

19.03.07

*Exxon Valdez* Oil Spill Trustee Council

**FY 96 Work Plan  
Revised Program 11-6-9990**

*prepared for the*  
**Legislative Budget & Audit Committee**

---

September 28, 1995

REPRESENTATIVE  
**TERRY MARTIN**  
 CHAIRMAN  
 BUDGET & AUDIT COMMITTEE  
 MEMBER  
 HOUSE FINANCE COMMITTEE

# Alaska State Legislature



MAY 15 - JAN 15 258-8169  
 716 W. 4TH, SUITE 650  
 ANCHORAGE, AK 99504

JAN 15 - MAY 15 465-3783  
 STATE CAPITOL  
 JUNEAU AK 99801-1182

HOME 333-6990  
 355 DONNA DRIVE, #11  
 ANCHORAGE, AK 99504

## LEGISLATIVE BUDGET AND AUDIT COMMITTEE

10 00 am, September 28, 1995

Regents Conference (Room 109A), Butrovich Bldg, U of A, Fairbanks

### I CALL TO ORDER

### II APPROVAL OF PRIOR MEETING MINUTES

A Minutes for March 2, April 21 and August 4

### III CONSIDERATION OF RPL'S

RPL No	Department	Program	Funding
<del>04-6-0008</del>	Revenue	CSED	\$540 0 Fed Rcpts.
<del>06-6-0093</del>	Health & Soc Services	DFYS	\$82 6 Gifts/Grants/Beq.
<del>08-6-0021</del>	Commerce & Econ Dev	Div of Tourism	\$165 0 GF/PR
<del>10-6-4006</del>	Natural Resources	Pipeline Coordinator	\$400 0 GF/PR
<del>11-6-9990</del>	Fish & Game	1996 Trustee Council Work Plan	\$12,653 6 Oil Spill Settlement Funds
11-6-9991	Fish & Game	Alaska SeaLife Center	\$24,956 0 Oil Spill Settlement Funds
<del>12-6-0021</del>	Public Safety	Div of Motor Vehicles	50,000 GF/PR
<del>12-6-0043</del>	Public Safety	Criminal Records & ID	\$638 3 Fed Rcpts
<del>20-6-0012</del>	Corrections	Boot Camp research	\$50 0 Fed Rcpts
<del>21-6-0012</del>	Community & Reg Affairs	VISTA volunteer travel	\$18 3 Fed Rcpts carryfor
<del>41-6-0503</del>	Courts	Judicial Council	\$20 5 Fed Rcpts carryfor
<del>45-6-0052</del>	University	Juneau residence hall	\$2,200 0 University Rcpts/revenue bonds
<del>48-6-0039</del>	Environmental Conservation	SPAR/Contaminated Sites	\$334 9 GF/PR

### IV REVIEW OF AUDIT REPORTS

#### Preliminary Audit Reports

DHSS - Y-K Placements/Bethel Group Home

DOC - Division of Community Corrections

DOL - ESD Appeal Tribunal

#### Final Audit Reports

State Single Audit for FY94

ANH, Inc - Conflict of Interest

DCED/AIDEA - Healy Coal Contracting Procedures

DOA/Courts - OPA/PD Eligibility Process

### V OTHER BUSINESS

Exxon Valdez Trustee Council presentation

*Terminating audits*

### VI ADJOURNMENT

#### Public Teleconference Sites

Anchorage Legislative Information Office  
 2nd Floor Conference Room  
 Anchorage Alaska

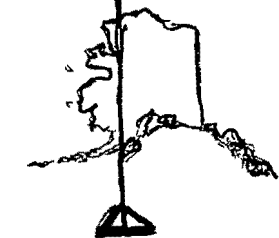
State Capitol Building  
 Butrovich Committee Room  
 Juneau Alaska

*permanent - expires after certain time.*

*permanent part-time temporary*

T. Martin  
 J. Davies  
 F. Zharoff  
 A. Adams  
 G. Davies  
 Con Bunde  
 Frank  
 Phillips - Anchorage  
 V. Kohring  
 W. Smith

*Oct 12*

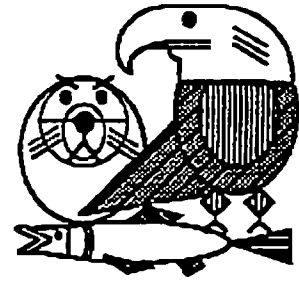


**Exxon Valdez Oil Spill Trustee Council**

Restoration Office

645 "G" Street, Anchorage, AK 99501

Phone (907) 278-8012 Fax. (907) 276-7178

**MEMORANDUM**

**TO** Virginia Stonkus  
Fiscal Analyst

**FROM** *Traci Cramer*  
Traci Cramer  
Administrative Officer

**DATE** September 22, 1995**RE** Additional Information for RPL 11-6-9990

Per your request, this memorandum contains additional information relating to project 96100 'Public Information, Scientific Management and Administration'. The total requested for the project in Federal Fiscal Year 1996 is \$3,008.2. This represents a decrease of \$598.9 from the Federal Fiscal Year 1995 Authorized level of \$3,607.1.

For comparison from fiscal year to fiscal year, there are four items which require further discussion. First, in FFY 1995 funding was split between the Alaska Department of Environmental Conservation and Fish and Game. During FFY 1996 the funding has been consolidated in the Alaska Department of Fish and Game. Secondly, the Trustee Council approved an increase of \$39.6 in December 1994. As a result of sufficient authorization a revised program was not submitted for the committee's approval. Thirdly, in FFY 1995 funding for the external audit was split between the state and federal governments. During FFY 1996 the funding has been consolidated in the Alaska Department of Fish and Game. Fourth, in FFY 1996 projects 95089 and 95100 have been consolidated into project 96100.

Project 96100 represents Public Information, Scientific Management and Administration. Within the project there are six components, allocated to the three state agencies. Additional information relating to the individual roles, responsibilities, and budget follows.

The first component is the **Oil Spill Public Information Center (OSPIC)**. OSPIC staff maintains a unique collection of oil spill related materials and also serves as the central access point for information and materials generated through the restoration process. Staff librarians respond to requests for information, process interlibrary loans, and

---

**Trustee Agencies**

State of Alaska Departments of Fish & Game Law and Environmental Conservation  
United States National Oceanic & Atmospheric Administration Departments of Agriculture and Interior

maintain the administrative record of documents generated through the restoration process. The past year, OSPIC staff served approximately 2000 visitors on-site, processed some 3400 requests for information, several hundred inter-library loans, and distributed approximately 11,000 documents. In addition to normal operational costs, this component includes subscription for newspapers, journals and on-line information services.

	ADF&G	ADEC	ADNR	TOTAL
Personnel (3.0 FTE)	163.4			163.4
Travel	1.3			1.3
Contractual	90.1			90.1
Commodities	13.0			13.0
Equipment	1.5			1.5
General Administration	<u>30.8</u>			<u>30.8</u>
Total	\$300.1			\$300.1

The second component is the **Chief Scientist and Peer Review** functions which provides the Trustee Council with independent scientific review of the restoration program. The process ensures that studies are based on sound scientific principles including scientific peer review of the individual proposals presented to the Trustee Council each year, as well as peer review of annual and final reports prior to their acceptance by the Trustee Council. Since the oil spill, independent scientific review and support have been a major part of the damage assessment and restoration process. Funding associated with scientific peer review of project proposals and reports is contained in the contractual line.

	ADF&G	ADEC	ADNR	TOTAL
Personnel (0.1 FTE)			7.0	7.0
Contractual			400.0	400.0
General Administration			<u>21.6</u>	<u>21.6</u>
Total			\$428.6	\$428.6

The third component is **Synthesis and Dissemination**. Efforts funded by this component are a result of the Trustee Council's recognition of the need to more effectively disseminate the results of restoration research and monitoring projects. The data and information resulting from Trustee Council sponsored projects are of value to resource managers, independent scientists, private organizations, businesses, and the general public.

	ADF&G	ADEC	ADNR	TOTAL
Personnel (0.2 FTE)			14.0	14.0
Contractual			175.0	175.0
Commodities			3.0	3.0
General Administration			<u>14.4</u>	<u>14.4</u>
Total			\$206.4	\$206.4

The fourth component is **Operations** or the administrative functions of the Trustee Council for both the state and federal restoration efforts. Included in this budget is the Executive Director and staff which is responsible to all six Trustee members collectively. Essential responsibilities include coordination, tracking and oversight, public outreach, finance, and management of the invitation and review process. In addition to normal operational costs, this component includes costs associated with the Trustee Council meetings such as advertising and telecommunications to ensure public access, travel within the spill area for public meetings, the cost associated with the external audit, and funding for the various scientific workshops. Also included are the costs associated with the printing, postage and distribution of the annual report and newsletters.

	ADF&G	ADEC	ADNR	TOTAL
Personnel (9.0 FTE)	749.5	87.9	63.0	900.4
Travel	82.0			82.0
Contractual	408.0		25.0	433.0
Commodities	27.0			27.0
Equipment	15.0			15.0
General Administration	<u>133.1</u>	<u>13.2</u>	<u>11.2</u>	<u>157.5</u>
Total	\$1,414.6	\$101.1	\$99.2	\$1,614.9

The fifth component is the 17-member **Public Advisory Group** or PAG which provides input to the Trustee Council on the annual work plan and other aspects of the restoration program. The PAG is comprised of representative of specific interest groups or organizations affected by the *Exxon Valdez* oil spill restoration effort (e.g., commercial fishing, tourism, subsistence, hunting-fishing, recreation, etc.) as well as two *ex-officio* representatives of the Alaska State Legislature. As you can see, the budget includes a position which coordinates the activities of the group and contractual meeting costs such as notices and telecommunications. In addition, funding is included for member travel and per diem expenses associated with the quarterly meetings and funding for a series of public meetings throughout the spill area.

	ADF&G	ADEC	ADNR	TOTAL
Personnel (1.0 FTE)	49.2			49.2
Travel	40.0			40.0
Contractual	23.5			23.5
General Administration	<u>9.0</u>			<u>9.0</u>
Total	\$121.7			\$121.7

The sixth component is the **Restoration Work Force**. The revised program is requesting authorization to support the three state Trustees. This funding is used to support staff who function as agency liaisons. The liaisons oversee the development of the work plan and generally represent the Trustee Council member in matters related to implementation of the restoration program.

	ADF&G	ADEC	ADNR	TOTAL
Personnel (1.0 FTE)	93.0	85.4	84.0	262.4
Travel	10.7	5.0	1.5	17.2
Contractual	1.3		12.8	14.1
Commodities	1.0		1.5	2.5
General Administration	<u>14.0</u>	<u>12.8</u>	<u>13.5</u>	<u>40.3</u>
Total	\$120.0	\$103.2	\$113.3	\$336.5

I hope this memorandum answered your questions. If you have questions relating to any of the other projects, or I can be of further assistance give me a call.

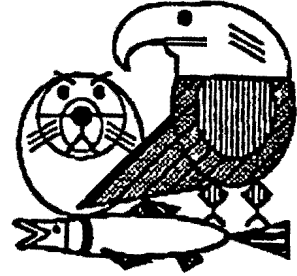
cc Molly McCammon, EVOS  
Mary Capobianco, DBR

**Exxon Valdez Oil Spill Trustee Council**

Restoration Office

645 "G" Street, Anchorage, AK 99501

Phone (907) 278-8012 Fax. (907) 276-7178

**MEMORANDUM**

**TO:** Nancy Slagle  
Director  
Division of Budget Review  
Office of Management and Budget

**FROM:**   
Molly McCammon  
Executive Director

**DATE** September 11, 1995**RE** *Exxon Valdez* Oil Spill RPL 11-6-9991

In accordance with Chapter 1, FSSLA 1992, the Department of Fish and Game requests authority to receive and expend \$24,956,000 from *Exxon Valdez* oil spill settlement trust funds to support construction of research facilities as part of the Alaska SeaLife Center in Seward

The funds would be used to construct a facility to conduct long-term research and monitoring activities to restore and enhance the biological resources injured by the *Exxon Valdez* oil spill (EVOS) as follows

- The Alaska SeaLife Center would provide presently unavailable laboratory capabilities for research and monitoring of the biological resources injured by the *Exxon Valdez* oil spill. Specific biological resources identified as injured by the spill include marine mammals (sea otters, harbor seals), seabirds (common murre, harlequin ducks, marbled murrelets, pigeon guillemots), complexes of intertidal and subtidal organisms, and several fishery resources (pink salmon, sockeye salmon and Pacific herring)
- Wet and dry labs would be constructed and available for fish genetics research and for live studies of bioenergetics, disease, reproduction, and neurobiology associated with the fish and invertebrates in the spill area. The facility would house a specialized library of literature and data pertaining to the northern Gulf of Alaska and spill region
- Research by the University of Alaska, state and federal resource agencies, and visiting scientists affiliated with agency, academic, and private entities in support of

---

**Trustee Agencies**

State of Alaska Departments of Fish & Game, Law, and Environmental Conservation  
United States National Oceanic & Atmospheric Administration, Departments of Agriculture and Interior



the Trustee Council restoration mission would be supported

- In addition to research facilities, the Alaska SeaLife Center would include a public education and visitation component that would be developed using separate funds secured from private contributions

The actual construction would be accomplished through a Reimbursable Services Agreement with the City of Seward, with project oversight being provided by the Alaska Department of Fish and Game. The Alaska SeaLife Center would be owned by the City of Seward and operated by the Seward Association for the Advancement of Marine Science, a non-profit corporation established in 1990. The University of Alaska would provide scientific leadership at the Alaska SeaLife Center, including development of quality assurance and standard operating protocols.

The facility has been the subject of extensive consultation and review by both federal and state agencies, the Exxon Valdez Trustee Council's independent Chief Scientist, additional independent scientific peer reviewers, University of Alaska researchers, design consultants, representatives of the City of Seward, and the Seward Association of the Advancement of Marine Science. The project has also been reviewed and is supported by the Trustee Council's 17-member Public Advisory Group, an advisory body comprised of representatives from diverse interest groups, industries and organizations within Alaska.

Based on detailed design development documents, the Alaska SeaLife Center is estimated to cost \$49,530,000. The Alaska Industrial Development and Export Authority has reviewed the estimate and found it to be realistic. Of the total estimated cost, \$37,530,000 has been allocated for the research component and \$12,000,000 has been allocated for the public education/visitation component.

It is anticipated that the Alaska SeaLife Center will be funded from the following sources:

Chapter 79, SLA 1993, Section 2	12,500,000
RPL 11-6-9999	24,956,000
Private Donations	12,000,000
United States Forest Service	43,000
United States Department of Commerce	<u>31,000</u>
Total	\$49,530,000

Additional documentation supporting this request is also being provided. This consists of a detailed Project Status Report on construction costs, facilities operations and management, and governing agreements. The governing agreements describe the

---

Trustee Agencies

State of Alaska Departments of Fish & Game, Law, and Environmental Conservation  
United States National Oceanic & Atmospheric Administration Departments of Agriculture and Interior

relationships and responsibilities between the Alaska Department of Fish and Game, the City of Seward, the University of Alaska, and the Seward Association for the Advancement of Marine Science

As a capital project, authority to receive and expend subject to AS 37 25 020 is requested

cc Kevin Brooks, Department of Fish and Game  
Joe Sullivan, Department of Fish and Game

---

**Trustee Agencies**

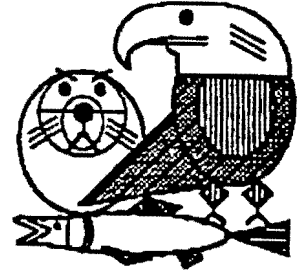
State of Alaska Departments of Fish & Game, Law, and Environmental Conservation  
United States National Oceanic & Atmospheric Administration, Departments of Agriculture and Interior

**Exxon Valdez Oil Spill Trustee Council**

Executive Director's Office  
709 West 9th Street, Room 859A  
P O Box 20122  
Juneau, AK 99802-0122

Phone (907) 586-7238

Fax (907) 586-7589

**FAX COVER SHEET**

Please deliver the following pages to

TO <u>Eric</u>	FAX NUMBER
OFFICE	DATE
PHONE #	TIME SENT

From \_\_\_\_\_

## COMMENTS

Signed copy for your file Please give  
a copy to Molly

— Thanks

Total Number of Pages (including this cover sheet) 4Fax sent by Teresa

If you do not receive all pages, please call 586-7238

Trustee Agencies

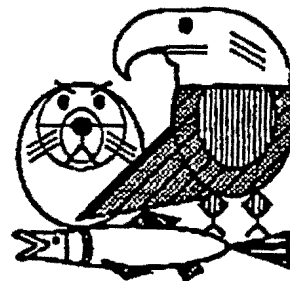
State of Alaska Departments of Fish & Game Law, and Environmental Conservation  
United States National Oceanic & Atmospheric Administration Departments of Agriculture and Interior

**Exxon Valdez Oil Spill Trustee Council**


Restoration Office

645 "G" Street, Anchorage, AK 99501

Phone (907) 278-8012 Fax. (907) 276-7178

**MEMORANDUM**

**TO:** Nancy Slagle  
Director  
Division of Budget Review  
Office of Management and Budget

**FROM:**   
Molly McCammon  
Executive Director

**DATE** September 11, 1995**RE** *Exxon Valdez* Oil Spill RPL 11-6-9991

In accordance with Chapter 1, FSSLA 1992, the Department of Fish and Game requests authority to receive and expend \$24,956,000 from *Exxon Valdez* oil spill settlement trust funds to support construction of research facilities as part of the Alaska SeaLife Center in Seward

The funds would be used to construct a facility to conduct long-term research and monitoring activities to restore and enhance the biological resources injured by the *Exxon Valdez* oil spill (EVOS) as follows

- The Alaska SeaLife Center would provide presently unavailable laboratory capabilities for research and monitoring of the biological resources injured by the *Exxon Valdez* oil spill. Specific biological resources identified as injured by the spill include marine mammals (sea otters, harbor seals), seabirds (common murre, harlequin ducks, marbled murrelets, pigeon guillemots), complexes of intertidal and subtidal organisms, and several fishery resources (pink salmon, sockeye salmon and Pacific herring)
- Wet and dry labs would be constructed and available for fish genetics research and for live studies of bioenergetics, disease, reproduction, and neurobiology associated with the fish and invertebrates in the spill area. The facility would house a specialized library of literature and data pertaining to the northern Gulf of Alaska and spill region
- Research by the University of Alaska, state and federal resource agencies, and visiting scientists affiliated with agency, academic, and private entities in support of

---

**Trustee Agencies**

State of Alaska Departments of Fish & Game Law, and Environmental Conservation  
United States National Oceanic & Atmospheric Administration Departments of Agriculture and Interior

the Trustee Council restoration mission would be supported

- In addition to research facilities, the Alaska SeaLife Center would include a public education and visitation component that would be developed using separate funds secured from private contributions

The actual construction would be accomplished through a Reimbursable Services Agreement with the City of Seward, with project oversight being provided by the Alaska Department of Fish and Game. The Alaska SeaLife Center would be owned by the City of Seward and operated by the Seward Association for the Advancement of Marine Science, a non-profit corporation established in 1990. The University of Alaska would provide scientific leadership at the Alaska SeaLife Center, including development of quality assurance and standard operating protocols.

The facility has been the subject of extensive consultation and review by both federal and state agencies, the *Exxon Valdez* Trustee Council's independent Chief Scientist, additional independent scientific peer reviewers, University of Alaska researchers, design consultants, representatives of the City of Seward, and the Seward Association of the Advancement of Marine Science. The project has also been reviewed and is supported by the Trustee Council's 17-member Public Advisory Group, an advisory body comprised of representatives from diverse interest groups, industries and organizations within Alaska.

Based on detailed design development documents, the Alaska SeaLife Center is estimated to cost \$49,530,000. The Alaska Industrial Development and Export Authority has reviewed the estimate and found it to be realistic. Of the total estimated cost, \$37,530,000 has been allocated for the research component and \$12,000,000 has been allocated for the public education/visitation component.

It is anticipated that the Alaska SeaLife Center will be funded from the following sources:

Chapter 79, SLA 1993, Section 2	12,500,000
RPL 11-6-9999	24,956,000
Private Donations	12,000,000
United States Forest Service	43,000
United States Department of Commerce	<u>31,000</u>
Total	\$49,530,000

Additional documentation supporting this request is also being provided. This consists of a detailed Project Status Report on construction costs, facilities operations and management, and governing agreements. The governing agreements describe the

---

Trustee Agencies

State of Alaska: Departments of Fish & Game, Law, and Environmental Conservation  
United States: National Oceanic & Atmospheric Administration, Departments of Agriculture and Interior

relationships and responsibilities between the Alaska Department of Fish and Game, the City of Seward, the University of Alaska, and the Seward Association for the Advancement of Marine Science

As a capital project, authority to receive and expend subject to AS 37 25 020 is requested

cc Kevin Brooks, Department of Fish and Game  
Joe Sullivan, Department of Fish and Game

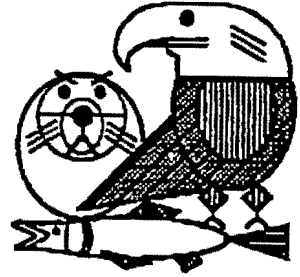
---

Trustee Agencies

State of Alaska Departments of Fish & Game, Law and Environmental Conservation  
United States National Oceanic & Atmospheric Administration, Departments of Agriculture and Interior

# Exxon Valdez Oil Spill Trustee Council

Executive Director's Office  
709 West 9th Street, Room 859A  
P O Box 20122  
Juneau, AK 99802-0122  
Phone (907) 586-7238 Fax (907) 586-7589



## FAX COVER SHEET

Please deliver the following pages to

TO <u>Eric</u>	FAX NUMBER
OFFICE	DATE
PHONE #	TIME SENT

From \_\_\_\_\_  
\_\_\_\_\_

### COMMENTS

Signed copy for your file Please give  
a copy to Molly  
Thanks

Total Number of Pages (including this cover sheet) 4

Fax sent by Vera

If you do not receive all pages, please call 586-7238

Department of Fish and Game

RPL #11-6-9990

Exxon Valdez Trustee Council-  
\$12,653,600 EVOSS

Statutory Authority AS 37 14 405

The Departments of Fish and Game, Natural Resources, and Environmental Conservation request authority to receive and expend \$12,653,600 from the Exxon Valdez oil spill settlement trust fund to implement the federal fiscal year 1996 projects approved by the Trustee Council at its August 25, 1995 meeting. Funding authorized under this revised program will be allocated to state agencies as follows:

Department of Fish and Game -	\$10,766.9
Department of Natural Resources -	1,644.1
Department of Environmental Conservation -	<u>242.6</u>
<b>Total</b>	<b>\$12,653.6</b>

In November 1994, the Council adopted a Restoration Plan to guide the restoration effort. To be eligible for funding, proposals must be consistent with the policies in the Plan, and must be designed to achieve the recovery objectives for injured resources and services. The Restoration Plan's approach includes four basic elements:

- Monitoring and Research - This component includes 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 intended to aid resource managers and the Trustee Council restore the injured resources and services.

Work plans funded/proposed for funding with EVOSS funds under this category from FY93 through this RPL equal \$85.5 million.

State and Federal

- General Restoration - This component can encompass a broad range of activities. Projects considered eligible include improvements to the rate of natural recovery by manipulating the environment directly or protecting natural recovery through the management of human uses (e.g., reducing/eliminating sources of pollution). \$25.0 million is being requested under this category in a separate RPL for the research infrastructure for the Alaska Sealife Center in Seward (Reference RPL# 11-6-9991).

Total estimated future authorizations (through FY02) anticipated by the Trustee Council for the Monitoring and Research, and General Restoration components is not expected to exceed \$137 million.

State/Federal

Note: Does not state that prior years estimates in the plan are both state and federal projects. Add'l she reflects all as monitoring and research.



## Department of Fish and Game

- **Habitat Acquisition and Protection** - This component includes the purchase of private land or interests in land to minimize further injury to resources and services, and allow recovery to continued unimpeded. It may also include recommendations for changes in agency management practices on existing public land in the spill area.

Land purchases and surface/subsurface rights authorized/funded with EVOSS funds under this category to date equals \$50.2 million. Estimated future authorizations (through FY02) anticipated by the Trustee Council under this category are not anticipated to exceed \$322.0 million.

- **Restoration Reserve** - This component provides a source of funding for restoration activities needed after the Exxon payments end in FY02. To date \$24 million has been allocated by the Council to the Restoration Reserve. The Council anticipates that \$12 million will be added to the Reserve for each of the remaining seven years of Exxon payments. Estimated future authorizations (FY97-FY02) anticipated by the Trustee Council under this category will therefore approximate \$84.0 million.

Other non-project specific expenditures/adjustments to date are approximately \$172.3. These include reimbursements to federal and state agencies for past damage assessment, cleanup, response, restoration, and litigation expenses after January 1991.

The Council's position in FY96 is to fund only those proposals that are designed to restore the resources or services identified in Table 1, unless new scientific evidence or local knowledge show that other resources or services experienced by a population-level injury or continuing chronic effect. The Council also determined that restoration action may address resources not listed on Table 1 if these activities will benefit an injured resource or service. For example, the Council believes 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."<sup>1</sup> [Emphasis added]

The Restoration Plan notes that approximately half of the funds to be allocated in FY96 will go toward three multi-year ecosystem studies of Prince William Sound. This emphasis on ecosystem investigations is acknowledged by the Trustee Council as a significant change from earlier work plans in that "it reflects an understanding by the Trustee Council that restoration issues are complex, and research must often take a long-term approach to understand the physical and biological interactions and may be constraining recovery of injured resources and services."<sup>2</sup>

---

<sup>1</sup> Invitation to Submit Restoration Projects for Federal Fiscal Year 1996 and Draft Restoration Program FY96 and Beyond, p. 4 Exxon Valdez Oil Spill Trustee Council, March 24, 1995.

<sup>2</sup> Ibid., p. 11.

## Department of Fish and Game

TABLE 1 Resources and Services Injured by the Spill<sup>3</sup>

INJURED RESOURCES			Lost or Reduced SERVICES
Biological Resources		Other	
Recovering:	Not Recovering:	Archaeological Resources	Commercial Fishing
Bald Eagle	Common Murre	Designated Wilderness Areas	Passive Uses
Black Oystercatcher	Harbor Seal	Sediment	Recreation/Tourism
Intertidal Organisms (some)	Harlequin Duck		
Killer Whale	Intertidal Organisms (some)		
Mussels	Marbled Murrelet		
Sockeye Salmon (Red Lake)	Pacific Herring		
Subtidal Organisms (some)	Pigeon Guillemot		
	Pink Salmon		
Recovery Unknown	Sea Otter		
Clams	Sockeye Salmon (Kenai & Akulura systems)		
Cutthroat Trout	Subtidal Organisms (some)		
Dolly Varden			
River Otter			
Rockfish			

## Legislative Fiscal Analyst Recommendations: It is recommended

1 That along with their FY97 budget submissions, the Departments of Fish and Game, Natural Resources, and Environmental Conservation provide the Finance Committees with a listing of all activities included in their respective operating and capital budgets that are enhanced or augmented with Exxon Valdez Oil Spill Settlement Funds, and at what levels

2 That authorization approved under this revised program be restricted to fiscal year 1996 activities only, and lapse date language to carry forward beyond June 30, 1996 be included in an FY97 appropriations bill or a future RPL. Consistent with past practices and with the conditions stipulated in AS 37 14 415(3), the Trustee Council is required to submit its proposed project listing and funding request to the Legislative Budget and Audit Committee each fiscal year for review

<sup>3</sup> Ibid. p 5 Continues to provide one year appropriation and we would have to obtain a lapse extension from the legislature

Legislative Finance Division

Virginia Stonkus, Fiscal Analyst

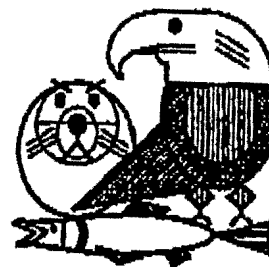
09/22/95

**Exxon Valdez Oil Spill Trustee Council**

Restoration Office

645 "G" Street, Anchorage, AK 99501

Phone (907) 278-8012 Fax (907) 276-7178

**MEMORANDUM**

**TO** Nancy Slagle  
Director  
Division of Budget Review  
Office of Management and Budget

**FROM** Molly McCammon  
Executive Director

**DATE** September 8, 1995

**RE.** *Exxon Valdez Oil Spill Revised Program 11-6-9990*

In accordance with Chapter 1, FSSLA 1992, the Departments of Fish and Game, Environmental Conservation, and Natural Resources request authority to receive and expend \$12,653,600 from *Exxon Valdez* oil spill settlement trust funds for the federal fiscal year 1996 Work Plan approved by the Trustee Council at its August 25, 1995 meeting

The projects included in the 1996 Work Plan were developed based on extensive scientific, budget and policy review, and taking into consideration comments received from the general public and the Trustee Council's 17-member Public Advisory Group. Briefly, the process began in January 1995 at the annual restoration workshop. Over 120 participants, including individuals currently conducting restoration projects, scientists familiar with the spill, and members of the public reviewed previous years' work and analyzed restoration needs for the future. The *Invitation to Submit Restoration Projects for Federal Fiscal Year 1996* was a product of the restoration workshop and was released in March 1995. This document described a long-range projection of research, monitoring and general restoration needs and provided the basis for this year's funding decisions by the Trustee Council.

The Trustee Council's work program is a comprehensive, balanced effort to restore injured resources and services in the spill area. The work plan recognizes the importance of research to determine why resources are not recovering or are recovering only slowly, reflects the need for monitoring to track the status of recovery, and provides for general restoration activities and habitat protection actions, especially those that help the

---

**Trustee Agencies**

State of Alaska Departments of Fish & Game, Law, and Environmental Conservation  
United States National Oceanic & Atmospheric Administration Departments of Agriculture and Interior

resources upon which communities within the spill area depend

Authority is being sought in this revised program for that portion of the Federal Fiscal Year 1996 Work Plan which will be implemented by the state agencies. Additional projects will be considered by the Trustee Council in December, after the results of the FY 95 field season are available and further scientific analysis is completed. At that time, another revised program will be submitted to the committee for review.

Since the Trustee Council operates on the federal fiscal year, authority to receive and expend is being requested through state fiscal year 1997 for these projects. Authorization to receive and expend is being requested in the amount of \$12,653,600 allocated to agencies as follows:

Environmental Conservation	242,600
Fish and Game	10,766,900
Natural Resources	1,644,100

In order to provide the context of the restoration projects proposed in this revised program, the following discussion of the annual work program reflects the entire Federal Fiscal Year 1996 restoration program. This includes projects that are proposed for implementation by state agencies, as well as projects that will be implemented by federal agencies. For ease of discussion, the work plan has been organized by restoration cluster. Projects designed to address similar restoration objectives or those that impact the same or related resources are reflected in one cluster. These include:

<u>Restoration Cluster</u>	<u>Page No.</u>
Pink Salmon	3
Pacific Herring	4
Sound Ecosystem Assessment	5
Sockeye Salmon	6
Cutthroat and Dolly Varden Trout	7
Marine Mammals	7
Nearshore Ecosystem Projects	8
Seabird-Forage Fish and Related Projects	9
Subsistence Services	10
Archeological Resources	11
Habitat Improvements	12
Reduction of Marine Pollution	12
Public Information, Science Management & Administration	13
Restoration Reserve	14
Alaska SeaLife Center	15
Habitat Protection and Acquisition Support	15

**Pink Salmon**

The pink salmon restoration program is under extensive on-going review. For that reason, the Trustee Council deferred a number of projects with significant restoration potential but which also raise important technical questions. In essence, these questions arise from the wide spectrum of opinion that exists on what approach to take to answer pink salmon genetics, straying, and stock-separation questions. The Research, Monitoring, and General Restoration elements being addressed in this cluster are as follows:

1. The ***toxic effect of oil on pink salmon*** was documented after the oil spill. Research showed that pink salmon eggs in oiled streams were dying at higher than rates in unoled streams. In FY 96, the egg mortality of wild pink salmon will continue to be monitored. Research will be focused on whether mortality is the result of genetic injury, that is, whether the original injury caused genetic damage that is being passed to subsequent generations. The research will also focus on whether the oil caused pink salmon to increase their natural rates of straying or decreased marine survival.

2. ***Stock separation and management*** provides better information for use by fishery managers to protect injured pink salmon runs that might otherwise be overharvested. Fishery managers use the information to set harvest limits, locations, and timing to concentrate commercial harvest on hatchery or uninjured wild runs in order to protect injured wild stocks.

3. ***Supplementation*** of pink salmon is being accomplished through the construction and monitoring of structures to enhance wild pink salmon production.

While the majority of the pink salmon projects are included in this cluster, ***the Sound Ecosystem Assessment (SEA)*** cluster also investigates the pink salmon resource using an ecosystem approach. SEA addresses the ecosystem processes that may be constraining recovery of herring and pink salmon and is discussed separately on page 5.

The pink salmon projects in this revised program are as follows:

<u>Agency</u>	<u>Project No.</u>	<u>Title</u>	<u>Request</u>
ADF&G	96139A1	Salmon Instream Habitat and Stock Restoration - Little Waterfall Barrier Bypass	55,000
ADF&G	96139A2	Spawning Channel Construction Project - Port Dick, Lower Cook Inlet	230,500
ADF&G	96186	Coded Wire Tag Recoveries from Pink Salmon in Prince William Sound	254,900

<u>Agency</u>	<u>Project No.</u>	<u>Title</u>	<u>Request</u>
ADF&G	96188	Otolith Thermal Mass Marking of Hatchery Reared Pink Salmon In PWS	93,200
ADF&G	96191A	Oil-Related Embryo Mortalities in PWS Pink Salmon Populations	389,500
ADF&G	96196	Genetic Structure of Prince William Sound Pink Salmon	71,300

### Pacific Herring

The herring biomass in Prince William Sound has declined by more than 75 percent from the record level in 1992 of over 100,000 tons. This precipitous decline was first observed in the spring of 1993 and has continued during 1994 and 1995. The herring program focuses on investigating the causes of the crash and prospects for recovery, and on providing management information to help fishery managers protect injured stocks as follows:

1. Research on **reproductive impairment** is being conducted to determine if exposure to oil caused decreased reproduction or genetic damage.
2. **Genetic stock identification** is being conducted to provide information to fisheries managers about the number and distribution of herring stocks to help them focus the harvest on uninjured populations.
3. **Herring disease** is being studied to determine the causes and impact of a virus and a fungus that have become common in Prince William Sound herring populations.
4. **Herring natal habitats** are being studied to develop a model for estimating the biomass of all spawning herring in Prince William Sound. This model will be used by the Department of Fish and Game as a management tool.
5. In order to integrate the herring research, an overall lead scientist with herring expertise is required to provide **program coordination** and scientific leadership.

While the majority of the herring projects are included in this cluster, **the Sound Ecosystem Assessment (SEA)** cluster also investigates the herring resource using an ecosystem approach. SEA addresses the ecosystem processes that may be constraining recovery of herring and pink salmon and is discussed separately on page 5.

The herring projects in this revised program are as follows:

<u>Agency</u>	<u>Project No</u>	<u>Title</u>	<u>Request</u>
ADF&G	96162	Investigation of Disease Factors Affecting Declines of Pacific Herring Population in PWS	204,100
ADF&G	96164	Pacific Herring Program Leadership	49,200
ADF&G	96165	Genetic Discrimination of Prince William Sound Herring Populations	103,900
ADF&G	96166	Herring Natal Habitats	229,900

#### Sound Ecosystem Assessment (SEA Program)

The SEA Program is a multi-year ecological investigation of the factors controlling populations of Prince William Sound pink salmon and herring. It is designed to obtain an understanding of the large-scale oceanographic mechanisms (temperature, salinity, circulation, water structure) that influence levels of adult production of pink salmon and herring in Prince William Sound by investigation of the early life stages of these species and their predator-prey relationships. The research goals for the SEA program follows:

- 1 ***Acquire an ecosystem-level understanding of processes*** that interact to maintain the production of pink salmon and herring within natural limits of variability
- 2 ***Use this information to develop improved predictors*** of annual levels of pink salmon and herring production. That is, to be able to forecast pink salmon and herring responses to both natural and human disturbances, including fisheries management, enhancement, and restoration
- 3 ***Establish a database*** describing the status of the ecosystem relative to pink salmon and herring as an information source for improving the effectiveness of management, enhancement, and restoration of these and other resources

The SEA projects in this revised program are as follows:

<u>Agency</u>	<u>Project No</u>	<u>Title</u>	<u>Request</u>
ADF&G	96320E	Salmon and Herring Predation	637,700
ADF&G	96320G	Phytoplankton and Nutrients	162,200
ADF&G	96320H	Zooplankton in the PWS Ecosystem	323,600
ADF&G	96320I	Isotope Tracers - Food Webs of Fish	83,300
ADF&G	96320J	Information Systems and Model Development	180,500
ADF&G	96320K	PWSAC Experimental Fry Release	61,400
ADF&G	96320M	Physical Oceanography in PWS	191,700

<u>Agency</u>	<u>Project No.</u>	<u>Title</u>	<u>Request</u>
ADF&G	96320N	Nekton/Plankton Acoustics	209,900
ADF&G	96320R	SEA Trophodynamics Modeling and Validation Through Remote Sensing	202,700
ADF&G	96320T	Juvenile Herring Growth and Habitat Partitioning	1,141,600
ADF&G	96320U	Energetics of Herring and Pollock	189,500
ADF&G	96320Y	Variation in Local Predation Rates on Hatchery - Released Fry	40,000
ADF&G	96320Z1	Synthesis and Integration	68,800

### Sockeye Salmon

The elements of the restoration program for sockeye salmon focus on the Kenai/Skilak and the Kodiak commercial fisheries as explained below

1 Research on the ***Kenai/Skilak sockeye*** The commercial fishery was curtailed in Upper Cook Inlet in 1989 due to oil contamination. As a result, there were higher than usual returns (overescapement) of spawning fish to the Kenai/Skilak lake systems. However, there is an imperfect understanding of the mechanism and amount of injury caused by the 1989 overescapement. The five-year-old component of the fish spawned in 1989 will return in 1995 and is being studied to assess the extent of injury.

The Kenai/Skilak sockeye projects include research to determine the mechanism and amount of injury caused by the escapement and support for the development of genetic stock identification and hydroacoustic techniques which are used to identify that portion of the Upper Cook Inlet commercial catch that is returning to the Kenai and other streams. This information allows fishery managers to concentrate the fishery on uninjured sockeye runs.

2 Research on ***Kodiak sockeye salmon*** The commercial fishery also experienced overescapement which affected the productivity of the Red, Frazer, Akalura, and Afognak lake systems in the Kodiak Archipelago. The Trustee Council proposes to continue monitoring smolt counts and other limnological parameters in the Kodiak lakes until smolt counts and other parameters appear normal for two consecutive years. This is currently estimated to occur in Red Lake in 1997.

3 In addition to the site specific research and monitoring efforts, ***Supplementation*** of Coghill Lake is on-going to enhance production of sockeye runs to provide replacement fish for affected commercial fisheries.



The sockeye salmon projects in this revised program are as follows

<u>Agency</u>	<u>Project No</u>	<u>Title</u>	<u>Request</u>
ADF&G	96255	Kenai River Sockeye Salmon Restoration	239,800
ADF&G	96258A	Sockeye Salmon Overescapement Project	460,200
ADF&G	96259	Restoration of Coghill Lake Sockeye Salmon	71,000

#### Cutthroat and Dolly Varden Trout

Prince William Sound is the northern and western limit of the cutthroat trout's range, and the resource does not exist elsewhere in the spill area. The cutthroat stocks known to exist within the Sound are few, rarely more than 1,000 individuals and are geographically isolated from each other. Studies conducted in 1989, 1990, and 1991 indicated that cutthroat and Dolly Varden trout growth rates and adult sizes were less in oiled than in unoiled areas.

Current restoration projects emphasize supplementation of wild stocks to augment their small populations, and thus their safety, in the face of spill-related or natural stresses. In Federal Fiscal Year 1996, the program will focus on the completion and evaluation of habitat improvements and on research on life history to enhance management of injured populations as described below.

- 1 ***Supplementation*** involves in-stream habitat improvements begun in 1994 and monitoring to determine their physical and biological success.
- 2 ***Research and monitoring*** provides basic information about the relationship between resident and anadromous forms of cutthroat and Dolly Varden trout. Research is intended to clarify the nature of previously documented injuries.

The cutthroat and Dolly Varden trout cluster is presented for information only. There are no state agency cutthroat and Dolly Varden trout projects under consideration in this revised program.

#### Marine Mammals

Understanding long-term declines in marine mammals, as well as factors presently limiting recovery, is fundamental to restoration of oil spill injuries. Although there are early indications that the number of harbor seals stabilized, their population in Prince William Sound remains low. Killer whales are considered to be a recovering species, but there continues to be interest in the status of their population in the Sound. To provide more information, the following approaches have been approved by the Trustee Council:

- 1 ***Factors limiting recovery of harbor seals*** are being studied, particularly those factors that affect the survival of juvenile harbor seals. Possible factors include food

limitations, predation by killer whales, and mortality caused by humans, including incidental take and subsistence harvest

2 The *monitoring of killer whales* has occurred in Prince William Sound every year since the spill. The draft monitoring schedule calls for every other year. Thus, Federal Fiscal Year 1996 closes out the 1995 project. Future monitoring needs will be evaluated after review of the 1995 information

The marine mammal projects in this revised program are as follows

<u>Agency</u>	<u>Project No.</u>	<u>Title</u>	<u>Request</u>
ADF&G	96001	Recovery of Harbor Seals. Condition and Health Status	214,100
ADF&G	96064	Monitoring, Habitat Use and Trophic Interactions of Harbor Seals in PWS	347,300
ADF&G	96170	Isotope Ratio Studies of Marine Mammals	150,400

#### Nearshore Ecosystem Projects

This cluster of projects addresses sea otters, river otters, harlequin ducks, pigeon guillemots, black oystercatchers, mussels, clams, and other intertidal/subtidal organisms. Also included in this cluster are projects that monitor the fate and persistence of oil. The restoration program has four major approaches to restore nearshore resources

1 *Monitor recovery of nearshore vertebrate predators* to determine whether or not populations are recovering, isolate processes constraining recovery, and identify potential activities to facilitate recovery. Four nearshore vertebrate predator species and their primary prey are being investigated to assess the health and recovery of the nearshore ecosystem. The predators are sea otter, river otter, harlequin duck, and pigeon guillemot. The prey species are mussels, clams, sea urchins, and crabs for sea otters and harlequin ducks, and nearshore benthic fishes for river otters and pigeon guillemots.

2 Continue to *monitor the recovery of intertidal areas* to determine contamination and recovery of this portion of the ecosystem.

3 *Assess the fate and persistence of oil* and identify means, if any, of removing remaining oil trapped in the sediments of the spill area. These issues are important and have attracted significant interest from the public, especially subsistence users around Chenega, who use beaches on which surface oil remains visible. A special workshop is scheduled for November 1995 to address these questions. Pending the outcome of the workshop, other projects may be recommended for Federal Fiscal

Year 1996 or future years

4 **Monitoring** additional nearshore species to determine recovery This includes a pilot study using satellite transmitters to track movements of harlequin ducks within the spill area and monitoring reproductive success in oiled and unoled areas within Prince William Sound

The nearshore ecosystem projects in this revised program are as follows

<u>Agency</u>	<u>Project No.</u>	<u>Title</u>	<u>Request</u>
ADF&G	96025	Mechanism of Impact and Potential Recovery of Nearshore Vertebrate Predators	542,400
ADEC	96027	Kodiak Archipelago Shoreline Assessment	10,000
ADF&G	96086	Herring Bay Monitoring and Restoration Studies	173,000
ADF&G	96106	Subtidal Monitoring Eelgrass Communities	250,000
ADF&G	96427	Harlequin Duck Recovery Monitoring	51,000

#### Seabird-Forage Fish and Related Projects

This project cluster addresses bald eagles, common murre, marbled murrelets, and pigeon guillemots through the following elements

1 Research on the dependency of seabirds on forage fish as a prey base The **seabird-forage fish project (APEX)** is an ecological study that examines populations of several injured fish-eating birds (common murre, marbled murrelets, and pigeon guillemots) that are not recovering in Prince William Sound This effort examines whether the abundance, composition, and distribution of forage fish are limiting seabird recovery in Prince William Sound The project envisions intensive study for five years (FY 95-99) A comprehensive review of the project will be undertaken during the fall of 1995 after preliminary results of the 1995 field season are available before a final commitment to the project is made.

2 **Monitoring and research** on other seabirds This includes projects which gather basic life history information and monitor recovery of populations, specifically for murrelets and common murre

The effort includes the development of a productivity index to monitor murrelet reproductive success and the development of basic biological information about the Kittlitz's murrelet, a species about which very little is known Transmitters are being used to track seasonal movement and pelagic habitat use and monitor the major spill-area population of common murre

Other efforts include a marine bird survey, publishing the results of a seabird workshop, and the close out of a project to remove introduced foxes from islands with seabird colonies

The seabird forage fish and related projects in this revised program are as follows:

<u>Agency</u>	<u>Project No.</u>	<u>Title</u>	<u>Request</u>
ADF&G	96163C	Fish Diet Overlap Using Fish Stomach Content Analysis	21,500
ADF&G	96163L	Historical Review of Ecosystem Structure in PWS/GOA Complex and Abundance and Distribution of Forage Fish in the Barren Islands	4,800
ADF&G	96600	Program Management	53,500

### Subsistence Services

This cluster of projects addresses certain biological resources used for subsistence (clams, harbor seals, Pacific herring, pink salmon, sea otters, and sockeye salmon) as well as the subsistence service. While most other projects in the work plan contribute to the recovery of subsistence, the projects in this cluster are designed to restore the subsistence service. The restoration program has several major elements to address subsistence:

1 ***Replace or enhance subsistence resources*** Several proposed projects are focused on enhancing or replacing harvestable resources near subsistence communities. Current projects involve providing enhanced or replacement salmon runs and the development of hatchery techniques to produce clam seed and provide replacement clam beds for subsistence use.

2 Increased ***participation of, and communication with, subsistence users*** about restoration efforts. This includes use of traditional subsistence knowledge about resources captured to assist researchers in achieving restoration objectives as well as helping subsistence users participate in the restoration planning and implementation process.

4 ***Food safety testing*** began in 1989 under the auspices of the Oil Spill Health Task Force. This and similar work was continued by the Trustee Council in Federal Fiscal Years 93, 94, and 95. Communication of food safety information will continue in Federal Fiscal Year 1996 under the Community Involvement project.

The subsistence projects in this revised program are as follows

<u>Agency</u>	<u>Project No</u>	<u>Title</u>	<u>Request</u>
ADF&G	96052	Community Involvement and Use of Traditional Knowledge	261,000
ADF&G	96127	Tatitlek Coho Salmon Release	26,600
ADF&G	96210	Prince William Sound Youth Area Watch	115,000
ADF&G	96214	Documentary on Subsistence Harbor Seal Hunting in PWS	77,400
ADF&G	96225	Port Graham Pink Salmon Subsistence Project	95,300
ADF&G	96244	Community Based Harbor Seal Management and Biological Sampling	128,500
ADF&G	96272	Chenega Chinook Release Program	52,300

### Archaeological Resources

Archaeological resources are non-renewable. They cannot recover in the same sense as biological resources. Thus, the restoration effort has focused on monitoring, site-stabilization and data recovery, and protecting artifacts and sites from further degradation as follows

1 ***Monitoring*** on a periodic basis is proposed for a small number of "index sites" to gauge whether there is a resurgence in looting and vandalism, and to continue hydrocarbon testing

2 ***Site-stabilization and data recovery*** will complete the curation of artifacts from two vandalized sites

3 ***Protecting artifacts and sites*** involves two strategies to prevent further degradation and vandalism. First, the site-stewardship program is designed to provide training and coordination for volunteers to monitor vandalized archaeological sites in the spill area. A pilot program for Kachemak Bay, Uganik Bay, Uyak Bay, and the Chignik Areas. Finally, the cluster includes the planning for efforts to conserve and display artifacts. The proposal would work with communities and museums in the spill area, and with the University of Alaska to evaluate the possible need for additional repositories and develop a regional approach to protection of artifacts. This planning effort could result in the need for additional funding in future years

The archaeological projects in this revised program are as follows

<u>Agency</u>	<u>Project No</u>	<u>Title</u>	<u>Request</u>
ADNR	96007A	Archaeological Index Site Monitoring	96,400
ADNR	96149	Archaeological Site Stewardship	54,100
ADNR	96154	Comprehensive Community Planning for Restoration of Archaeological Resources in PWS and Lower Cook Inlet	9,600

### Habitat Improvements

While opportunities to directly manipulate damaged habitat as a means of helping injured biological resources recover are limited, restoration along the Kenai River presents a significant opportunity. Adverse impacts to the banks of the Kenai River total about 19 miles of degraded shoreline along public lands. Riparian habitats have been impacted by trampling, vegetation loss and other development impacts. This riparian zone provides important habitat for a variety of injured resources including Dolly Varden, pink salmon, and sockeye salmon. Elements of this restoration effort involve restoration of injured fish habitat, enhancement and direction of recreation to minimize further impacts, and protection of the biological-physical functions of the Kenai River habitat.

The restoration program elements in this revised program is

<u>Agency</u>	<u>Project No</u>	<u>Title</u>	<u>Request</u>
ADNR	96180	Kenai Habitat Restoration and Recreation Enhancement Project	241,900
ADF&G	96180	Kenai Habitat Restoration and Recreation Enhancement Project	281,000

### Reduction of Marine Pollution

Another restoration program element involves reduction of marine pollution, specifically where the pollution is likely to affect the recovery of a part of the injured marine ecosystem, or of injured resources or services. A comprehensive plan to identify and remove the major sources of marine pollution and solid waste in Prince William Sound is being developed. The plan is expected to be finished during Federal Fiscal Year 1996, and it is not yet possible to estimate further Trustee Council funding.

The proposed project in this revised program is

<u>Agency</u>	<u>Project No.</u>	<u>Title</u>	<u>Request</u>
ADEC	96115	Sound Waste Management Plan	28,300

### **Public Information, Science Management, and Administration**

These expenses fund management and administrative functions necessary to implement the restoration program. For administrative purposes, the majority of this cluster is budgeted within the State of Alaska and the Trustee Council reimburses the state for costs incurred. The budget for this component of the restoration program has been reduced by almost 20%, from a total budget of \$4.2 million in FY 95 to \$3.4 million for FY 96. Further reductions are expected through FY 2002. Specific components of the cluster are explained below.

1. ***Public Information and Involvement*** is a critical component of the restoration effort. To that end, the Trustee Council is assisted by a 17-member Public Advisory Group (PAG) which provides input to the Trustee Council on the annual work plan and other aspects of the restoration program. The Trustee Council regularly holds public meetings to provide information and solicit comment on restoration activities. In addition, the Trustee Council publishes a Restoration Update newsletter, an annual status report, and a variety of other publications to provide information to scientists and the public.

The Oil Spill Public Information Center (OSPIC) was established in 1990. The center serves as the central access point for information and materials generated through the restoration process. In the past four years, staff librarians have responded to over 11,000 information requests, processed over 1,500 interlibrary loans, and distributed over 20,000 documents. Beginning in Federal Fiscal Year 1995, the Trustee Council provided funding to more efficiently synthesize and disseminate information generated through the restoration process including the creation of a comprehensive database of restoration project information. This effort will continue into Federal Fiscal Year 1996.

2. ***Scientific management and support*** provides the Council independent scientific review of the restoration program and ensures that studies are based on sound scientific principles. Since the oil spill, independent scientific review and support have been a major part of the damage assessment and restoration process. This process includes scientific peer review of project proposals and draft reports. The use of technical workshops is one of the methods used to focus scientific discussion. In 1995, technical workshops were held on seabird restoration, intertidal/subtidal communities, wild salmon stock supplementation, and ecosystem

factors affecting pink salmon and herring in Prince William Sound. Similar workshops will be conducted during Federal Fiscal Year 1996. In addition, an annual restoration symposium is held to provide a forum for principal investigators, project leaders, independent scientists, resource managers, PAG members, and community residents the chance to meet, report on the results of the most recent field season, and discuss efforts to synthesize information and guide the overall program.

3 **Administration** of both the state and federal restoration efforts is important to ensure overall management and implementation of the program. The Trustee Council is staffed by an executive director who oversees a staff that performs the planning, coordination, project oversight, fiscal accountability, and communication functions of the Trustee Council. In addition, each Trustee Council agency has a liaison who assists with work plan development and other Council efforts.

The public information, science management and administration project in this revised program is

<u>Agency</u>	<u>Project No.</u>	<u>Title</u>	<u>Request</u>
ADEC	96100	Administration, Public Information and Scientific Management	204,300
ADF&G	96100	Administration, Public Information and Scientific Management	1,956,400
ADNR	96100	Administration, Public Information and Scientific Management	847,500

#### Restoration Reserve

Complete recovery from the *Exxon Valdez* oil spill may not occur for decades. For example, some salmon return in cycles of four to six years, and other resources have lives that are much longer. To be effective, restoration activities may have to span more than one generation. Sometimes long-term research is necessary to understand why a resource is not recovering. In many cases, research must precede effective restoration or improved management decisions that will protect a resource or service. For these reasons, some restoration activities may continue for a long time.

Annual payments by the Exxon Corporation to the Restoration Fund end in September, 2001. The *Exxon Valdez* Restoration Reserve was created by the Trustee Council to hold funds to be used for restoration activities after the last annual payment. Allocation of the Reserve to specific activities will be made by the Trustee Council at a later date. Until that time, the funds continue to be held in trust by the U.S. District Court of Texas and authority to receive and expend is not required.



The Trustee Council has approved the transfer of \$12 million in Federal Fiscal Year 1996, the third payment toward the *Exxon Valdez* Restoration Reserve. Additional deposits of \$12 million in each of the remaining six years would provide a reserve of \$108 million plus interest. These funds could be used to carry out long-term restoration activities after the final payment by Exxon in 2001.

### Alaska SeaLife Center

In November 1994, the Trustee Council conditionally approved spending up to \$24,956,000 to support construction of marine research infrastructure important to the long-term restoration effort. A separate request to receive and expend has been submitted for approval. Please refer to RPL 11-6-9991 for additional information.

### Habitat Protection and Acquisition Support

Over the last three years, the Trustee Council located and evaluated lands owned by willing private owners with the goal of protecting habitat vital to recovery of injured resources and services. Habitat protection will prevent additional injury to resources and services while recovery is taking place, as well as provide a long-term safety net for these resources.

To date, the Trustee Council has protected habitat in the following five areas:

- *Kachemak Bay* In 1993, the Trustee Council contributed funding to the purchase of 23,800 acres of private inholdings within Kachemak Bay State Park on the Kenai Peninsula.
- *Seal Bay and Tonki Cape (Afognak Island)* Also in 1993, the state protected 41,549 acres on northern Afognak Island (17,166 acres on Seal Bay and 24,383 acres on Tonki Cape), which were dedicated in 1994 as the Afognak Island State Park.
- *Orca Narrows Subparcel* In January 1995, the federal government acquired from the Eyak Corporation timber rights on 2,052 acres of land in Orca Narrows near Cordova in Prince William Sound.
- *Akhiok-Kaguyak* In May 1995, the federal government acquired from Akhiok-Kaguyak, Inc. interest in 119,885 acres of land in Kodiak National Wildlife Refuge.
- *Old Harbor* Also in May 1995, the federal government acquired from the Old Harbor Native Corporation surface title to about 29,000 acres and conservation easements on 3,000 acres. These lands are also within the Kodiak National Wildlife Refuge. In addition, the Old Harbor Native Corporation agreed to preserve 65,000 acres of land on nearby Sitkalidak Island as a private wildlife refuge.

The Trustee Council is currently in various stages of negotiation with willing private landowners to protect additional habitat. Negotiations are on-going with Eyak, Tatitlek, Chenega, Port Graham, English Bay, and Koniag corporations, and with Afognak Joint Venture and the Kodiak Island Borough. The Council anticipates that agreements will be completed with most landowners during the next year.

In addition, the Trustee Council is proposing to protect a number of small parcels (under 1,000 acres each). 267 parcels were nominated; the Trustee Council has authorized preliminary negotiations for 29.

Authority to receive and expend at this time is limited to acquisition support and management costs only. Funds are not being requested for the purchase of habitat. A separate request will be submitted once agreements are complete.

The habitat protection and acquisition support project in this revised program is

<u>Agency</u>	<u>Project No.</u>	<u>Title</u>	<u>Request</u>
ADF&G	96126	Habitat Protection Acquisition Support	20,000
ADNR	96126	Habitat Protection Acquisition Support	394,600

Attached to this request is a summary which reflects the individual projects by agency. In addition, an abstract for each project has been attached. Detailed information exists for each project. If you would like additional information on any of the projects or any other aspect of the restoration program, please let me know.

Thank you for consideration of this request. If you have any questions, give me a call.

attachments

cc Joe Sullivan, ADF&G  
Ernie Piper, ADEC  
Carol Fries, ADNR

**EXXON VALDEZ TRUSTEE COUNCIL**  
**1996 Federal Fiscal Year Project Budget**  
**October 1, 1995 - September 30, 1996**

Agency	Project Number	Project Title	RPL 11-6-9990
<b>ADEC</b>	96027	Kodiak Archipelago Shoreline Assessment	\$10 0
	96100	Administration, Public Information and Scientific Management	\$204 3
	96115	Sound Waste Management Plan	\$28 3
		<b>ADEC Total</b>	<b>\$242.6</b>
<b>ADF&amp;G</b>	96001	Recovery of Harbor Seals Condition and Health Status	\$214 1
	96025	Mechanism of Impact and Potential Recovery of Nearshore Vertebrate Predators	\$542 4
	96052	Community Involvement and Use of Traditional Knowledge	\$261 0
	96064	Monitoring, Habitat Use and Trophic Interactions of Harbor Seals in PWS	\$347 3
	96086	Herring Bay Monitoring and Restoration Studies	\$173 0
	96100	Administration, Public Information and Scientific Management	\$1,956 4
	96106	Subtidal Monitoring Eelgrass Communities	\$250 0
	96126	Habitat Protection Acquisition Support	\$20 0
	96127	Tatitlek Coho Salmon Release	\$26 6
	96139A1	Salmon Instream Habitat and Stock Restoration - Little Waterfall Barrier Bypass	\$55 0
	96139A2	Spawning Channel Construction Project - Port Dick, Lower Cook Inlet	\$230 5
	96162	Investigations of Disease Factors Affecting Declines of Pacific Herring Populations in PWS	\$204 1
	96163C	Fish Diet Overlap Using Fish Stomach Content Analysis	\$21 5
	96163L	Historical Review of Ecosystem Structure in the PWS/GOA Complex and Abundance and Distribution of Forage Fish in the Barren Islands	\$4 8
	96164	Pacific Herring Program Leadership	\$49 2

**EXXON VALDEZ TRUSTEE COUNCIL**  
**1996 Federal Fiscal Year Project Budget**  
**October 1, 1995 - September 30, 1996**

Agency	Project Number	Project Title	RPL 11-6-9990
	96165	Genetic Discrimination of Prince William Sound Herring Populations	\$103 9
	96166	Herring Natal Habitats	\$229 9
	96170	Isotope Ratio Studies of Marine Mammals	\$150 4
	96180	Kenai Habitat Restoration and Recreation Enhancement Project	\$281 0
	96186	Coded Wire Tag Recoveries From Pink Salmon in Prince William Sound	\$254 9
	96188	Otolith Thermal Mass Marking of Hatchery Reared Pink Salmon in PWS	\$93 2
	96191A	Oil-Related Embryo Mortalities in PWS Pink Salmon Populations	\$389 5
	96196	Genetic Structure of Prince William Sound Pink Salmon	\$71 3
	96210	Prince William Sound Youth Area Watch	\$115 0
	96214	Documentary on Subsistence Harbor Seal Hunting in PWS	\$77 4
	96225	Port Graham Pink Salmon Subsistence Project	\$95 3
	96244	Community Based Harbor Seal Management and Biological Sampling	\$128 5
	96255	Kenai River Sockeye Salmon Restoration	\$239 8
	96258A	Sockeye Salmon Overescapement Project	\$460 2
	96259	Restoration of Coghill Lake Sockeye Salmon	\$71 0
	96272	Chenega Chinook Release Program	\$52 3
	96320E	Salmon and Herring Predation	\$637 7
	96320G	Phytoplankton and Nutrients	\$162 2
	96320H	Zooplankton in the PWS Ecosystem	\$323 6
	96320I	Isotope Tracers - Food Webs of Fish	\$83 3
	96320J	Information Systems and Model Development	\$180 5
	96320K	PWSAC Experimental Fry Release	\$61 4
	96320M	Physical Oceanography in PWS	\$191 7
	96320N	Nekton/Plankton Acoustics	\$209 9

**EXXON VALDEZ TRUSTEE COUNCIL**  
**1996 Federal Fiscal Year Project Budget**  
**October 1, 1995 - September 30, 1996**

Agency	Project Number	Project Title	RPL 11-6-9990
	96320R	SEA Trophodynamic Modeling and Validation Through Remote Sensing	\$202 7
	96320T	Juvenile Herring Growth and Habitat Partitioning	\$1,141 6
	96320U	Energetics of Herring and Pollock	\$189 5
	96320Y	Variation in Local Predation Rates on Hatchery-Released Fry	\$40 0
	96320Z1	Synthesis and Integration	\$68 8
	96427	Harlequin Duck Recovery Monitoring	\$51 0
	96600	Program Management	\$53 5
		<b>ADF&amp;G Total</b>	<b>\$10,766 9</b>
	96007A	Archaeological Index Site Monitoring	\$96 4
	96100	Administration, Public Information and Scientific Management	\$847 5
<b>ADNR</b>	96126	Habitat Protection Acquisition Support	\$394 6
	96149	Archaeological Site Stewardship	\$54 1
	96154	Comprehensive Community Planning for Restoration of Archaeological Resources in PWS and Lower Cook Inlet	\$9 6
	96180	Kenai Habitat Restoration and Recreation Enhancement Project	\$241 9
		<b>ADNR Total</b>	<b>\$1,644 1</b>
		<b>TOTAL</b>	<b>\$12,653 6</b>

<b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b>
---

**Project Number:** 96001

**Project Title:** Recovery of Harbor Seals from EVOS Condition and Health Status

**Proposer:** Castellini, University of Alaska/Fairbanks

**New or Cont'd:** Continued

**Cluster:** Marine Mammal Program

**RPL Request:** ADFG \$214 1

**Cooperating Federal Agencies:**

**Total FY 96:** \$214 1

None

---

**Project Summary.**

This project focuses on the health of harbor seals, a marine mammal species that is not recovering in Prince William Sound. Personnel from the University of Alaska in cooperation with the Alaska Department of Fish and Game will work with harbor seals to assess their health, blood and blubber chemistry and size in relation to their ecological and nutritional requirements. The project addresses potential health and nutritional problems that may be impeding harbor seal recovery.

**Chief Scientist's Recommendation.**

This is a solid technical proposal that addresses a basic question about recovery of harbor seals in the oil spill area. The investigator is well qualified, and is helping to evaluate the most generally accepted hypothesis for the seals' decline.

**Trustee Council Action**

Fund This project will document the body condition and nutritional status of harbor seals, thus helping to test the "is it food?" hypothesis for declines in the PWS harbor seal population. This information is necessary to eliminate alternative hypotheses (e.g., predation, disease). This project complements 96064 and will enable managers, subsistence hunters, and others to focus their concerns and efforts on the most probable sources of population decline.

9/11/95

<b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b>
---

**Project Number:** 96007A

**Project Title:** Archaeological Index Site Monitoring

**Proposer:** ADNR

**New or Cont'd:** Continued

**Cluster:** Archaeological  
Resources

**RPL Request:** ADNR \$96 4

**Cooperating  
Federal**

**Total FY 96:** \$141 6

**Agencies:** DOI, USFS

---

**Project Summary**

Monitoring of archaeological sites on public land injured by vandalism and oiling will concentrate on a sample of index sites in the three regions of the spill. Oiled sites will be tested for re-introduced oil. The 10-year project will end at five years if monitoring shows no continued injury.

**Chief Scientist's  
Recommendation**

This is an excellent proposal that represents the minimum that can be done in archaeological site monitoring. There is a need to continue consultations with Native groups.

**Trustee Council  
Action**

Fund. Proposer should continue and expand consultation with Native groups. The project provides continued monitoring of archaeological sites injured by vandalism and oiling. The ten year project will end at five years if monitoring shows no continued injury.

<b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b>
---

**Project Number:** 96025

**Project Title:** Mechanism of Impact and Potential Recovery of Nearshore Vertebrate Predators

**Proposer:** DOI

**New or Cont'd:** Continued

**Cluster:** Nearshore Ecosystem Projects

**RPL Request:** ADFG \$542 4

**Cooperating  
Federal**

**Total FY 96:** \$1,728 2

**Agencies:** DOI, NOAA

---

**Project Summary:** The project assesses trophic, health, and demographic factors across a suite of "apex" predators injured by the spill to determine mechanisms constraining recovery and improve knowledge of the status of recovery. Primary hypotheses: 1) recovery of nearshore resources is limited by recruitment processes, 2) initial and/or residual oil in benthic habitats and in or on benthic prey has had a limiting effect on the recovery of predators, and 3) EVOS-induced changes in populations of benthic prey species have influenced the recovery of predators.

**Chief Scientist's  
Recommendation.**

This program was peer reviewed in detail in March 1995, and an 18-month workplan was approved by the Trustee Council. A detailed review of the first full field season of this program will be conducted in the fall or winter of 1996 in order to define the program for FY 96.

**Trustee Council  
Action**

Fund: Project will be reviewed in fall of 1995 to see if modifications in 1996 Detailed Project Description are necessary based on 1995 field season. Budget will be reevaluated following review session. In general, the nearshore ecosystem, including intertidal habitat and organisms, was hardest hit by the spill. This project monitors recovery of intertidal organisms and closely linked vertebrate predators and addresses question of whether continuing contamination is slowing recovery of vertebrate predators.

9/11/95



<b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b>
---

**Project Number:** 96027

**Project Title:** Kodiak Archipelago Shoreline Assessment\* Monitoring Surface and Subsurface Oil

**Proposer:** ADEC

**New or Cont'd:** Continued

**Cluster:** Nearshore Ecosystem Projects

**RPL Request:** ADEC \$10 0

**Cooperating  
Federal**

**Total FY 96:** \$60 0

**Agencies:** NOAA

---

**Project Summary:** This project completes work begun in FY 95 to determine the areal extent, toxicity and origin of oil on selected Kodiak Archipelago shorelines. Most of these shorelines were last surveyed in 1990. The information about the remaining oil is necessary to determine whether recovery is proceeding at an acceptable rate, to help local people assess whether the presence of remaining oil is still affecting shoreline activities, to determine the origin and toxicity of any remaining oil, and to determine if any beaches need additional treatment.

**Chief Scientist's  
Recommendation**

This is close-out funding to hold community meetings and complete the final report.

**Trustee Council  
Action:**

Fund This project closes out work funded in FY 95

<b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b>
---

**Project Number:** 96052

**Project Title:** Community Involvement & Use of Traditional Knowledge

**Proposer:** Chugach Regional  
Resources  
Commission

**New or Cont'd:** Continued

**Cluster:** Subsistence Projects

**RPL Request:** ADFG \$261 0

**Cooperating  
Federal**

**Total FY 96:** \$261 0

**Agencies:** None

---

**Project Summary**

This project, submitted by the Chugach Regional Resources Commission (CRRC), will continue a program begun in FY 95. This project will encourage and facilitate communication among the Trustee Council, researchers working on oil spill restoration projects, regional organizations and residents of communities impacted by the oil spill. The goal is to make optimal use of the complementary nature of scientific data and traditional knowledge.

**Chief Scientist's  
Recommendation:**

Addresses needed restoration work by furthering interactions between EVOS scientists and community members.

**Trustee Council  
Action**

Fund. This project will continue a program to facilitate communication and interaction among the Trustee Council, scientists, and residents of communities impacted by the oil spill.

<b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b>
---

**Project Number:** 96064

**Project Title:** Monitoring, Habitat Use, and Trophic Interactions of Harbor Seals in Prince William Sound

**Proposer:** ADFG

**New or Cont'd:** Continued

**Cluster:** Marine Mammal Program

**RPL Request:** ADFG \$347 3

**Cooperating  
Federal**

**Total FY 96:** \$347 3

**Agencies:** None

---

**Project Summary:** This project will monitor the status of harbor seals in PWS and investigate the possible causes for the ongoing decline. Aerial surveys will be conducted to determine whether the population continues to decline, stabilizes, or increases. Seals will be satellite-tagged to describe their movements, use of haulouts, and hauling out and diving behavior. Samples of blood, blubber, whiskers, and skin will be collected to study diet, health and condition, and genetic relationships to other harbor seal populations.

**Chief Scientist's Recommendation.** This is a very good proposal for continuing work on restoration of harbor seals. The investigators are performing well.

**Trustee Council Action** Fund This basic study explores reasons for the long-term decline in harbor seals. Focus is on "is it food?" hypothesis, but also addresses alternatives, such as predation and disease. This work will enable resource managers, subsistence users, and others to focus their efforts and concern on the most probable causes of population decline.

<b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b>
---

**Project Number:** 96086

**Project Title:** Herring Bay Monitoring and Restoration Studies

**Proposer:** Highsmith, University  
of Alaska/Fairbanks

**New or Cont'd:** Continued

**Cluster:** Nearshore Ecosystem  
Projects

**RPL Request:** ADFG \$173 0

**Cooperating  
Federal**

**Total FY 96:** \$173 0

**Agencies:** None

---

**Project Summary.**

In 1990, intertidal restoration studies were established in Herring Bay in response to the T/V *Exxon Valdez* oil spill. These studies have continued through the 1994 field season and show continued injury to *Fucus gardneri* and the associated invertebrate population, especially in the upper intertidal. Data collected during the 1995 field season will be incorporated into the existing Herring Bay database and the rates and extents of recovery determined for injured resources.

**Chief Scientist's  
Recommendation:**

This is a project that was funded from 1990 through 1995, with close-out scheduled for FY 96. The budget appears to be high for a close-out project.

**Trustee Council  
Action:**

Fund. Project is close-out (data analysis and report writing only) for studies previously funded by the Trustee Council.

<b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b>
---

**Project Number:** 96100

**Project Title:** Public Information, Science Management and Administration

**Proposer:** ADNR, ADFG, DEC

**New or Cont'd:** Continued

**Cluster:** Public Information,  
Science Management,  
and Administration

**RPL Request:** ADNR \$847 5  
ADFG \$1,956 4  
ADEC \$204 3

**Cooperating  
Federal**

**Total FY 96:** \$3,439 6

**Agencies:** NOAA,DOI, USFS

---

**Project Summary.**

Funding for management and administrative expenses necessary to implement the restoration program, including research, monitoring, general restoration and habitat protection. This budget supports scientific review under an independently contracted Chief Scientist. This peer review is provided for new project proposals as well as final reports. These funds also support technical review workshops. Public information and involvement is also supported with these funds, including operation of the 17 member Public Advisory Group and the Oil Spill Public Information Center that provides information upon request to researchers throughout the country. The budget for this component this year has been reduced by almost 20%, from \$4.2 million in FY 95, to \$3.4 million in FY 96. For administrative purposes, the majority of this cluster is budgeted within the State of Alaska and the Trustee Council reimburses the state for costs incurred.

**Chief Scientist's  
Recommendation.**

Not applicable. Note: Funding for the Chief Scientist's competitively bid contract is contained within the overall budget for Project 96100.

**Trustee Council  
Action.**

Fund

<b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b>
---

**Project Number:** 96106

**Project Title:** Subtidal Monitoring Eelgrass Communities

**Proposer:** Jewett, University of  
Alaska/Fairbanks

**New or Cont'd:** Continued

**Cluster:** Nearshore Ecosystem  
Projects

**RPL Request:** ADFG \$250 0

**Cooperating  
Federal**

**Total FY 96:** \$250 0

**Agencies:** None

---

**Project Summary**

This project would provide funds to write the final report for Project 95106. The budget reflects projected costs of sample analysis, data analysis, and report preparation. The final report will incorporate and compare all data collected since 1991.

**Chief Scientist's  
Recommendation**

This is a close-out project for work previously funded by the Trustees. The investigator is doing a very good job on subtidal studies.

**Trustee Council  
Action**

Fund. Would close out work funded in previous years.

<b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b>
---

**Project Number:** 96115

**Project Title:** Sound Waste Management Plan

<b><u>Proposer:</u></b>	Prince William Sound Economic Development Council	<b><u>New or Cont'd:</u></b>	Continued
		<b><u>Cluster:</u></b>	Reducing Marine Pollution

**RPL Request:** ADEC \$28 3

		<b><u>Cooperating Federal Agencies:</u></b>	None
<b><u>Total FY 96:</u></b>	\$28 3		

---

**Project Summary:** The Sound Waste Management Plan is a comprehensive plan to identify and remove the major sources of marine pollution and solid waste in PWS that may be affecting recovery of resources and services injured by the Exxon Valdez Oil Spill. This request completes the first phase -- planning begun in FY 95. The following phases of the plan will be to implement these solutions using funds from a variety of sources, possibly including the Trustee Council.

**Chief Scientist's  
Recommendation** Prior work won't come to fruition if these final funds are not supplied in 1996. In theory, this project could speed recovery of injured species but those linkages are not clear. Future funding requests need close scrutiny.

**Trustee Council  
Action:** Fund Project completes comprehensive planning for PWS communities to determine appropriate strategies for minimizing marine pollution, some of which may be affecting recovery of injured resources and services.

<b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b>
---

**Project Number:** 96126

**Project Title:** Habitat Protection Acquisition Support

**Proposer:** ADFG, ADNR

**New or Cont'd:** Continued

**Cluster.** Habitat Protection  
Support

**RPL Request:** ADFG \$20 0  
ADNR \$394 6

**Cooperating  
Federal**

**Total FY 96:** \$1,193 0

**Agencies:** USFS,DOI

---

**Project Summary**

This project supports activities necessary for the Trustee Council's habitat protection program including negotiations with willing private landowners, parcel appraisals, hazardous materials surveys, title searches, and site visits as needed. The Trustee Council has made purchases or executed protection agreements in five areas to date and discussions with a number of additional Native Corporations, local governments and private landowners are ongoing. Authority to receive and expend at this time is limited to acquisition support and management costs. Separate requests will be submitted for review once agreements involving the state are completed.

**Chief Scientist's  
Recommendation**

The independent Chief Scientist's recommendation in support of habitat protection was documented as part of the *Report of the Executive Director Concerning Habitat Acquisition* (November 28, 1994).

**Trustee Council  
Action**

Fund



<b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b>
---

**Project Number:** 96127

**Project Title:** Tattilek Coho Salmon Release

**Proposer:** Tattilek IRA

**New or Cont'd:** Continued

**Cluster:** Subsistence Projects

**RPL Request:** ADFG \$26 6

**Cooperating**

**Federal**

**Total FY 96:** \$26 6

**Agencies:** None

---

**Project Summary**

Project will create a coho salmon return to Boulder Bay near Tattilek village. Enough coho eggs to produce 20,000 smolts will be collected from an ADF&G approved stream, incubated and reared to smolt at the Solomon Gulch Hatchery, transported and held for two weeks in net pens in Boulder Bay before release. Release will produce a 2,000 to 3,000 adult return to Boulder Bay for harvest in a subsistence fishery.

**Chief Scientist's  
Recommendation**

Excellent project, technically sound, highly feasible. However, Trustee Council funding should be limited to maximum of one life cycle of coho (approximately 4 years).

**Trustee Council  
Action**

Fund. However, no funds should be spent on this project until final approval of EA undertaken in FY 95 (approval expected 8/25/95). Fund for 4 years (one coho life cycle). Project will create a coho salmon run near Tattilek as a replacement resource for subsistence resources injured by the oil spill.

9/11/95

<b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b>
---

**Project Number:** 96139A1

**Project Title:** Salmon Instream Habitat and Stock Restoration - Little Waterfall  
Barrier Bypass Improvement

**Proposer:** ADFG

**New or Cont'd:** Continued

**Cluster:** Pink Salmon Projects

**RPL Request:** ADFG \$55 0

**Cooperating  
Federal**

**Total FY 96:** \$55 0

**Agencies:** None

---

**Project Summary:** This proposal will provide for continuation of Project 95139A1 to complete the barrier bypass improvement at Little Waterfall Creek. It will evaluate whether the improvements are successful once construction is complete. The project will increase spawning habitat use by pink and coho salmon and thus will increase salmon production in ensuing years.

**Chief Scientist's  
Recommendation.**

This proposal is technically sound and its implementation will likely enhance pink salmon production.

**Trustee Council  
Action**

Fund. Project is intended to increase available spawning habitat and thus provide additional pink and coho salmon for harvest as a replacement for salmon lost in EVOS.

9/11/95

<b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b>
---

**Project Number:** 96139A2

**Project Title:** Spawning Channel Construction Project Port Dick Creek, Lower Cook Inlet

**Proposer:** ADFG

**New or Cont'd:** Continued

**Cluster:** Pink Salmon Projects

**RPL Request:** ADFG \$230 5

**Cooperating  
Federal  
Agencies:**

**Total FY 96:** \$230 5

None

---

**Project Summary:** The proposed Port Dick Pink Salmon Spawning Channel would restore wild pink and chum salmon stocks. The proposed project would increase the spawning habitat available in Port Dick Creek by restoring formerly used tributaries by excavating down to stable water sources.

**Chief Scientist's  
Recommendation**

Implementation of this proposal will likely enhance pink salmon production, and contains plans to monitor performance of the modified channel. It had been previously approved in 1995.

**Trustee Council  
Action**

Fund. Project is intended to increase available spawning habitat and thus provide additional pink and chum salmon for harvest as a replacement for salmon lost in the oil spill.

9/11/95

<p><b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b></p>
---

**Project Number:** 96149

**Project Title:** Archaeological Site Stewardship

**Proposer:** ADNR

**New or Cont'd:** NEW

**Cluster:** Archaeological  
Resources

**RPL Request:** ADNR \$54 1

**Cooperating**

**Federal**

**Total FY 96:** \$74 4

**Agencies:** DOI

---

**Project Summary:** The archaeological site stewardship program will provide training and coordination for a cadre of volunteers to monitor vandalized archaeological sites in the oil spill area beyond the ability of agency monitoring. Volunteer site stewards will protect damaged sites in Kachemak Bay, Uganik Bay, Uyak Bay and the Chignik area of the Alaska Peninsula. Further protection will come from increased local awareness of harm from site vandalism.

**Chief Scientist's Recommendation:** The concept was favorably reviewed. This project could serve as a useful model for protection of sites by local residents.

**Trustee Council Action:** Fund. The project will provide training and coordination for volunteers to monitor vandalized archaeological sites in the oil spill area. This effort is currently beyond the ability of agency monitoring. After FY 98, expenses will be assumed either by volunteer stewards or agency budgets.

<b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b>
---

**Project Number:** 96154

**Project Title:** Comprehensive Community Plan for Restoration of  
Archaeological Resources in PWS and Lower Cook Inlet

**Proposer:** Chugach Heritage  
Foundation

**New or Cont'd:** NEW

**Cluster:** Archaeological  
Resources

**RPL Request:** ADNR \$9 6

**Cooperating  
Federal**

**Total FY 96:** \$206 3

**Agencies:** USFS, DOI

---

**Project Summary:** This project would provide coordinated and cost-effective approach to the provision and delivery of technical assistance planning services to each of the Chugach Oil Spill Impacted Region communities engaged in the development of a cultural center or subsistence restoration facility. The project is designed to facilitate a region-wide effort, coordinate and provide for the various technical service elements associated with and essential to the planning and development of community cultural centers or subsistence restoration facilities and their attendant long-term programs.

**Chief Scientist's  
Recommendation**

A well presented and complete proposal for local restoration of archaeological resources affected by the spill, concentrating on storage and display of artifacts in the spill area. I recommend this planning effort.

**Trustee Council  
Action**

Fund. Project description has been revised to reflect a comprehensive community planning effort.

<b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b>
---

**Project Number:** 96162

**Project Title:** Investigations of Disease Factors Affecting Declines of Pacific Herring Populations in Prince William Sound, AK

**Proposer:** University of  
California, Univeristy  
of Washington, Simon  
Fraser University

**New or Cont'd:** Continued

**Cluster:** Herring Projects

**RPL Request:** ADFG \$204 1

**Cooperating  
Federal  
Agencies:**

None

**Total FY 96:** \$635 0

---

**Project Summary:** Field and laboratory studies will focus on Viral Hemorrhagic Septicemia (VHS) and *Ichthyophonus hoferi*, a pathogenic fungus, to determine their role in the disease and mortality observed in PWS herring since 1993. Herring in PWS will be monitored three times per year for signs of disease and immune status. Specific pathogen-free herring will be used to determine the degree of mortality, blood chemical changes and pathogenicity produced by these organisms alone and in combination with exposure to stressors such as petroleum hydrocarbons, temperature and crowding. (This project was formerly numbered 95320S.)

**Chief Scientist's  
Recommendation:**

This is an innovative and thorough approach to investigating the potential relationship between oil exposure and manifestation of disease in herring, although the time between the spill and the population crashes raises questions about cause and effect. Nevertheless, there is a plausible basis for the questions being addressed by this work. By exposing pathogen-free herring to oil and challenge by VHS virus and *Ichthyophonus* in laboratory experiments, the role of these pathogens in the population crashes will be clarified. Also, learning more about the circumstances of disease transmission may benefit herring management.

**Trustee Council  
Action:**

Defer until FY 95 results are evaluated (fund interim). Project is designed to investigate potential link between oil exposure and disease and between disease and the population decline in PWS. Understanding the lack of recovery is important for restoration and resumption of a herring fishery.

9/11/95

<b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b>
---

**Project Number:** 96163C

**Project Title:** Fish Diet Overlap Using Fish Stomach Content Analysis

**Proposer:** Duffy, et al

**New or Cont'd:** Continued

**Cluster:** Seabird/Forage Fish  
Ecosystem Project

**RPL Request:** ADFG \$21 5

**Cooperating  
Federal**

**Total FY 96:** \$133 1

**Agencies:** NOAA

---

**Project Summary:** Part of Project 96163 (Seabird-Forage Fish/APEX) This study will use seabirds as "probes" of the trophic environment of PWS and compare their reproductive and foraging biologies with similar measurements from the Barren Islands, an area with more suitable or abundant food. Measurements will be compared with hydroacoustic and net samples of fish to calibrate seabird performance with fish distribution and abundance. The project will use fish samples to compare diet, energetics and reproductive parameters of different forage-fish species to determine whether competitive and predatory interactions or different responses to the environment may be favoring the abundance of one fish species over another.

**Chief Scientist's  
Recommendation:** Project to be subject of detailed review in November 1995, as voted by the Trustee Council in approving the FY 95 startup of this project.

**Trustee Council  
Action:** Provide interim funding only. Defer remainder pending project review with the Chief Scientist. Project addresses the "is it food?" hypothesis for several seabird species that are in continuing decline. This information could help inform future fisheries management decisions, particularly if commercial interest in fisheries for capelin and other small, oil-rich species was to emerge.

9/11/95

<b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b>
---

**Project Number:** 96163L

**Project Title:** Historical Review of Ecosystem Structure in the PWS/GOA Complex and Abundance and Distribution of Forage Fish in the Barren Islands

**Proposer:** Duffy, et al

**New or Cont'd:** Continued

**Cluster:** Seabird/Forage Fish  
Ecosystem Project

**RPL Request:** ADFG \$4 8

**Cooperating  
Federal**

**Total FY 96:** \$73 3

**Agencies:** DOI, NOAA

---

**Project Summary.** Part of Project 96163 (Seabird-Forage Fish/APEX) This study will use seabirds as "probes" of the trophic environment of PWS and compare their reproductive and foraging biologies with similar measurements from the Barren Islands, an area with more suitable or abundant food. Measurements will be compared with hydroacoustic and net samples of fish to calibrate seabird performance with fish distribution and abundance. The project will use fish samples to compare diet, energetics and reproductive parameters of different forage-fish species to determine whether competitive and predatory interactions or different responses to the environment may be favoring the abundance of one fish species over another.

**Chief Scientist's  
Recommendation**

Project to be subject of detailed review in November 1995, as voted by the Trustee Council in approving the FY 95 startup of this project.

**Trustee Council  
Action**

Provide interim funding only. Defer remainder pending project review with the Chief Scientist. Project addresses the "is it food?" hypothesis for several seabird species that are in continuing decline. This information could help inform future fisheries management decisions, particularly if commercial interest in fisheries for capelin and other small, oil-rich species was to emerge.

9/11/95



<p><b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b></p>
---

**Project Number:** 96164

**Project Title:** Pacific Herring Program Leadership

**Proposer:** ADFG

**New or Cont'd:** NEW

**Cluster:** Herring Projects

**RPL Request:** ADFG \$49 2

**Cooperating**

**Federal**

**Total FY 96:** \$49 2

**Agencies:** None

---

**Project Summary**

The purpose of this project is to enhance coordination, integration and critical review of projects that are designed to study different aspects of Pacific herring in the PWS ecosystem, to better understand the interactions of the components of the ecosystem, and to aid in the recovery of the injured resource and lost services

**Chief Scientist's  
Recommendation**

As revised, this proposal provides the leadership the herring research program deserves

**Trustee Council  
Action**

Fund Increased leadership should increase the effectiveness of the EVOS herring program Note that the balance of funds needed to hire a program leader should come from 96162, 96165, and 96166 It is unlikely this project will transition into normal agency management In future years, funding will be rolled into other herring projects

<b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b>
---

**Project Number:** 96165

**Project Title:** Genetic Discrimination of Prince William Sound Herring Populations

**Proposer:** ADFG

**New or Cont'd:** Continued

**Cluster:** Herring Projects

**RPL Request:** ADFG \$103 9

**Cooperating  
Federal  
Agencies:**

**Total FY 96:** \$103 9

None

**Project Summary**

The PWS herring fishery has been in catastrophic decline since 1992. The Alaska Department of Fish and Game recovery effort includes incorporating a knowledge of genetically derived population structure into harvest management. This continuing project will delineate the structure of PWS population(s) and related North Pacific populations using both nuclear and mitochondrial DNA analyses. Tests for temporal and spatial diversity within years and temporal stability across years will be done.

**Chief Scientist's  
Recommendation**

This is a continuing project that will directly affect issues of importance for managing Prince William Sound herring. The investigators have performed admirably on past projects, and I recommend further support for the project in 1996.

**Trustee Council  
Action**

Fund. This project addresses basic questions about the genetic composition of PWS herring in relation to other North Pacific populations. This information is important to management. When setting harvest limits, it is important to know whether there exists one or more genetically distinct populations.

<p><b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b></p>
---

**Project Number:** 96166

**Project Title:** Herring Natal Habitats

**Proposer:** ADFG

**New or Cont'd:** Continued

**Cluster:** Herring Projects

**RPL Request:** ADFG \$229 9

**Cooperating  
Federal  
Agencies:**

**Total FY 96:** \$444 1

None

---

**Project Summary:**

Past studies have documented damage from oil exposure in adult herring, hatching success of embryos, and levels of physical and genetic abnormalities in larvae. The PWS herring spawning population has drastically declined since 1993, and pathology studies implicated Viral Hemorrhagic Septicemia (VHS) and *Ichthyophonus* as potential sources of mortality as well as indicators of stress. The project will continue to provide estimates of spawning herring abundance and investigate the lethality of suspected pathogens and the role of environmental contaminants in disease transmission through laboratory and field studies.

**Chief Scientist's  
Recommendation:**

Relates to SEA hypothesis and causes of decline in herring, which are fundamental to the EVOS restoration program. However, there is concern about the extent to which some activities can be considered on-going agency management. The budget is too high.

**Trustee Council  
Action:**

Defer pending 1) review of FY 95 results, 2) a review of recovery objective for herring based on FY 95 results, 3) a review of the project budget, and 4) agreement on plan for transition to normal agency management. In addition, there is a question whether herring spawn deposition surveys are a cost-effective management tool (juvenile herring survey may be more effective). Fund interim. The goal of the project is to improve estimation of spawning biomass, in order to establish harvest levels and guidelines that allow natural restoration to occur and that will sustain a healthy fishery.

9/11/95

<b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b>
---

**Project Number:** 96170

**Project Title:** Isotope Ratio Studies of Marine Mammals in Prince William Sound

**Proposer:** Schell, University of Alaska/Fairbanks

**New or Cont'd:** Continued

**Cluster:** Marine Mammal Program

**RPL Request:** ADFG \$150 4

**Cooperating Federal**

**Total FY 96:** \$150 4

**Agencies:** None

---

**Project Summary:** Stable isotope ratios are natural tracers of carbon and nitrogen transfers through food webs. Through a mix of captive animal studies, comparison of isotope ratios in archived and current marine mammal tissues and their potential prey species in the PWS, insight into environmental changes causing the decline of harbor seals may be possible. This project will supply the isotope ratio determinations for other projects using this technique in the PWS ecosystem. Over the 12 months of FY 96 funding about 10,000 samples in these related projects will be analyzed. (This project was formerly numbered 95320I2.)

**Chief Scientist's Recommendation**

Excellent in all respects. This project will doubtlessly provide insights into the functioning of the Prince William Sound ecosystem that cannot be obtained in other ways. It may well provide valuable information for modeling the entire ecosystem at a very reasonable cost. Coordination with Project 96121 should prevent duplication of effort.

**Trustee Council Action**

Fund. This project provides technical support for 96064, and will assist the SEA program (96320) by describing the food chains that support important commercial fisheries in PWS.

<b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b>
---

**Project Number:** 96180

**Project Title:** Kenai Habitat Restoration & Recreation Enhancement Project

**Proposer:** ADNR

**New or Cont'd:** NEW

**Cluster:** Habitat  
Improvements

**RPL Request:** ADFG \$281 0  
ADNR \$241 9

**Cooperating  
Federal**

**Total FY 96:** \$560 6

**Agencies:** DOI

---

**Project Summary**

Adverse impacts to the banks of the Kenai River total approximately 19 miles of the river's 166 mile shoreline. Included in this total are 5.4 river miles of degraded shoreline on public land. Riparian habitats have been impacted by trampling, vegetation loss and structural development. This riparian zone provides important habitat for pink salmon, sockeye salmon and Dolly Varden, species injured by the *Exxon Valdez* oil spill. The project's objectives are to restore injured fish habitat, protect fish and wildlife habitat, enhance and direct recreation and preserve the values and biophysical functions that the riparian habitat contributes to the watershed.

**Chief Scientist's  
Recommendation**

This is a well presented proposal, and the supplementary information provided helps to clarify the relationship to work that is being carried out with funds provided from the *Exxon Valdez* criminal settlement and other sources. This is a strong project aimed at the direct restoration of habitats that are important to the recovery of sockeye and other fish species of commercial and recreational importance.

**Trustee Council  
Action**

Fund. This project will aid restoration of habitat for the benefit of sockeye salmon and other fish species of commercial and recreational importance.

<b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b>
---

**Project Number:** 96186

**Project Title:** Coded Wire Tag Recoveries From Pink Salmon in Prince William Sound

**Proposer:** ADFG

**New or Cont'd:** Continued

**Cluster:** Pink Salmon Projects

**RPL Request:** ADFG \$254 9

**Cooperating  
Federal**

**Total FY 96:** \$254 9

**Agencies:** None

---

**Project Summary:** This project funds recovery of coded-wire tags in PWS pink salmon. The recovered tags are used to help ADFG manage the commercial fishery to protect injured stocks. The project is part of a program to transition to a more precise in-season tool, otolith marking, with a permanent funding source other than the Trustee Council. (This project was formerly numbered 95320B.)

**Chief Scientist's  
Recommendation:** This project is necessary to support the transition to the otolith thermal mass marking. This project should be discontinued only after feasibility of TMM is demonstrated.

**Trustee Council  
Action:** Fund. Future years' funding, as recommended, includes two years of overlap with Otolith Thermal Marking Project (96188). The project provides information that allows managers to vary the timing and location of commercial harvest to protect injured wild stocks. This is especially important for stocks in the hard-hit Southwest District in PWS and would enable continued fishing in this area.

9/11/95

<b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b>
---

**Project Number:** 96188

**Project Title:** Otolith Thermal Mass Marking of Hatchery Reared Pink Salmon  
in Prince William Sound

**Proposer:** ADFG

**New or Cont'd:** Continued

**Cluster:** Pink Salmon Projects

**RPL Request:** ADFG \$93 2

**Cooperating**

**Federal**

**Total FY 96:** \$93 2

**Agencies:** None

---

**Project Summary:**

This project will develop otolith mass marking as an in-season stock separation tool for pink salmon in PWS. In-season stock composition data is used by fishery managers to protect damaged wild pink salmon stocks from overharvest in mixed-stock fisheries. Coded-wire tags are presently used for this purpose in the Sound. Transitioning to otolith marking will reduce costs and increase precision. (This project was formerly numbered 95320C.)

**Chief Scientist's  
Recommendation:**

This is the continuation of a previously approved program. It is innovative, cost effective, and probably one of the most effective steps the Trustees can support to improve pink salmon management.

**Trustee Council  
Action**

Fund. Otolith marking is a more accurate and less expensive technology for providing the information now obtained through coded wire tags. Future years' funding, as recommended, includes two years of overlap with Coded Wire Tag (Project 96186). Funding for application of this technique will make a transition to non-Trustee sources by FY 99 (only closeout funds proposed in '99).

9/11/95

<b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b>
---

**Project Number:** 96191A

**Project Title:** Oil-Related Embryo Mortalities in PWS Pink Salmon Populations

**Proposer:** ADFG

**New or Cont'd:** Continued

**Cluster:** Pink Salmon Projects

**RPL Request:** ADFG \$389 5

**Cooperating  
Federal**

**Total FY 96:** \$474 6

**Agencies:** None

---

**Project Summary:** Elevated embryo mortalities were detected in populations of pink salmon inhabiting oiled streams following the oil spill. The purpose of this project is to continue to monitor the recovery of pink salmon embryos in the field, provide laboratory verification of the field results, and verify and identify the occurrence of genetic damages. Results of these studies may provide the first evidence of heritable injury in fish exposed to chronic or acute sources of oil pollution.

**Chief Scientist's  
Recommendation:**

The assessment of embryo survival in the field is worthwhile to verify the 1994 result that no survival difference exists between oiled and unoled streams for even-year pink salmon. However, the search for microlesions in the genome of injured pink salmon, through employing a variety of the latest genetic techniques, may not be able to detect these very rare events in the many possible locations for such mutations. The molecular genetics should not go forward in FY 96 until the results from FY 95 have been reviewed in the fall. If the adults from the 1994 brood year that were exposed as eggs do not produce a f2 generation, then only closeout funding should be provided.

**Trustee Council  
Action:**

Fund ongoing component of project. Interim funding only on molecular genetics component of project. Decision on further molecular genetics work pending further review of all pink salmon proposals addressing genetics/straying/stock identification questions. This project monitors potential on-going injury to and recovery of pink salmon and explores the hypothesis that oil spill injury is being passed on genetically.



<b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b>
---

**Project Number:** 96196

**Project Title:** Genetic Structure of Prince William Sound Pink Salmon

**Proposer:** ADFG

**New or Cont'd:** Continued

**Cluster:** Pink Salmon Projects

**RPL Request:** ADFG \$71 3

**Cooperating**

**Federal**

**Total FY 96:** \$178 5

**Agencies:** None

---

**Project Summary**

Previous work found that wild-stock pink salmon suffered both direct lethal and sublethal injuries as a result of the oil spill. An understanding of the population structure of pink salmon in PWS is essential to assess the impact of these injuries on a population basis and to devise and implement management strategies for restoration. This project is designed to delineate the genetic structure of populations of wild pink salmon inhabiting PWS (This project was formerly numbered 95320D )

**Chief Scientist's  
Recommendation**

This is the second year of this work on the genetic stock structure of pink salmon in Prince William Sound. This is a good proposal being conducted by well-qualified geneticists. The proposed breeding experiments are justified in order to interpret the heterozygosity of certain genes used as markers.

**Trustee Council  
Action:**

Fund close-out of current work. Defer new data gathering pending further review of all pink salmon proposals addressing genetics/straying/stock identification questions. This project is designed to determine geographic extent of genetic differences in PWS pink salmon. In combination with 96093A and B, this information will guide development of management strategies for single vs. multiple stocks.

9/11/95

<b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b>
---

**Project Number:** 96210

**Project Title:** Prince William Sound Youth Area Watch

**Proposer:** Chugach Regional  
Resources  
Corporation

**New or Cont'd:** NEW

**Cluster:** Subsistence Projects

**RPL Request:** ADFG \$115 0

**Cooperating  
Federal**

**Total FY 96:** \$115 0

**Agencies:** None

---

**Project Summary:**

Students from Chenega Bay, Tatitlek and some outlying areas will participate in research projects identified by the Prince William Sound Science Center and other EVOS researchers. The objective is to increase the awareness of youth regarding the effects of the oil spill and encourage their involvement in research/restoration. Students will be involved in oceanographic testing, fish monitoring, bird and mammal observations, pristane/mussel analysis and octopus studies.

**Chief Scientist's  
Recommendation**

A solid proposal for a pilot project to involve local youth in the scientific aspects of the restoration program. Well presented and integrated proposal.

**Trustee Council  
Action:**

Fund as a pilot project. However, no funds should be spent on this project until legal and budget review are complete, liability concerns are resolved, and final approval is received from the Executive Director.

9/11/95

<b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b>
---

**Project Number:** 96214

**Project Title:** Documentary on Subsistence Harbor Seal Hunting in PWS

**Proposer:** Tatitlek Village

**New or Cont'd:** NEW

**Cluster:** Subsistence Projects

**RPL Request:** ADFG \$77 4

**Cooperating**

**Federal**

**Total FY 96:** \$77 4

**Agencies:** None

---

**Project Summary:** The purpose of this project is to make a documentary on subsistence hunting of harbor seals in PWS. This video will document all facets of harbor seal hunting including the ecological and biological knowledge hunters use to hunt harbor seals. By documenting this knowledge, the project will enhance the restoration of the seal population by providing an indigenous hunter's perspective on harbor seal ecology.

**Chief Scientist's  
Recommendation:**

Project is an excellent idea. Will directly serve the interests of the communities, and will assist restoration of harbor seals by allowing subsistence users to make better decisions about the resource.

**Trustee Council  
Action**

Fund

<b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b>
---

**Project Number:** 96225

**Project Title:** Port Graham Pink Salmon Subsistence Project

**Proposer:** Port Graham

**New or Cont'd:** NEW

**Cluster:** Subsistence Projects

**RPL Request:** ADFG \$95 3

**Cooperating  
Federal**

**Total FY 96:** \$95 3

**Agencies:** None

---

**Project Summary**

This project will help supply pink salmon for subsistence use in the Port Graham area during the broodstock development phase of the Port Graham hatchery. Because local runs of coho and sockeye salmon, which are the more traditional salmon subsistence resources, are at low levels, pink salmon are now heavily relied on for subsistence. This project will help ensure that pink salmon remain available for subsistence use until the more traditional species are rejuvenated.

**Chief Scientist's  
Recommendation:**

Potentially worthwhile project that should supplement pink salmon production for the benefit of subsistence users.

**Trustee Council  
Action:**

Fund. Project is intended to increase the availability of pink salmon for subsistence use, replacing runs of coho and sockeye salmon depleted since the oil spill.

<b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b>
---

**Project Number:** 96244

**Project Title:** Community-Based Harbor Seal Management and Biological Sampling

**Proposer:** Alaska Native Harbor Seal Commission

**New or Cont'd:** Continued

**Cluster:** Subsistence Projects

**RPL Request:** ADFG \$128 5

**Cooperating  
Federal**

**Total FY 96:** \$128 5

**Agencies:** None

---

**Project Summary:** The goal of the project is to facilitate the involvement of subsistence users of harbor seals in the restoration of this species through two workshops, conducting biological sampling, collection and application of traditional knowledge, and development of a traditional knowledge database. A subcontract with the Alaska Native Harbor Seal Commission will contribute to developing a meaningful role for subsistence hunters in research and restoration activities.

**Chief Scientist's  
Recommendation**

This is a well integrated and technically feasible project

**Trustee Council  
Action:**

Fund This project will follow through on recommendations from workshops supported through previous Trustee Council projects. Subsistence users will be involved in harbor seal restoration through collecting biological samples from subsistence-taken animals, and a traditional knowledge database will be developed and distributed.

9/11/95

<p><b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b></p>
---

**Project Number:** 96255

**Project Title:** Kenai River Sockeye Salmon Restoration

**Proposer:** ADFG

**New or Cont'd:** Continued

**Cluster:** Sockeye Salmon  
Program

**RPL Request:** ADFG \$239 8

**Cooperating  
Federal**

**Total FY 96:** \$442 9

**Agencies:** None

---

**Project Summary**

Greatly reduced fishing time in upper Cook Inlet in 1989 due to the presence of oil caused sockeye salmon spawning escapements in the Kenai River to exceed the desired amount by three times. The overescapement may have reduced survival of juvenile sockeye salmon. Careful monitoring and possible reduction of Kenai River sockeye salmon harvests may be necessary to ensure adequate escapements. The goal of this project is to restore Kenai River sockeye salmon through improved stock assessment capabilities and more accurate regulation of spawning levels.

**Chief Scientist's  
Recommendation:**

This has been an excellent program, producing landmark results in '94 and '95. It has achieved its objectives by providing management tools for the upper Cook Inlet fishery. Closeout funds are requested for '96, but the amount seems high.

**Trustee Council  
Action:**

Fund close-out of FY 95 project. Defer a decision on FY 96 and future years until December, pending a review of the 1995 Kenai/Skilak sockeye return and of the overall Kenai/Skilak sockeye program. The project provides in-season identification of actual runs that Cook Inlet fishermen are harvesting which is used by fisheries managers to modify fishing areas and openings to protect Kenai/Skilak stocks.

9/11/95

<b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b>
---

**Project Number:** 96258A

**Project Title:** Sockeye Salmon Overescapement Project

**Proposer:** ADFG

**New or Cont'd:** Continued

**Cluster:** Sockeye Salmon  
Program

**RPL Request:** ADFG \$460 2

**Cooperating  
Federal**

**Total FY 96:** \$858 9

**Agencies:** None

---

**Project Summary**

This proposal provides for a close-out budget for the Kenai lakes sockeye research program with a limited continued sockeye monitoring program for the Kodiak Island lakes. If depressed adult returns from 1989 brood are observed in the Kenai River in 1995, continuation of the evaluation is proposed for the 1996 field season, which would bring the FY 96 cost to \$907,800. In addition, a separate proposal to experimentally evaluate the proposed mechanism leading to reduced production of smolt from the Kenai systems by means of an *in situ* enclosure study is integrated into these investigations.

**Chief Scientist's  
Recommendation**

Preliminary analysis of the 1995 return appears to confirm a weak return of the 1990 brood year, which would be consistent with an effect of overescapement in 1987 - 1989. The fry weight data and observations on vertical migration of zooplankton might also reflect on effect of overescapement. The application of the limnological work to management is unclear. The closeout costs appear high and further description of the analysis to be conducted on 1995 data is needed. I cannot recommend gathering new data except perhaps in Red and Akalura lakes on Kodiak Island.

**Trustee Council  
Action:**

Fund close-out of FY 95 work on Kenai/Skilak portion, continue limited Kodiak monitoring. Defer decision on FY 96 and future years' Kenai/Skilak work until fall, pending review of 1995 sockeye return and of the overall Kenai/Skilak sockeye program. This project investigates multiple mechanisms for injuries to sockeye caused by overescapement, and also will determine the effects on smolt escapement and ultimate production of returning adults. It also monitors recovery of Kodiak runs and provides information to help restore these runs.

9/11/95

<b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b>
---

**Project Number:** 96259

**Project Title:** Restoration of Coghill Lake Sockeye Salmon

**Proposer:** ADFG

**New or Cont'd:** Continued

**Cluster:** Sockeye Salmon  
Program

**RPL Request:** ADFG \$71 0

**Cooperating  
Federal**

**Total FY 96:** \$285 8

**Agencies:** USFS

---

**Project Summary.** Coghill Lake has historically been a major sockeye producer for PWS. The current production is very low and could jeopardize the sustainability of this sockeye stock without restoration efforts. This project continues a program begun in 1993 to fertilize Coghill Lake to restore the run. A restored sockeye salmon run would provide an important replacement resource for sport and commercial fisheries in PWS.

**Chief Scientist's  
Recommendation.**

This project is a replacement action for oil spill injury using lake fertilization to increase sockeye salmon production in Coghill Lake. Reviews have identified risks in the approach taken. If the fertilization program does not work, we are not likely to know why. In spite of my reservations about the project, I recommend continued funding.

**Trustee Council  
Action.**

Defer pending review of FY 95 results (fund interim). Consistent with recommendation in FY 95 work plan, there must be a transition to a non-Trustee funding source after FY 97. This project is designed to restore Coghill Lake to its former position as a mainstay of the commercial/sport sockeye fishery in PWS. Although the injury to this fishery was not caused by the oil spill, this project has been conducted on a replacement basis for losses of other fishery resources.

9/11/95



<b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b>
---

**Project Number:** 96272

**Project Title:** Chenega Chinook Release Program

<b><u>Proposer:</u></b>	Prince William Sound Aquaculture Corporation	<b><u>New or Cont'd:</u></b>	Continued
		<b><u>Cluster:</u></b>	Subsistence Projects

**RPL Request:** ADFG \$52 3

		<b><u>Cooperating Federal Agencies:</u></b>	
<b><u>Total FY 96:</u></b>	\$52 3		None

---

**Project Summary** Chinook salmon incubated and reared at the Wally Noerenberg Hatchery will be released in Crab Bay, adjacent to the native community of Chenega. Adult salmon returning to the site of release will provide replacement resources and associated services injured by the oil spill. Two releases have taken place (1994 & 1995) as part of this multi-year project. Adult salmon will begin returning in 1996 and 1997, with larger numbers projected at nearly 1,000 adult fish returning in 1998 and thereafter.

**Chief Scientist's  
Recommendation** Excellent proposal. Good match with Trustee Council's fish supplementation criteria. Good local involvement. Suggest continued Trustee Council funding through at least FY 97, pending project review in Fall 1996 to assess effectiveness.

**Trustee Council  
Action** Fund through one full chinook salmon life cycle (at least FY 97). Review effectiveness in fall of 1996. Project will provide replacement resources for subsistence salmon injured by the oil spill. However, the proposers should develop a plan for a transition to non-Trustee funding.

9/11/95

<b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b>
---

**Project Number:** 96320E

**Project Title:** SEA Salmon and Herring Predation

**Proposer:** ADFG

**New or Cont'd:** Continued

**Cluster:** Sound Ecosystem  
Assessment (SEA)

**RPL Request:** ADFG \$637 7

**Cooperating  
Federal**

**Total FY 96:** \$637 7

**Agencies:** None

---

**Project Summary:** This project would continue work initiated in FY 94 as part of the Sound Ecosystem Assessment (SEA) program effort (Project 96320) This sub-project would determine the extent to which variations in predation on juvenile pink salmon affect survival and describe mechanisms that cause variation in predation This would include the identification of fish predators (distribution, abundance, species, and size composition) along the juvenile salmon migratory pathway The project will also collect samples for a variety of the other SEA efforts

**Chief Scientist's  
Recommendation:**

Project helps provide the larger context of ecosystem structure under which restoration must be considered to be effective, and is likely to contribute valuable information for the management of salmon and herring in PWS A review workshop should be held in January 1996, at which we would expect a substantial review of the first 2 years' work

**Trustee Council  
Action.**

Fund Part of the 14-part \$4,525 7 Sound Ecosystem Assessment (SEA) Project 96320 initiated in FY 94

<b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b>
---

**Project Number:** 96320G

**Project Title:** SEA Phytoplankton and Nutrients

**Proposer:** McRoy, University of  
Alaska/Fairbanks

**New or Cont'd:** Continued

**Cluster:** Sound Ecosystem  
Assessment (SEA)

**RPL Request:** ADFG \$162 2

**Cooperating  
Federal**

**Total FY 96:** \$162 2

**Agencies:** None

---

**Project Summary:**

This project would continue work initiated in FY 94 as part of the Sound Ecosystem Assessment (SEA) program effort (Project 96320). This project would focus on primary production and provide nutrient and phytoplankton data to help evaluate the influence of phytoplankton dynamics on the PWS food web. The project would examine variations in phytoplankton production in relation to zooplankton production and oceanographic conditions.

**Chief Scientist's  
Recommendation**

Project helps provide the larger context of ecosystem structure under which restoration must be considered to be effective, and is likely to contribute valuable information for the management of salmon and herring in PWS. A review workshop should be held in January 1996, at which we would expect a substantial review of the first 2 years' work.

**Trustee Council  
Action:**

Fund Part of the 14-part \$4,525.7 Sound Ecosystem Assessment (SEA) Project 96320 initiated in FY 94.

<b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b>
---

**Project Number:** 96320H

**Project Title:** SEA Zooplankton in the PWS Ecosystem

**Proposer:** Cooney, University of  
Alaska/Fairbanks

**New or Cont'd:** Continued

**Cluster:** Sound Ecosystem  
Assessment (SEA)

**RPL Request:** ADFG \$323 6

**Cooperating  
Federal**

**Total FY 96:** \$323 6

**Agencies:** None

---

**Project Summary:**

This project would continue work initiated in FY 94 as part of the Sound Ecosystem Assessment (SEA) program effort (Project 96320). This project would continue to investigate the annual zooplankton bloom and its relationship to fish predator abundance. The project would sample and monitor the distribution and composition of PWS macrozooplankton populations in collaboration with the physical oceanography component of SEA.

**Chief Scientist's  
Recommendation:**

Project helps provide the larger context of ecosystem structure under which restoration must be considered to be effective, and is likely to contribute valuable information for the management of salmon and herring in PWS. A review workshop should be held in January 1996, at which we would expect a substantial review of the first 2 years' work.

**Trustee Council  
Action:**

Fund Part of the 14-part \$4,525.7 Sound Ecosystem Assessment (SEA) Project 96320 initiated in FY 94.

<b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b>
---

**Project Number:** 96320I

**Project Title:** SEA Isotope Tracers - Food Webs of Fish

**Proposer:** Prince William Sound  
Science Center

**New or Cont'd:** Continued

**Cluster:** Sound Ecosystem  
Assessment (SEA)

**RPL Request:** ADFG \$83 3

**Cooperating  
Federal**

**Total FY 96:** \$195 8

**Agencies:** NOAA

---

**Project Summary.** This project would continue work initiated in FY 94 as part of the Sound Ecosystem Assessment (SEA) program effort (Project 96320). This sub-project would analyze tissue samples and use shifts in stable isotope ratios that occur with trophic level and food source to describe food sources and predation relationships among species in PWS.

**Chief Scientist's  
Recommendation**

Project helps provide the larger context of ecosystem structure under which restoration must be considered to be effective, and is likely to contribute valuable information for the management of salmon and herring in PWS. A review workshop should be held in January 1996, at which we would expect a substantial review of the first 2 years' work.

**Trustee Council  
Action**

Fund Part of the 14-part \$4,525.7 Sound Ecosystem Assessment (SEA) Project 96320 initiated in FY 94. Future program effort and funding will be considered after mid-January SEA program review session. Projected SEA cost in FY 97 is \$3,600.0, FY 98 is \$2,600.0.

<b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b>
---

**Project Number:** 96320J

**Project Title:** SEA Information Systems and Model Development

**Proposer:** Prince William Sound  
Science Center

**New or Cont'd:** Continued

**Cluster:** Sound Ecosystem  
Assessment (SEA)

**RPL Request:** ADFG \$180 5

**Cooperating  
Federal  
Agencies:**

**Total FY 96:** \$482 7

DOI, NOAA

---

**Project Summary:** This project would continue work initiated in FY 94 as part of the Sound Ecosystem Assessment (SEA) program effort (Project 96320) This particular sub-project would provide an information system appropriate for the SEA effort and develop the modeling resources needed to achieve the program's objectives This sub-project provides for overall data management and technical support to other SEA efforts through field data communications, descriptive modeling, numerical modeling, support with sampling technologies, and on-line analysis and visualization tools This sub-project provides the means by which various data can be collected, used and understood

**Chief Scientist's  
Recommendation:**

Project helps provide the larger context of ecosystem structure under which restoration must be considered to be effective, and is likely to contribute valuable information for the management of salmon and herring in PWS A review workshop should be held in January 1996, at which we would expect a substantial review of the first 2 years' work

**Trustee Council  
Action:**

Fund Part of the 14-part \$4,525 7 Sound Ecosystem Assessment (SEA) Project 96320 initiated in FY 94 Future program effort and funding will be considered after mid-January SEA program review session Projected SEA cost in FY 97 is \$3,600 0, FY 98 is \$2,600 0

<b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b>
---

**Project Number:** 96320K

**Project Title:** SEA PWSAC — Experimental Fry Release

**Proposer:** Prince William Sound  
Aquaculture  
Corporation

**New or Cont'd:** Continued

**Cluster:** Sound Ecosystem  
Assessment (SEA)

**RPL Request:** ADFG \$61 4

**Cooperating  
Federal**

**Total FY 96:** \$61 4

**Agencies:** NOAA

---

**Project Summary:**

This project would continue work initiated in FY 94 as part of the Sound Ecosystem Assessment (SEA) program effort (Project 96320). This project would support the rearing of salmon fry for release as part of an effort to investigate the possible influence of fry size as a determinant of survival during early marine residence as part of the SEA study effort.

**Chief Scientist's  
Recommendation:**

Project helps provide the larger context of ecosystem structure under which restoration must be considered to be effective, and is likely to contribute valuable information for the management of salmon and herring in PWS. A review workshop should be held in January 1996, at which we would expect a substantial review of the first 2 years' work.

**Trustee Council  
Action:**

Fund Part of the 14-part \$4,525.7 Sound Ecosystem Assessment (SEA) Project 96320 initiated in FY 94.

<b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b>
---

**Project Number:** 96320M

**Project Title:** SEA Physical Oceanography in PWS

**Proposer:** Prince William Sound  
Science Center

**New or Cont'd:** Continued

**Cluster:** Sound Ecosystem  
Assessment (SEA)

**RPL Request:** ADFG \$191 7

**Cooperating  
Federal**

**Total FY 96:** \$499 4

**Agencies:** NOAA

---

**Project Summary**

This project would continue work initiated in FY 94 as part of the Sound Ecosystem Assessment (SEA) program effort (Project 96320). This project would investigate the physical oceanographic structure of PWS including the space/time variability of atmospheric and oceanic processes within PWS, investigate relationships between atmospheric forcing (wind, storms, long term temperature changes) and wind and buoyancy-driven currents, determine how these relationships act to retain/disperse food resources for ecologically important species within PWS, and investigate large and fine scale oceanographic structures and major climatic cycles and events

**Chief Scientist's  
Recommendation**

Project helps provide the larger context of ecosystem structure under which restoration must be considered to be effective, and is likely to contribute valuable information for the management of salmon and herring in PWS. A review workshop should be held in January 1996, at which we would expect a substantial review of the first 2 years' work

**Trustee Council  
Action**

Fund Part of the 14-part \$4,525 7 Sound Ecosystem Assessment (SEA) Project 96320 initiated in FY 94. Future program effort and funding will be considered after mid-January SEA program review session. Projected SEA cost in FY 97 is \$3,600 0, FY 98 is \$2,600 0



<b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b>
---

**Project Number:** 96320N

**Project Title:** SEA Nekton/Plankton Acoustics

**Proposer:** Prince William Sound  
Science Center

**New or Cont'd:** Continued

**Cluster:** Sound Ecosystem  
Assessment (SEA)

**RPL Request:** ADFG \$209 9

**Cooperating  
Federal**

**Total FY 96:** \$487 6

**Agencies:** NOAA

---

**Project Summary:** This project would continue work initiated in FY 94 as part of the Sound Ecosystem Assessment (SEA) program effort (Project 96320) This project would describe macrozooplankton distribution and biomass in real time using hydroacoustics, describe fish predator distribution/biomass in real time using hydroacoustics, investigate hypothesis that plankton/nekton/predator populations aggregate in cyclic patterns and specific locations due to currents and bottom morphology

**Chief Scientist's  
Recommendation:**

Project helps provide the larger context of ecosystem structure under which restoration must be considered to be effective, and is likely to contribute valuable information for the management of salmon and herring in PWS A review workshop should be held in January 1996, at which we would expect a substantial review of the first 2 years' work

**Trustee Council  
Action:**

Fund Part of the 14-part \$4,525 7 Sound Ecosystem Assessment (SEA) Project 96320 initiated in FY 94 Future program effort and funding will be considered after mid-January SEA program review session Projected SEA cost in FY 97 is \$3,600 0, FY 98 is \$2,600 0

<b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b>
---

**Project Number:** 96320R

**Project Title:** SEA Trophodynamic Modeling and Validation Through Remote Sensing

**Proposer:** Eslinger, University  
of Alaska/Fairbanks

**New or Cont'd:** NEW

**Cluster:** Sound Ecosystem  
Assessment (SEA)

**RPL Request:** ADFG \$202 7

**Cooperating  
Federal**

**Total FY 96:** \$202 7

**Agencies:** None

---

**Project Summary:** This is a new SEA sub-project in FY 96 as a result of an internal reorganization of efforts. Some of the work performed under 95320-G and J is to be done under this project in FY 96 and beyond. This project would continue the trophodynamic modeling of phytoplankton and zooplankton begun in FY 95 and add modeling of ichthyoplankton, herring larvae in particular. It will evaluate and verify the model against field data to be collected using a variety of remote sensing and *in situ* sampling platforms.

**Chief Scientist's  
Recommendation:**

Project helps provide the larger context of ecosystem structure under which restoration must be considered to be effective, and is likely to contribute valuable information for the management of salmon and herring in PWS. A review workshop should be held in January 1996, at which we would expect a substantial review of the first 2 years' work. This reorganization of the SEA program seems logical and effective. This work is central to development of an understanding of controls of year-to-year variation in recruitment success of fish in Prince William Sound.

**Trustee Council  
Action:**

Fund Part of the 14-part \$4,525 7 Sound Ecosystem Assessment (SEA) Project 96320 initiated in FY 94

<b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b>
---

**Project Number:** 96320T

**Project Title:** SEA Juvenile Herring Growth and Habitat Partitioning

**Proposer:** Norcross, University  
of Alaska/Fairbanks

**New or Cont'd:** Continued

**Cluster:** Sound Ecosystem  
Assessment (SEA)

**RPL Request:** ADFG \$1,141 6

**Cooperating**

**Federal**

**Total FY 96:** \$1,141 6

**Agencies:** None

---

**Project Summary**

This project would continue work initiated in FY 94 as part of the Sound Ecosystem Assessment (SEA) program effort (Project 96320). This sub-project would investigate what may be causing the failure of herring runs in PWS by investigating the dynamics of larval and juvenile herring. The proposed project, together with other investigations being undertaken as part of the SEA program, would attempt to describe the relative importance of zooplankton abundance, oceanic conditions, habitat requirements, and density dependent predation in determining large fluctuations in herring abundance. The budget for this sub-project contains research vessel charter costs that will support SEA project efforts.

**Chief Scientist's  
Recommendation:**

Project helps provide the larger context of ecosystem structure under which restoration must be considered to be effective, and is likely to contribute valuable information for the management of salmon and herring in PWS. A review workshop should be held in January 1996, at which we would expect a substantial review of the first 2 years' work.

**Trustee Council  
Action:**

Fund Part of the 14-part \$4,525.7 Sound Ecosystem Assessment (SEA) Project 96320 initiated in FY 94.

<b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b>
---

**Project Number:** 96320U

**Project Title:** SEA. Energetics of Herring and Pollock

**Proposer:** Paul, University of  
Alaska/Fairbanks

**New or Cont'd:** Continued

**Cluster:** Sound Ecosystem  
Assessment (SEA)

**RPL Request:** ADFG \$189 5

**Cooperating  
Federal**

**Total FY 96:** \$189 5

**Agencies:** None

---

**Project Summary:**

This project would continue work initiated in FY 94 as part of the Sound Ecosystem Assessment (SEA) program effort (Project 96320). Project would focus on the seasonal somatic energy cycles of two important forage fish species in the spill area: Pacific herring and walleye pollock. The project would explore overwinter survival of juvenile herring and herring reproductive biology and provide energetic information to quantify trophic interactions (food webs) involving pollock.

**Chief Scientist's  
Recommendation**

Project helps provide the larger context of ecosystem structure under which restoration must be considered to be effective, and is likely to contribute valuable information for the management of salmon and herring in PWS. A review workshop should be held in January 1996, at which we would expect a substantial review of the first 2 years' work.

**Trustee Council  
Action:**

Fund: Part of the 14-part \$4,525.7 Sound Ecosystem Assessment (SEA) Project 96320 initiated in FY 94.

<b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b>
---

**Project Number:** 96320Y

**Project Title:** SEA Variation in Local Predation Rates on Hatchery-Released Fry

**Proposer:** Prince William Sound  
Science Center

**New or Cont'd:** Continued

**Cluster:** Sound Ecosystem  
Assessment (SEA)

**RPL Request:** ADFG \$40 0

**Cooperating  
Federal**

**Total FY 96:** \$40 0

**Agencies:** None

---

**Project Summary**

Project close out of investigation of the size, composition, behavior and duration of foraging aggregations of predators, especially birds, at fry release sites

**Chief Scientist's  
Recommendation**

Project helps provide the larger context of ecosystem structure under which restoration must be considered to be effective, and is likely to contribute valuable information for the management of salmon and herring in PWS. A review workshop should be held in January 1996, at which we would expect a substantial review of the first 2 years' work.

**Trustee Council  
Action**

Fund Part of the 14-part \$4,525.7 Sound Ecosystem Assessment (SEA) Project 96320 initiated in FY 94. Funding provides for closeout (analysis and final report writing) of prior year work. Future program effort and funding will be considered after mid-January SEA program review session.

<b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b>
---

**Project Number:** 96320Z1

**Project Title:** SEA Synthesis and Integration

**Proposer:** Cooney, University of  
Alaska/Fairbanks

**New or Cont'd:** NEW

**Cluster:** Sound Ecosystem  
Assessment (SEA)

**RPL Request:** ADFG \$68 8

**Cooperating  
Federal**

**Total FY 96:** \$68 8

**Agencies:** None

---

**Project Summary**

This project would support work initiated in FY 94 as part of the Sound Ecosystem Assessment (SEA) program effort (Project 96320). This sub-project provides additional support to the Lead Scientist of the Project for synthesis and integration activities associated with the application of SEA field and modelling studies to the restoration of pink salmon and Pacific herring populations in PWS.

**Chief Scientist's  
Recommendation**

Project helps provide the larger context of ecosystem structure under which restoration must be considered to be effective, and is likely to contribute valuable information for the management of salmon and herring in PWS. A review workshop should be held in January 1996, at which we would expect a substantial review of the first 2 years' work. Necessary for effective project management, although cost for administrative support seems high.

**Trustee Council  
Action:**

Fund Part of the 14-part \$4,525.7 Sound Ecosystem Assessment (SEA) Project 96320 initiated in FY 94.

<b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b>
---

**Project Number:** 96427

**Project Title:** Harlequin Duck Recovery Monitoring

**Proposer:** ADFG

**New or Cont'd:** Continued

**Cluster:** Nearshore Ecosystem  
Projects

**RPL Request:** ADFG \$51 0

**Cooperating**

**Federal**

**Total FY 96:** \$261 1

**Agencies:** None

---

**Project Summary**

This project will compare population parameters between oiled and unoled areas based on population structure, behavior, production, and growth rates Shoreline boat surveys will be conducted simultaneously Changes in population size, structure, and production in oiled and unoled areas and between years will be compared Continued population monitoring and brood surveys will allow us to assess trends and suggest factors limiting recovery

**Chief Scientist's  
Recommendation.**

Surveys of harlequin ducks are a high restoration priority However, without statistical justification, a decision on work for 1997 and beyond should be made later Three more years of effort are proposed for this project This request for future work should be examined after review of FY 96 work

**Trustee Council  
Action**

Fund interim costs, defer decision on balance of FY 96 funding until report from prior year (Project B11) is submitted Consider funding for future years after review of FY 96 work This project continues a series of studies focusing on injury to and recovery of harlequin ducks in PWS This information will help determine when current harvest restrictions can be lifted and whether additional actions, such as more cleanup of oiled mussel beds, are necessary

9/11/95

<b>EXXON VALDEZ OIL SPILL — FY 96 WORK PLAN</b> <b>Revised Program 11 - 6 - 9990</b>
---

**Project Number:** 96600

**Project Title:** Program Management

**Proposer:** NOAA

**New or Cont'd:** Continued

**Cluster:** Seabird/Forage Fish  
Ecosystem Project

**RPL Request:** ADFG \$53 5

**Cooperating  
Federal**

**Total FY 96:** \$53 5

**Agencies:** NOAA

---

**Project Summary**

The purpose of this project is provide support for continued NOAA participation in *Exxon Valdez* damage assessment and management. The program manager of the Office of Oil Damage Assessment and Restoration is responsible for management and oversight of scientists and contractors as they relate to the *Exxon Valdez* Oil Spill Trustee Council. The program manager has responsibility for maintaining information and records on studies schedules, work progress and study products and works closely with project leaders of studies to ensure that program goals, objectives and timelines are met.

**Chief Scientist's  
Recommendation:** Not applicable

**Trustee Council  
Action:** Fund