Knowledge	\$0.0	\$0.0	\$0.0	\$104.5	\$271.0	\$250.0	\$250.0	\$1000.0	\$375.5	\$1,500.0	\$1,875.5
127 / Tatitlek Coho Salmon Release	\$0.0	\$0.0	\$0.0	\$4.6	\$26.6	\$15.9	\$15.9	\$15.9	\$31.2	\$47.7	\$78.9
131 / Chugach Region Clam Restoration	\$0.0	\$0.0	\$0.0	\$223.0	\$274.9	\$413.6	\$417.4	\$417.4	\$497.9	\$1,248.4	\$1,746.3
138 / Elders/Youth Conference	\$0.0	\$0.0	\$0.0	\$42.3	\$0.0	\$0.0	\$0.0	\$0.0	\$42.3	\$0.0	\$42.3
210 / PWS Youth Area Watch	\$0.0	\$0.0	\$0.0	\$0.0	\$115.0	\$100.0	\$100.0	\$0.0	\$115.0	\$200.0	\$315.0

**NOTES:** 1) Figures for FY 92-95 are unaudited expenditures on restoration projects; an additional \$6.8 million was spent on damage assessment studies in FY 92.

2) Costs projected for FY 97-99 are for planning purposes and have not yet been approved by the Trustee Council.

3) A blank space means the Trustee Council has not yet forecast anticipated funding for that year.

# DRAFT

<u>Project</u>	<u>FY92</u>	<u>FY93</u>	<u>FY94</u>	<u>FY95</u>	<u>FY96</u>	<u>FY97</u>	<u>FY98</u>	<u>FY99 +</u>	<u>Subtotal FY92-96</u>	<u>Subtotal FY97-99</u>	<u>Total FY92-99</u>
214 / Subsistence Seal Hunting Documentary	\$0.0	\$0.0	\$0.0	\$0.0	\$77.4	\$0.0	\$0.0	\$0.0	\$77.4	\$0.0	\$77.4
220 / Eastern PWS Wildstock Salmon Habitat Restoration	\$0.0	\$0.0	\$0.0	\$0.0	\$92.0	\$115.0	\$12.0	\$0.0	\$92.0	\$127.0	\$219.0
222 / Anderson Creek Salmon Restoration	\$0.0	\$0.0	\$0.0	\$0.0	\$16.1	\$56.4	\$0.0	\$0.0	\$16.1	\$56.4	\$72.5
225 / Port Graham Pink Salmon Subsistence Project	\$0.0	\$0.0	\$0.0	\$0.0	\$95.3	\$83.1	\$77.2	\$161.5	\$95.3	\$321.8	\$417.1
244 / Harbor Seal/Sea Otter Cooperative Effort	\$0.0	\$0.0	\$44.9	\$61.3	\$128.5	\$100.0	\$85.0	\$0.0	\$234.7	\$185.0	\$419.7
256 / Columbia and Solf Lakes Sockeye Salmon Stocking	\$0.0	\$0.0	\$0.0	\$0.0	\$60.8				\$60.8		\$60.8
272 / Chenega Chinook Release	\$0.0	\$10.7	\$55.4	\$44.9	\$52.3	\$51.1	\$0.0	\$0.0	\$163.3	\$51.1	\$214.4
279 / Food Safety Testing	\$0.0	\$231.0	\$272.6	\$170.4	\$0.0	\$0.0	\$0.0	\$0.0	\$674.0	\$0.0	\$674.0
428 / Community Planning Project	\$0.0	\$0.0	\$57.9	\$93.9	\$0.0	\$0.0	\$0.0	\$0.0	\$151.8	\$0.0	\$151.8
<b>Recreation</b>	\$0.0	\$40.8	\$75.0	\$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	\$115.8	\$0.0	\$115.8
<b>Reduction of Marine Pollution</b>	\$0.0	\$0.0	\$0.0	\$266.2	\$28.3	\$0.0	\$0.0	\$0.0	\$294.5	\$0.0	\$294.5
115 / Sound Waste Management Plan	\$0.0	\$0.0	\$0.0	\$264.8	\$28.3				\$293.1		\$293.1
417 / Waste Oil Disposal Facilities	\$0.0	\$0.0	\$0.0	\$1.4	\$0.0	\$0.0	\$0.0	\$0.0	\$1.4	\$0.0	\$1.4

**NOTES:** 1) Figures for FY 92-95 are unaudited expenditures on restoration projects; an additional \$6.8 million was spent on damage assessment studies in FY 92.  
2) Costs projected for FY 97-99 are for planning purposes and have not yet been approved by the Trustee Council.  
3) A blank space means the Trustee Council has not yet forecast anticipated funding for that year.



<u>Project</u>	<u>FY92</u>	<u>FY93</u>	<u>FY94</u>	<u>FY95</u>	<u>FY96</u>	<u>FY97</u>	<u>FY98</u>	<u>FY99 +</u>	<u>Subtotal FY92-96</u>	<u>Subtotal FY97-99</u>	<u>Total FY92-99</u>
<b>Habitat Improvements</b>	\$0.0	\$0.0	\$0.0	\$115.0	\$560.6	\$879.6	\$759.6	\$0.0	\$675.6	\$1,639.2	\$2,314.8
058 / Landowner Assistance Program	\$0.0	\$0.0	\$0.0	\$88.2	\$0.0	\$0.0	\$0.0	\$0.0	\$88.2	\$0.0	\$88.2
060 / Spruce Bark Beetle Impacts	\$0.0	\$0.0	\$0.0	\$26.8	\$0.0	\$0.0	\$0.0	\$0.0	\$26.8	\$0.0	\$26.8
180 / Kenai River Habitat Restoration and Recreation Enhancement	\$0.0	\$0.0	\$0.0	\$0.0	\$560.6	\$879.6	\$759.6	\$0.0	\$560.6	\$1,639.2	\$2,199.8
<b>Information Support</b>	\$0.0	\$0.0	\$69.4	\$0.0	\$42.0	\$0.0	\$0.0	\$0.0	\$111.4	\$0.0	\$111.4
507 / EVOS Symposium Publication	\$0.0	\$0.0	\$69.4	\$0.0	\$42.0	\$0.0	\$0.0	\$0.0	\$111.4	\$0.0	\$111.4
<b>Total Cost :</b>	\$5,636.2	\$7,709.1	\$14,457.8	\$17,053.9	\$18,204.8	\$13,797.5	\$10,301.7	\$3,079.1	\$63,061.8	\$27,178.3	\$90,240.1

**NOTES:** 1) Figures for FY 92-95 are unaudited expenditures on restoration projects; an additional \$6.8 million was spent on damage assessment studies in FY 92.  
 2) Costs projected for FY 97-99 are for planning purposes and have not yet been approved by the Trustee Council.  
 3) A blank space means the Trustee Council has not yet forecast anticipated funding for that year.

**Table C-2. RESTORATION PROJECT COSTS: FY 92 - 99 and Beyond**  
**Public Information/Science Management/Administration and Habitat Protection & Acquisition Support**

<u>Project</u>	<u>FY92</u>	<u>FY93</u>	<u>FY94</u>	<u>FY95</u>	<u>FY96</u>	<u>FY97</u>	<u>FY98</u>	<u>FY99 +</u>	<u>Subtotal FY92-96</u>	<u>Subtotal FY97-99</u>	<u>Total FY92-99</u>
<b>Habitat Protection and Acquisition</b>	\$0.0	\$156.8	\$2,468.5	\$1,326.3	\$2,160.9	\$0.0	\$0.0	\$0.0	\$6,112.5	\$0.0	\$6,112.5
059 / Habitat Identification Workshop	\$0.0	\$23.1	\$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	\$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	\$89.8	\$0.0	\$89.8
110 / Habitat Protection: Data Acquisition and Support	\$0.0	\$0.0	\$437.9	\$136.4	\$0.0	\$0.0	\$0.0	\$0.0	\$574.3	\$0.0	\$574.3
126 / Habitat Protection and Acquisition Support	\$0.0	\$0.0	\$2,030.6	\$1,189.9	\$2,160.9				\$5,381.4		\$5,381.4
<b>Public Information/Science Management/Administration</b>	\$4,293.9	\$2,653.8	\$4,035.7	\$3,120.5	\$3,439.6	\$3,200.0	\$2,800.0	\$7200.0	\$17,543.5	\$13,200.0	\$30,743.5
100 and 089 / Administration, Science Mgmt., & Public Information	\$4,293.9	\$2,653.8	\$3,732.2	\$3,097.1	\$3,439.6	\$3,200.0	\$2,800.0	\$7200.0	\$17,216.6	\$13,200.0	\$30,416.6
422 / Restoration Plan EIS	\$0.0	\$0.0	\$303.5	\$23.4	\$0.0	\$0.0	\$0.0	\$0.0	\$326.9	\$0.0	\$326.9
<b>Total Cost :</b>	\$4,293.9	\$2,810.6	\$6,504.2	\$4,446.8	\$5,600.5	\$3,200.0	\$2,800.0	\$7,200.0	\$23,656.0	\$13,200.0	\$36,856.0

- NOTES:** 1) Figures for FY 92-95 are unaudited expenditures on restoration projects; an additional \$6.8 million was spent on damage assessment studies in FY 92.  
2) Costs projected for FY 97-99 are for planning purposes and have not yet been approved by the Trustee Council.  
3) A blank space means the Trustee Council has not yet forecast anticipated funding for that year.

**Exxon Valdez Oil Spill Trustee Council**  
645 G Street, Suite 401  
Anchorage, AK 99501-3451

PRESORTED  
FIRST CLASS MAIL  
U.S. POSTAGE  
PAID  
ANCHORAGE  
PERMIT #1013