Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
__	__	✓	1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓	__	__	2. Technical feasibility.*
✓	__	__	3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Document ID Number 92061527932

- ☐ A-92 WPWG
- ☑ B-93 WPWG
- ☐ C-RPWG
- ☐ D-PAG
- ☐ E-MISC.

Title of Project: ENVIRONMENTAL LEARNING RESOURCE CENTER

Justification: (Link to Injured Resource or Service) Integrated Public Information System and Education Program for Assessment and Prevention of Oil Spills.

Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach)

A building addition to the existing Kodiak College library is proposed to house an environmental learning resource center which will provide reference areas, seminar space, media access, and classrooms for education related to oil spills. The proposal includes $780,000 for construction costs and $120,000 for a dedicated line, videophone technology, and media equipment to enable interaction via long distance. The college will commit to providing operational costs.

College staff attended and taped all of the Emergency Services Council meetings following the Exxon Valdez oil spill. Currently, these and other valuable videotapes, books, papers, and resources are accumulating and must be safeguarded and made accessible to the public. As continuing study into oil spill prevention and technology is conducted, a dedicated space will be vital. Classroom and seminar space will be important for ongoing education in assessment and prevention of additional harm to ecosystems affected by the spill. Educational presentations will involve scientists, fishermen, and the general public.

Estimated Duration of Project: Construction of Facility, 2 years

Estimated Cost per Year: Total: $ 900,000 (FY 93 90K, FY 94 810K)

Other Comments: This proposal addresses Option 33 in the Exxon Valdez Oil Spill Restoration Framework, Volume I.

Name, Address, Telephone:

Carol Hagel, College Director
Kodiak College
117 Benny Benson Drive
Kodiak, AK 99615
907-486-4161

Oil spill restoration is a public process. Your ideas and suggestions will not be proprietary, and you will not be given any exclusive right or privilege to them.

137

ID # 920605137

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

Public Education Construct Seabird Center

✓ Checked for Completeness

ID stamped/Input completed
Name
Affiliation
Costs

✓ Category Management Action

✓ Lead Agency

_____

_____ Cooperating Agency(ies)

_____

Y N Passed initial screening criteria

Type: Education

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

Seward Assn. for the Advancement of Marine Science

POB 1329
Seward, Alaska

Phone 907 224 3080

3 June 1992

Exxon Valdez Oil Spill Restoration Team
645 G Street
Anchorage, Alaska
99501

Dear Trustee Council:

Attached is a restoration project to be considered for funding by the Exxon Valdez Oil Spill Trustee Council. The goal of the project is to construct a permanent running seawater facility, the Alaska SeaLife Center, whose primary mission will be rehabilitation of injured marine mammals and seabirds. This facility is needed because there is no running seawater care center in Alaska that can rehabilitate marine mammals or do long term studies of either marine mammals or seabirds. This project is being jointly undertaken by a nonprofit organization called Seward Association for the Advancement of Marine Science, City of Seward and University of Alaska Institute of Marine Science. The funding requested from the trustees will be used for building the physical plant for the rehabilitation, research, and education programs.

Attached is the ideas form, a more detailed proposal which describes the project and budget, and informational material for the project.

Sincerely,

Willard E. Dunham
Chairman of the Board

Attachements:
Format For Ideas for Restoration Projects Form
Proposal for Alaska SeaLife Center
Preliminary Design Plans for Alaska SeaLife Center

• Seward, AK 99664 • (907) 224-5261 • FAX (907) 224-3392

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project: Construction and Operation of the Alaska SeaLife Center (ASLC)

Justification

Objective: The goal of the project is to construct a permanent running seawater facility whose primary mission will be rehabilitation of injured marine mammals and seabirds. Oiled and injured animals will receive care until they can be released or held permanently if their injuries preclude release. An equally important mission of the facility will be basic biological research on marine mammals and seabirds so that impacts of human activities such as pollution and fishing can be better understood. The Center's program will also include a public education effort that explores the impacts of use of the waterway and fishing on the marine ecosystem. The program will promote good stewardship of marine resources. The location of the Center will be in Seward, an area ideally situated geographically for such a facility. Seward was selected for the site of temporary rescue operations during the oil spill. The City of Seward has allocated a large tract of shorefront property for the project. Additional property belonging to the University of Alaska will also be used for the Center.

Rationale: This facility is needed because there are no running seawater care centers in Alaska that can rehabilitate marine mammals or do long term studies of either marine mammals or seabirds. Marine mammals such as sea otters and several species of seabirds are very susceptible to oil and other pollutants. This situation was highlighted during the recent oil spill in Prince William Sound when seabirds and mammals required assistance to survive and temporary facilities had to be hurriedly constructed at great cost. This project is also needed so we can begin to explore the reasons for the declining populations of sea lions, harbor seals and several seabird species in Alaska.

Technical approach: This project is being jointly undertaken by a nonprofit organization called Seward Association for the Advancement of Marine Science, the City of Seward and University of Alaska Institute of Marine Science. The funding requested from the trustees will be used for building the physical plant for the rehabilitation, research and education programs. A firm that specializes in seawater facilities has provided preliminary plans and a budget for this project. After ASLC has been open for one year it will operate with funds derived from the aquarium income and an endowment, as well as money solicited from individuals and foundations. The facility will be the centerpiece of an urban renewal project for Seward, a town whose beaches were oiled, and whose tourism industry was negatively affected by the oil spill. Other aspects of the greater Seward urban renewal project such as the convention center that will be associated with it will be funded from other sources.

Estimated Duration of Project: Three years.

Estimated Cost per Year: Year 1 $2,080,000; Year 2 $5,506,500
Year 3 $38,272,167

Other Comments: A more detailed proposal and budget are attached along with the preliminary design plans. We would also like to make an oral presentation of the project to the trustees.

Name, Address, Telephone:
Willard E. Dunham
Chairman of the Board
Seward Association for the Advancement of Marine Science
POB 1329
Seward, Alaska 99664
Phone 907 224 3080

PROJECT PROPOSAL

To: Exxon Valdez Trustee Council
645 G Street
Anchorage, Alaska
99501

From: Seward Association for the Advancement
of Marine Science (SAAMS)
POB 1329
Seward, Alaska
Phone 907 224 3080

99664

TITLE: Construction and Operation of the Alaska SeaLife Center

AMOUNT REQUESTED: $45,858,667

Willard Dunham
Chairman of the Board
SAAMS

TABLE OF CONTENTS

ABSTRACT

This proposal requests funds for construction of the Alaska SeaLife Center, a facility for rehabilitation and research on marine mammals and seabirds impacted by human activities, especially oil transportation. The Center will also have an educational program with a focus on the importance of our marine resources and citizen stewardship of those resources. The project budget includes construction costs of the running seawater and educational components of the center and operation costs for the first year after completion. Thereafter the Center's maintenance and operation will be funded though use fees, donations, grants, and endowment funds. The facility will be the centerpiece of an urban renewal project for Seward, a town whose beaches were oiled, and whose tourism industry was negatively affected by the oil spill. The funding requested from the trustees is for the the rehabilitation, research and education physical plant only. Other aspects of the greater Seward urban renewal project such as the convention center that will be associated with it will be funded from other sources. SAAMS has already raised $2,153,258 in contributions (see ATTACHMENT II) toward this project and $500,000 was awarded to the project from oil spill penalty funds.

INTRODUCTION

The Project

The Alaska SeaLife Center (ASLC) will be built in Seward, Alaska, as a balanced union of injured marine animal rehabilitation, marine mammal and seabird research, and educational exhibits of live marine animals and marine ecology. The emphasis of the education program will be stewardship of Alaska's valuable marine resources and lessons learned from past human uses of those resources. The non-profit organization, Seward Association for the Advancement of Marine Science (SAAMS), is coordinating the scientific interests of the University of Alaska and the City of Seward to supply a long overdue sea animal rescue center for Alaska and the world. The ASLC will become a showcase, demonstrating how public concerns about the environment can be translated into tangible rehabilitation research. Studies done at ASLC will provide information useful in minimizing the negative impacts of our vital oil transportation industry and exploitation of our marine resources on the ecosystem.

Alaska, with 38 per cent of all coastline in the United States, currently has no facilities to care for sick marine mammals, study them under controlled conditions, nor see them in their undersea

environment. This situation was highlighted during the recent oil spill in Prince William Sound when seabirds and mammals required assistance to survive and temporary facilities had to be hurriedly constructed at great cost.

The ASLC is designed to fill all three gaps. It will become a place where injured pinnipeds, cetaceans, sea otters, and seabirds can be rescued, cared for and eventually released. Its research facilities will attract scientists interested in rehabilitation and will encourage them to investigate problems of northern latitude species. Natural habitat exhibits, both above and below water, will instill in Alaskans and visitors an appreciation for the full spectrum of behaviors of some of the ocean creatures only glimpsed offshore or seldom seen.

The complexity and fragility of habitats will be central themes throughout ASLC. Discoveries in the research and rehabilitation programs will be shared through exhibits and tours. Unfortunately, Alaska has some examples of marine animals in trouble like the threatened Stellar sea lion and harbor seal and programs at ASLC will help focus attention on issues of declining populations, interactions with commercial fisheries, the management of coastal resources and oil transportation. The research center will be able to actively study these organisms and contribute to our understanding of why their populations are declining.

Statewide Context

The ASLC will become a unique facility for Alaska. The closest institution capable of holding live marine mammals is the Long Marine Laboratory in Santa Cruz, California. The closest facility that the public can view live marine organisms is the aquarium in Seattle. The new Center will be a large magnet drawing rehabilitation, scientific and marine education expertise into Alaska from all over the world. The State would also benefit from increased usage of the railroad and Anchorage International Airport, as well as an influx of new tourist dollars.

Regional Context

Seward lies between Prince William Sound and Cook Inlet on the Kenai Peninsula at the north end of Resurrection Bay. During the oil spill, the prevailing currents caused oil to be washed into the Bay. Because of its central and strategic location in the path of oil, Seward was selected as the logical place to set up wildlife rescue operations. Soon after the oil spill temporary facilities were constructed to rehabilitate oiled sea otters and birds. The ASLC will occupy the site used by those now dismantled facilities.

Half of Alaska's population lives within three hours drive of Seward.

Thus, a majority of Alaskans especially school groups will have easy access to ASLC. Seward is the gateway to Kenai Fjords National Park, 580,000 acres of icefield, active glaciers, and fjords. Beyond the mouth of Resurrection Bay rise Chiswell and Pye Islands of the Alaska Maritime National Wildlife Refuge, breeding rookeries for Stellar sea lions and northern seabirds. Sea otters swim in the bays alongside whales, seals, fishes, and marine invertebrates. This visually spectacular and biologically rich setting is ideal for a marine center of international stature.

One of the most active tourist corridors in the State exists between Anchorage and Seward. Anchorage has a variety of tourist attractions and the international airport. Between Seward and Anchorage there are opportunities for winter and summer skiing, Portage Glacier exhibit, the train trips to Whittier and Seward, many hiking trails and fresh water fishing areas. The Kenai Peninsula has some of the best saltwater fishing opportunities in the world. Visitors to Seward also arrive by sea. Kenai Fjords and Harding Ice Field National Park attract cruise ships whose passengers often travel to Anchorage via road or railroad. The natural beauty of the Kenai Peninsula makes it an ideal area for the evergrowing trend in ecotourism.

Urban Context

The ASLC site is adjacent to the the University of Alaska Institute of Marine Science's shore station. The City has already made the land available for ASLC and other marine science use. This ASLC site plays a key urban planning role for Seward. The present growth of the City is north towards the marina. This pattern of development has weakened the City center which is in need of redevelopment. The ASLC would create a new downtown attraction. Visitors would be drawn from the road, railroad and docks into the City center, or along the pedestrian esplanade, to the southernmost end of Seward. The Center would create a place of public focus and landmark identity where the City and Resurrection Bay meet in dramatic dialog. The funding requested from the trustees is for the physical plant for the rehabilitation, research and education physical plant only. Other aspects of the greater Seward urban renewal project such as the convention center that will be associated with it will be funded from other sources. SAAMS has already raised $2,153,258 in contributions (see ATTACHMENT II) toward this project and $500,000 was awarded to the project from oil spill penalty funds.

The Site

The City of Seward has allocated a tract of land large enough for the project to the ASLC. The University of Alaska Institute of Marine Science will provide the land for the research section of ASLC.

Rehabilitation Program

Rehabilitation programs present many faces, ranging from carcass examination to the rescue and release of rehabilitated animals. The program at Seward will operate under the aegis of the National Marine Fisheries Service, Fish and Wildlife Service, and Alaska Department of Fish and Game. The priority for live animals is to help them overcome illness, with the expectation that they can be returned to the wild. Before any animal is released, it must meet strict criteria established by ASLC medical staff and government agencies, to ensure that it poses no threat to wild populations nor faces undue risks to its own survival. Animals that do not achieve the necessary level of fitness to be released may thrive as members of the permanent exhibit and research colonies.

Once the physical plant is completed the rehabilitation section of ASLC will operate with funds derived from the aquarium income as well as money solicited from individuals, foundations, and SAAMS will solicit funds for an endowment to insure its viability. It is expected that much of the work will be carried out by volunteers aiding the small permanent staff.

Research Program

The ASLC will provide scientists with opportunities never before available in Alaska. The guiding philosophy will be to encourage investigations in a wide variety of disciplines that will lead to greater understanding of Alaskan marine ecology. Researchers will be encouraged to engage in studies that benefit marine mammal and avicultural husbandry, medicine, and emergency care, and thereby lend their support to the Center's rehabilitation activities and permanent colonies of mammals and seabirds. The humane treatment of research animals will be ensured by an animal care committee.

The Center will also offer researchers opportunities to study arctic and subarctic marine birds that will be held in the public display areas and research compounds. Pools will be designated to accommodate diving and wading birds and to provide secluded space for mating and rearing young.

The Research section of ASLC will operate with funds derived from the grants solicited by scientists from agencies like National Science Foundation, National Institute of Health and NOAA as well as income from the aquarium . SAAMS will also solicit funds for an endowment to insure its viability. The research section which will adjoin the University of Alaska Seward Marine Center Laboratory will be open to researchers from any creditable institution who have funds to operate at ASLC.

Education and Exhibits

Live animal exhibits of Stellar sea lions, sea otters, alcids and other marine birds, fishes, and invertebrates at the Center will convey its message of environmental stewardship through dramatic encounters with animals in habitat settings, reinforced by interpretive and interactive displays. At every opportunity, the research and rehabilitation areas will be open to the public, thereby unveiling the Center's full range of activities, including programs undertaken jointly with the Alaska Maritime Refuge's new marine bird center in Homer.

The education section of ASLC will operate primarily with funds derived from the aquarium and gift shop income as well as money solicited from foundations. SAAMS will solicit funds for an endowment to insure its viability. It is expected that much of the work will be carried out by volunteers aiding the small permanent staff.

ADMINISTRATION OF THE CENTER

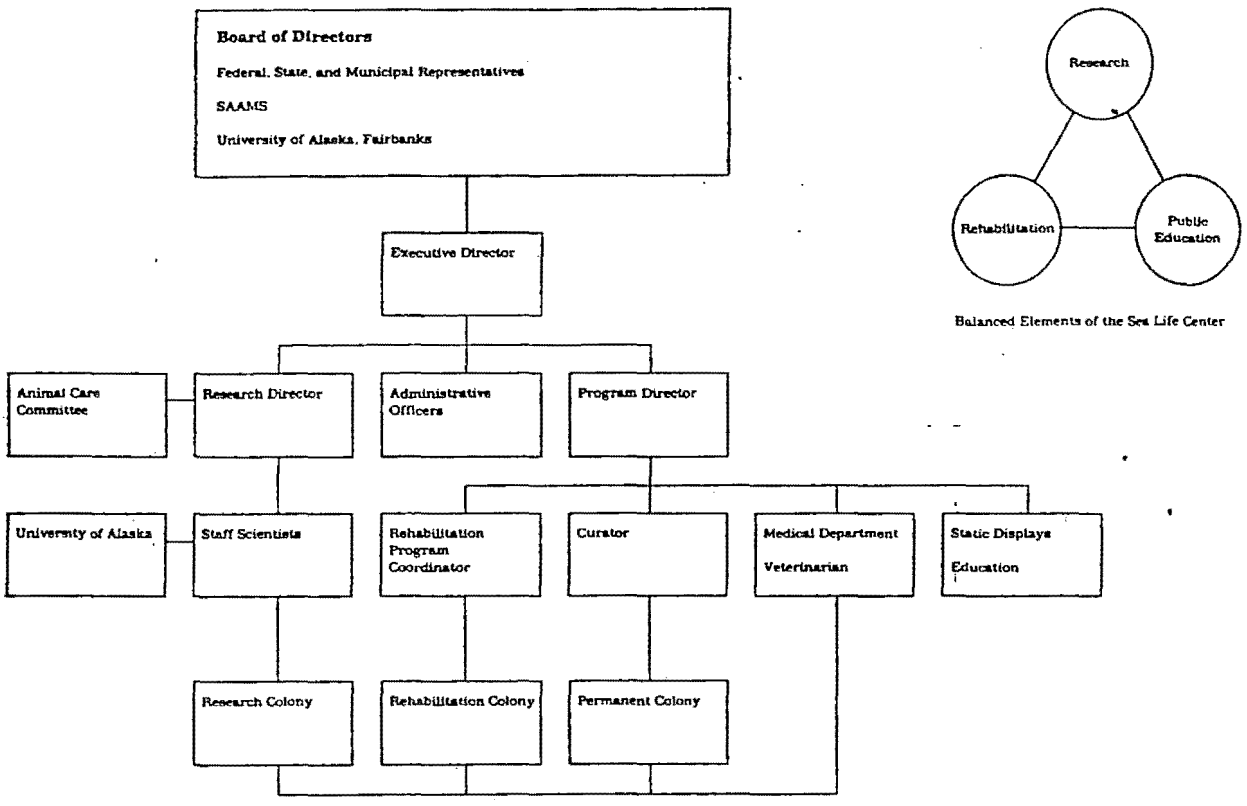
Institutional Plan

The Seward Association for the Advancement of Marine Science is a non-profit institution (Federal Tax ID 92-132479) dedicated to building the marine science industry in Alaska. The City of Seward and the University of Alaska have been cooperating for over 20 years to promote marine science programs for Alaska. Concerned citizens of Seward and Anchorage created the SAAMS group to facilitate this relationship and create a non-profit institution through which projects like ASLC could be initiated.

The proposed administrative structure for the ASLC reflects the balance among the Center's three missions: rehabilitation, research, and educational displays. Setting the course of the Center is a board of directors consisting of representatives from SAAMS, the University of Alaska, and three levels of government. The executive director is the link between the Center and its trustees on the board. Administrators of public relations, marketing, finances, and purchasing will report to the executive director.

The director of the Center's programs will supervise the educational, curatorial, medical, and rehabilitation departments. The rehabilitation program will be directed at the outset by the veterinarian; once this endeavor becomes established, a rehabilitation coordinator will step in.

The research staff and scientists will be supervised by a director, counseled by an animal care committee composed of the staff veterinarian, representatives from the University of Alaska, and public delegates. Scientists from the University of Alaska will augment the team of investigators based at the Center. Management of the health of animals in the research colony will be the direct responsibility of the staff veterinarian, who will also serve as a member of the animal care committee, which will scrutinize all research protocols to ensure humane treatment. The permanent colony of animals will be managed by a curator, guided by the staff veterinarian.



Proposed Administrative Structure

Balanced Elements of the Sea Life Center

PHYSICAL PLANT

Life Support System

The Seward site is ideal for a running seawater facility. The University of Alaska has operated a shore station there for twenty years and has found that the water quality is excellent for maintaining live marine organisms.

In keeping with the multi-use and tripartite goals of the institution, the Life Support System for the Alaska Sea Life Center will provide excellent water quality, supply, and separation control. Since disease transmission between research, rehabilitation, and public exhibits would be potentially harmful and difficult to control, the Center will be configured to isolate these areas as efficiently as possible to minimize capital and operating cost.

A conceptual design for the physical plant has been completed by Cambridge 7 Associates of Boston and is attached to the proposal as ATTACHMENT I.

Rehabilitation Area

The rehabilitation area will consist of rectangular and circular tanks, with a total surface area of up to 1,500 square feet, including haul-out space for pinnipeds (up to 25 seals or 6 sea lions or 10 fur seals) and sea otters (up to 15). A 35' diameter circular tank, when filled to capacity with water, will be available for small whales. The tank will have a 5' wide ledge at mid depth to create a haul-out area for pinnipeds and otters when the pool is half filled. Outdoor cages and pools of varying sizes will be available to house convalescing birds.

The rehabilitation compound will include a 5,000 square foot hospital containing a medical treatment center, small clinical laboratory, and intensive care pens for pinnipeds, otters, and seabirds. A dissection area, used to examine dead strandlings, will be adaptable for use as a wash facility for oiled wildlife. The Center's rehabilitation facilities will serve as a valuable resource in the event of a major oil spill or disease outbreak.

Research Area

The research compound will be separated from the exhibit and rehabilitation areas to prevent the transmission of disease-causing agents. The public will have access to the compound as part of the overall exhibit, except during studies, such as those on breeding behavior or chick or pup rearing, when animals must be undisturbed.
The marine mammal pools will be designed with the flexibility to

accommodate different species in controllable environments. Harbor seals, young Stellar sea lions, fur seals, and sea otters can be held in square or rectangular pools that will exceed the standards established by the U.S. Department of Agriculture. For larger pinnipeds and small cetaceans, the compound will feature a novel arrangement of two circular tanks, 50' and 20' in diameter, joined by a 5' wide channel. The 10' deep tanks will have 5'6" wide ledge at mid depth, which can serve as a haul-out space for pinnipeds when the pool is half filled. At this water level, the tanks will be transformed into two separate units, 35' and 12' in diameter and 5'6" deep. These facilities can meet the needs of several concurrent studies.
The associated research laboratories will also be adaptable to the broad categories of anticipated studies. A 5,000 square foot building will provide a wet lab, enabling researchers to bring birds and mammals into a controlled environment, where electrical equipment can be used to measure physiological parameters. Dry lab space will be available for biochemical analyses, constructing electronic telemetry devices to be carried by animals released to the wild, computer data logging, and preparation of materials for metabolic studies. Office space will also be available for researchers and graduate students.

Public Education

Visitors will first experience the SeaLife Center on the new city plaza "town commons". The sea lion exhibit will be its landmark feature. The dramatic silhouettes of the animals and the artificial rockwork will mirror an island rookery not far down the Bay, symbolizing the connection of Alaska to the sea.

In the auditorium there will be introductory films about marine ecology. Wall murals and environmental soundscapes, in conjunction with films, will explore the current and historical attitudes and ecological values of Alaska Natives, whose lives still depended on ocean resources. During the evening the lobby and auditorium can be leased for receptions, meetings, films, lectures, seminars, and other events.

In the wall will be a spectacular 50' x 30' king crab natural habitat tank. Through it the fishes of the Gulf of Alaska tank and the exterior Steller sea lion exhibit will be visible giving a three layer sense of the expanse and complexity of Alaska's ocean world. Sheltered walkways will lead into the above-water realms of seabirds, sea otters, and Stellar sea lions. A rainy, windy day will show the elements marine animals face in nature and how they cope.

Educational messages will tell how sea otters have recovered from historic over-harvesting and the effect of oil pollution on them. Steller sea lions and some seabird species populations have plummeted for unknown reasons. Displays will explore the possible reasons for these declining populations.

The closing exhibit will reiterate the complexity and fragility of the marine ecosystem, stressing the need for conservation and stewardship, especially in relation to the oil industry, both locally and globally.

BUDGET

PLANNING AND CONSTRUCTION

27 May 1992

BUDGET ESTIMATE

YEAR 1

Completion Phase I Fees	$ 21,000
Economic Feasibility Study & Master Plan Development Fee	94,000
Programming & Schematic Design Fee (Architectural/Engineering & Exhibits)	600,000
Design Development Fee (Architectural/Engineering & Exhibits)	1,150,000
Design Consultant Travel & Misc. Expenses	15,000
Promotional Video Design & Development	20,000
Executive Assistant/Fund Raiser Salary	60,000
Travel (Fund Raising, Promotional & Aquarium Visit)	15,000
Advertising, Public Relations	30,000
Telephone, Facsimile	15,000
Postage (Poster Mailing & Correspondence	12,000
Office Supplies	8,000
Retainer Next Design Phase	15,000
Accounting Expenses	5,000
Miscellaneous Expenses	20,000
Total	$ 2,080,000

YEAR 2

Contract Documents Fee (Architectural/Engineering & Exhibits)	$ 1,750,000
Construction Supervision Fee (Partial for foundations, site work & utilities)	500,000
Executive Assistant/Fund Raiser	60,000
Office Clerk Salary	32,000
Postage	18,000
Travel	25,000
Advertising & Public Relations	20,000
Telephone, Facsimile	15,000
Office Supplies	6,500
Loan Repayment of City of Seward	50,000
Accounting Expenses	10,000
Miscellaneous Expenses	20,000
Projected Construction Costs (Site Work, Utilities, Foundations)	3,000,000
Total	$ 5,506,500

YEAR 3

Construction Supervision Fee (Main Building)		$ 1,000,000
Gift Shop Initial Inventory		650,000
Projected Construction Cost		34,000,000
Architectural/Structural	(19,000,000)	
LSS	(5,000,000)	
M.E.P., F.P. & Security	(4,000,000)	
Exhibits (artificial habitat, graphics, & artifacts, etc.)	(6,000,000)	
Total (Not including start-up below)		$35,650,000
Start-up activities (See included start-up estimate document 1994-1995 time period before opening.)		$ 2,622,167
Total		$ 2,622,167
TOTAL BUDGET**		$45,858,667

OPERATIONS BUDGET

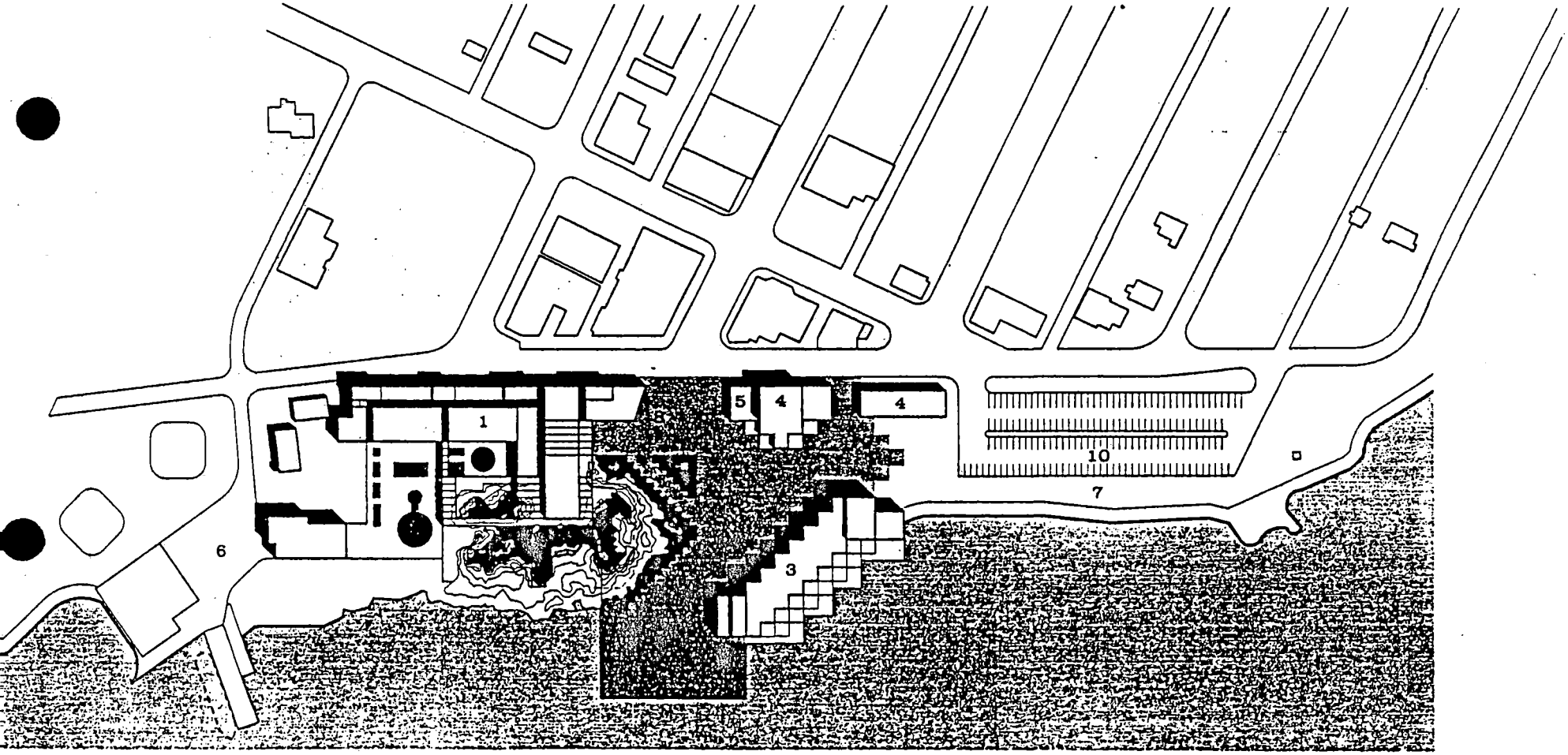
BUDGET LINE ITEM	TOTAL COST IN 1996 DOLLAR
Salaries (FTE=11)	667,000
Benefits (at 50% of salary)	333,500
PERSONNEL SUBTOTAL	1,000,500
Telephone	39,253
Supplies	175,066
Postage	22,947
Professional Fees	20,000
Outside Services	20,000
Equipment	150,000
Travel	27,617
Professional Development	7,885
Dues/Subscriptions	8,898
Specimen Food	230,000
Specimen Purchase	50,000
Collecting Trips	800,000
Insurance	50,000
Dept. Misc./Discretionary	20,000
STARTUP EXPENSES SUBTOTAL	1,621,667
TOTAL OPERATING EXPENSES	$ 2,622,167

SUMMARY

The ASLC will become a new landmark in Alaska which will provide a year-round focus on marine ecology. Alaska's immediate reward will be increased tourism and an influx of international scientists to work on its troubling marine problems. The permanent colony of animals will allow medical and husbandry personnel to gain and maintain their proficiency. The staff will build on that experience to deliver the kind of medical intervention required when dealing with oil spill injuries and other rehabilitation. In turn, those specialized skills will benefit animals in the permanent colony that might occasionally need special support.

No facility in North America was designed at the conceptual phase to accommodate each of the three elements, rehabilitation, research and education, with equal vigor. Seward, a city at the edge of an ocean wilderness, rich with marine mammals, seabirds, and fisheries, and with ties to an established university research community, is ideally suited to make a home for the first institution to accomplish this union.

ATTACHMENT I Conceptual plans for the Alaska SeaLife Center.

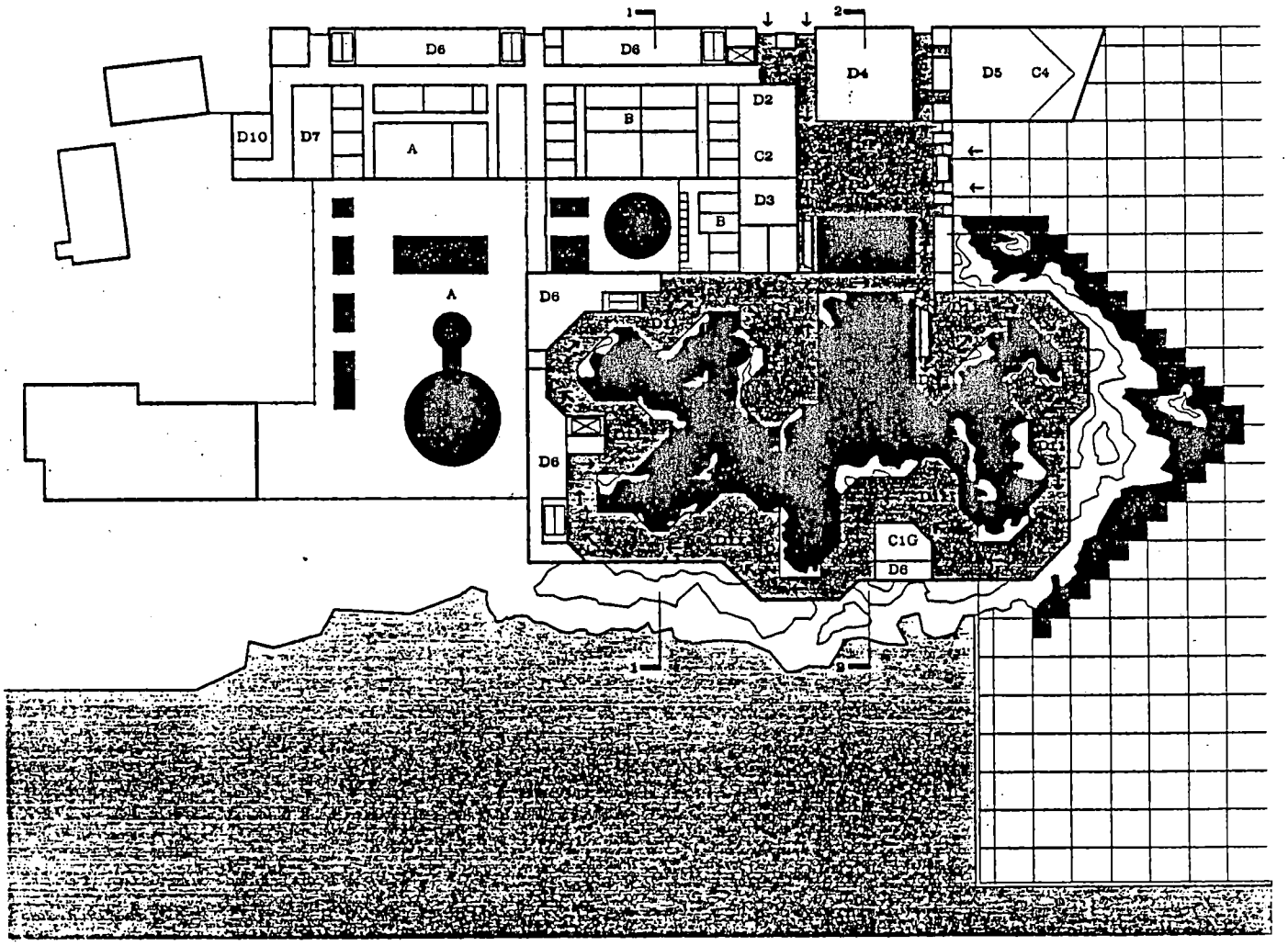


1 New Sea Life Center
2 City Plaza
3 Conference Center/Hotel/ Restaurant
4 Retail
5 Visitor Center
6 Existing I.M.S. Complex
7 Existing Public Esplanade Park
8 Marine Center Entry
9 Water Feature
10 Public Parking

First Level

Key

A. Research (Interior and Exterior)
B. Rehabilitation (Interior and Exterior)
C. Public Exhibits
  - C1A Sea Lions
  - C1B Sea Otters
  - C1C Seabirds
  - C1D Gulf of Alaska
  - C1E Alaska Crabs
  - C1F Alaska Natives
  - C1G Salmon
  - C2 Changing Exhibit
  - C3 Summary Exhibit
  - C4 Introductory Film
D. Core Facilities
  - D1 Administration
  - D2 Lobby and Public Services
  - D3 Education
  - D4 Museum Shop
  - D5 Auditorium
  - D6 Curatorial
  - D7 Maintenance
  - D8 Building Mechanical
  - D9 Life Support
  - D10 Service
  - D11 Circulation



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pper Level

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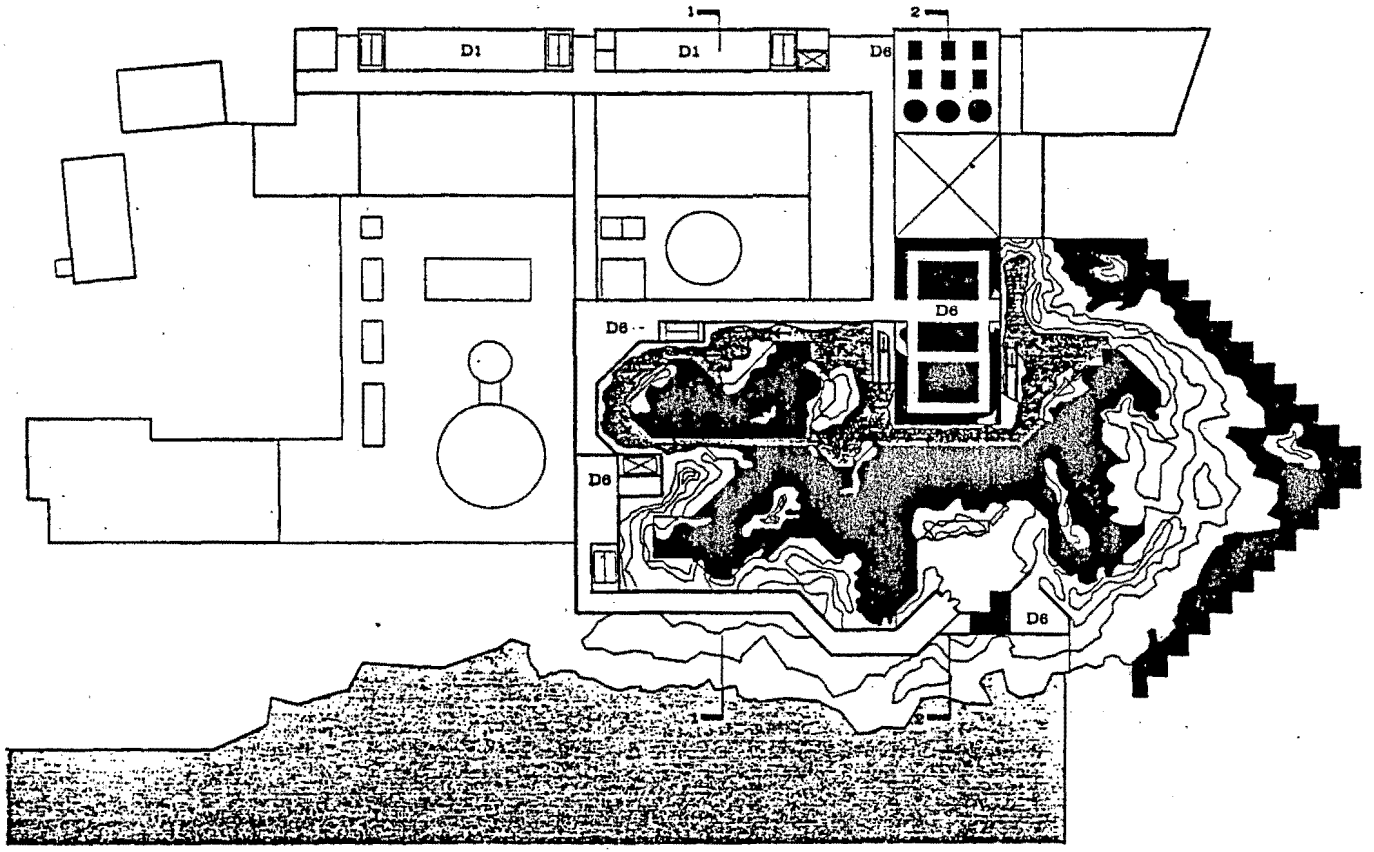
Research (Interior and Exterior)
Rehabilitation (Interior and Exterior)
Public Exhibits
C1A Sea Lions
C1B Sea Otters
C1C Seabirds
C1D Gulf of Alaska
C1E Alaska Crabs
C ska Natives
C mon
C2 Changing Exhibit
C3 Summary Exhibit
C4 Introductory Film
Core Facilities
D1 Administration
D2 Lobby and Public Services
D3 Education
D4 Museum Shop
D5 Auditorium
D6 Curatorial
D7 Maintenance
D8 Building Mechanical
D9 Life Support
D10 Service
D11 Circulation



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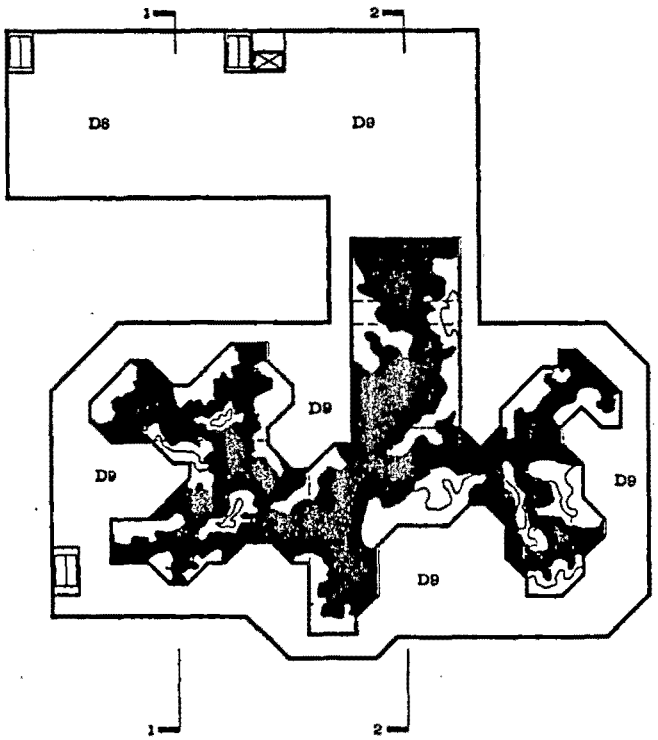
Lower Level

Key

A. Research (Interior and Exterior)
B. Rehabilitation (Interior and Exterior)
C. Public Exhibits
- C1A Sea Lions
- C1B Sea Otters
- C1C Seabirds
- C1D Gulf of Alaska
- C1E Alaska Crabs
- C1F Alaska Natives
- C1G Salmon
- C2 Changing Exhibit
- C3 Summary Exhibit
- C4 Introductory Film

D. Core Facilities
- D1 Administration
- D2 Lobby and Public Services
- D3 Education
- D4 Museum Shop
- D5 Auditorium
- D6 Curatorial
- D7 Maintenance
- D8 Building Mechanical
- D9 Life Support
- D10 Service
- D11 Circulation



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wer Level

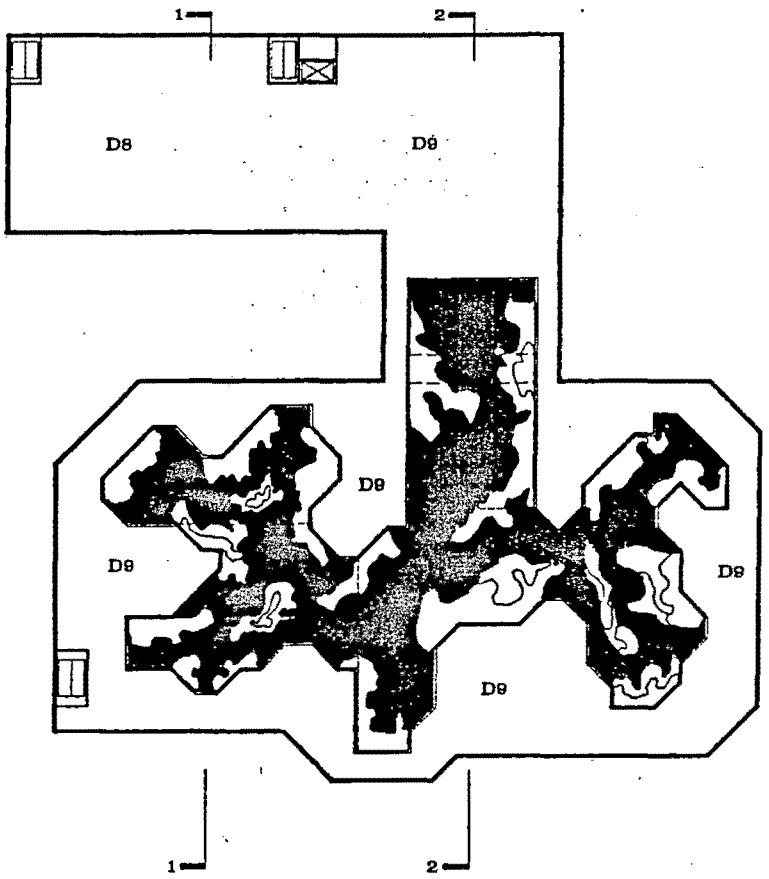
Key

A. Research (Interior and Exterior)

B. Rehabilitation (Interior and Exterior)

C. Public Exhibits
- C1A Sea Lions
- C1B Sea Otters
- C1C Seabirds
- C1D Gulf of Alaska
- C1E Alaska Crabs
- C1F Alaska Natives
- C1G Salmon
- C2 Changing Exhibit
- C3 Summary Exhibit
- C4 Introductory Film

D. Core Facilities
- D1 Administration
- D2 Lobby and Public Services
- D3 Education
- D4 Museum Shop
- D5 Auditorium
- D6 Curatorial
- D7 Maintenance
- D8 Building Mechanical
- D9 Life Support
- D10 Service
- D11 Circulation



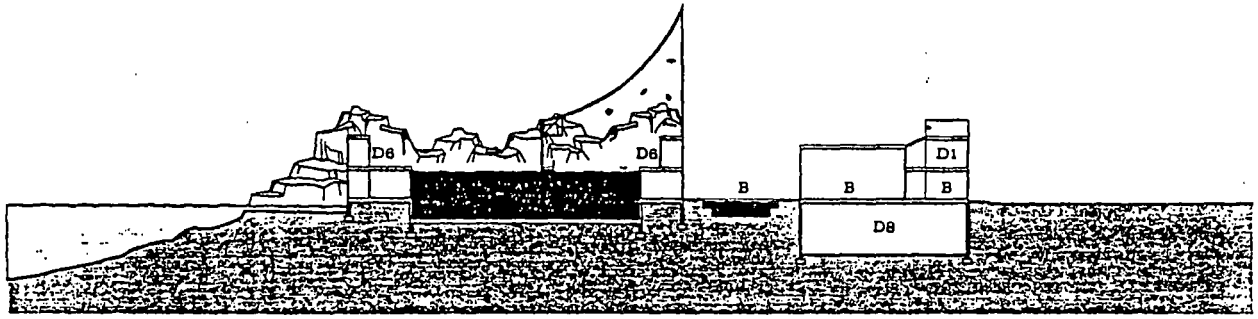
Scale: 1"=50'

Building Sections

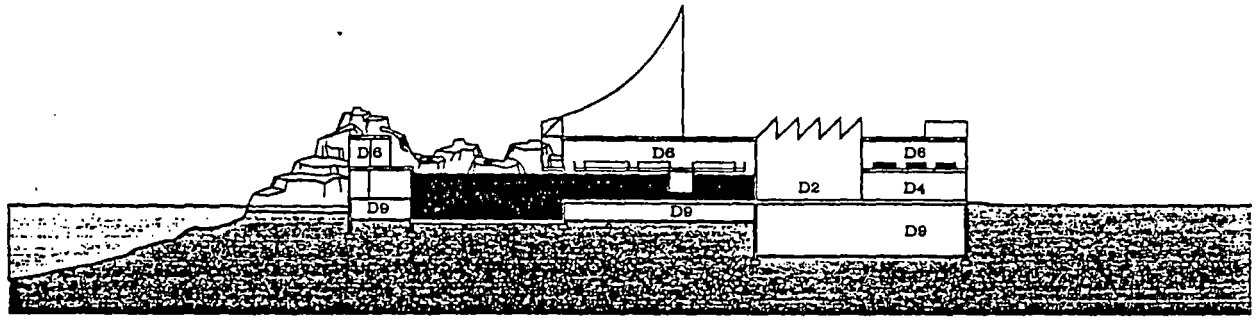
Key

A. Research (Interior and Exterior)
B. Rehabilitation (Interior and Exterior)
C. Public Exhibits
  - C1A Sea Lions
  - C1B Sea Otters
  - C1C Seabirds
  - C1D Gulf of Alaska
  - Alaska Crabs
  - Alaska Natives
  - C1G Salmon
  - C2 Changing Exhibit
  - C3 Summary Exhibit
  - C4 Introductory Film

D. Core Facilities
  - D1 Administration
  - D2 Lobby and Public Services
  - D3 Education
  - D4 Museum Shop
  - D5 Auditorium
  - D6 Curatorial
  - D7 Maintenance
  - D8 Building Mechanical
  - D9 Life Support
  - D10 Service
  - D11 Circulation



Section 1



Section 2

Scale: 1"=50'

Program Space Description	Exterior Area sf	Interior Area sf
A. Research (Interior)		
1. Wet Laboratories		1,500
2. Biochemistry Laboratory		700
Computer and Electronics Laboratory		400
Temperature Controlled Research (cold water)		100
5. Temperature Controlled Research (warm water)		100
6. Isotope Laboratory		400
7. Chemical Storage Room		100
8. Offices, 5 @ 100 sf		500
9. Supply Storage		100
10. Instrument Room		500
11. Outdoor Research Tanks	±20,000	
a. Ring 50' diameter x 10' deep (with center interior lab)		
b. Ring 20' diameter x 10' deep		
c. 2 tanks 15 x 15 x 5' deep		
d. 1 tank 10 x 15 x 5' deep		
e. 1 tank 20 x 45 x 8' deep		
12. Outdoor Research Pens	±1,000	
a. Rectangular pools 4' deep, with and without dry haul-out space		
b Rectangular pools 4-8" deep, with dry haul-out space for wading birds		
Subtotal	21,000	4,400
B. Rehabilitation		
1. Surgery		400
2. Rehabilitation/Treatment Area		400
3. Treatment Room		400
Pathology Area		500
Tissue Storage		400
6. Freezer		100
7. Food Prep		150
8. Office		150
9. Holding Pens, 5 tanks @ 150 sf		750
10. Work Area		600
11. Clinic/Pathology Laboratory		300
12. Ice Machine Room		150
13. Supply Storage		200
14. Bird cages 4' x 4' and 4' x 8' tiered 2 high (±128 sf of floor space)		200
15. Outdoor Rehabilitation Tanks	5,000	
a. Ring Tank 35' diameter x 10' deep		
b. 2 tanks 10 x 10 x 5' deep		
c. 1 tank 20 x 20 x 5' deep		
16. Outdoor Rehabilitation Pens	±1,000	
a. Rectangular pools 4' deep, with and without dry haul-out space		
b. Rectangular pools 4-8", with dry haul-out space for wading birds.		
Subtotal	6,000	4,700

Program Space Description	Exterior Area sf	Interior Area sf
C. Public Education Exhibits		
1. Exhibit Areas (Subarctic Zone/Arctic Zone)		
a. Steller Sea Lions	12,000	
b. Sea Otters	6,000	
c. Seabirds	5,000	
d. Open Ocean—Gulf of Alaska/Bering Sea/ Arctic Ocean Comparative Coral Reefs		2,500
e. Alaska Crabs		1,500
f. Alaska Natives/Cultural		(See Lobby)
g. Salmon		500
2. Changing Exhibit		1,000
3. Summary Exhibit		1,000
4. Research Exhibit (exterior)	(See Research)	
5. Rehabilitation Exhibit (exterior)	(See Rehabilitation)	
Subtotal	23,000	6,500
D. Core Facilities		
1. Administration		
a. Executive Director		150
b. Executive Secretary/Receptionist		100
c. Waiting Area		150
d. Conference Room		200
e. Program Director		150
f. Research Director		150
g. Veterinarian		150
h. Executive Secretary/Administrative Assistant		100
i. Secretarial Pool (3)		300
j. Public Services Coordinator		100
k. Controller		150
l. Accounting (2)		250
m. Record Storage/Files		150
n. Cash Room		100
o. Curatorial Offices—Mammals (4)		300
p. Curatorial Office—Fish/Invertebrates		100
q. Curatorial Office—Aviarist		100
r. Curatorial Secretary		100
s. Marketing Office		200
t. Development Office		100
u. Membership Office		100
v. Staff Lunch Room		300
w. Kitchenette		50
x. Staff Restrooms		600
y. Staff Showers and Lockers		300
Subtotal		4,450
2. Lobby and Public Services		
a. Lobby/Queue		1,500
b. Ticketing		100
c. Information		50
d. Coat Room		200
e. First Aid Room		100
f. Rest Rooms		500
g. Carriage/Wheelchair Storage		150
h. Entrance/Members Groups		300
Subtotal		2,900

gram Space Description	Exterior Area sf	Inte[illegible]ea sf
Education		
a. Workshops/Classrooms (2 @ 400 sf)		800
b. Education Director		100
c. Education Staff (2 stations)		150
d. [illegible]ary		200
e. [illegible]unteer Coordinator		100
f. Volunteers		200
g. Meeting Room		150
total		1,700
Museum Shop		
a. Museum Shop		2,000
b. Museum Shop Storage (Daily)		400
c. Museum Shop Storage (Main)		1,000
d. Museum Shop Office		100
total		3,500
Auditorium		
a. Hall (250-300 seats)		3,000
b. Preparation Room		500
c. Projection Room		200
d. Storage		300
total		4,000
Curatorial		
a. Water Quality Lab		400
b. [illegible]ropsy		400
c. [illegible]n Pathology Lab		400
d. [illegible]zer		600
e. Cooler		200
f. Food Preparation Room		600
g. Laundry Room		50
h. Storage		100
i. Diver Locker Room		100
j. Diver Toilet Room		100
k. Mammal Holding		
1) Steller Sea Lions		3,000
2) Sea Otters		1,000
l. Fish Holding Rooms		2,000
m. Bird Isolation Room		150
n. Brooder Room		150
o. Bird Holding Room		300
p. General Curatorial Work Rooms		1,000
q. General Storage		200
total		10,750

Program Space Description	Exterior Area sf	Interior Area sf
7. Maintenance		
a. Chief Engineer's Office		100
b. Central Control Room		200
c. Custodial Office		100
d. Custodial Storage		400
e. General Storage/Workshop		400
f. Security Offices		100
g. Security Control		200
Subtotal		1,500
8. Building Mechanical		9,000
Subtotal		9,000
9. Life Support		9,000
Subtotal		9,000
10. Service		
a. Loading Dock/Main		1,500
b. Receiving Office		100
c. Holding		300
d. Trash Storage		200
Subtotal		2,100
11. Building Circulation		
a. Public	6,000	15,000
b. Staff		5,000
Subtotal	6,000	20,000
Total Facility	**56,000**	**84,500**

ATTACHMENT II Tax form for Seward Association for the Advancement of Marine Science.

Form **990**

Department of the Treasury
Internal Revenue Service

Return of Organization Exempt From Income Tax

Under section 501(c) of the Internal Revenue Code (except black lung benefit trust or private foundation) or section 4947(a)(1) charitable trust

Note: You may have to use a copy of this return to satisfy state reporting requirements.

OMB No. 1545-0047

1991

This Form is Open to Public Inspection

A For the calendar year 1991, or fiscal year beginning , 1991, and ending , 19

Please use IRS label or print or type. See Specific Instructions.

B Name of organization: SEWARD ASSOCIATION FOR THE ADVANCEMENT OF MARINE SCIENCES

Number and street (or P.O. box no. if mail is not delivered to street address): P.O. Box 1329 — Room/suite:

City, town, or post office, state, and ZIP code: Seward, AK 99664

C Employer identification number: 92-0132479

D State registration number: N/A

E If application for exemption is pending, check here ▶ ☐

F Check type of organization—Exempt under section ▶ ☒ 501(c)(3) (insert number). OR ▶ ☐ section 4947(a)(1) charitable trust

G Accounting method: ☐ Cash ☒ Accrual ☐ Other (specify) ▶

H Is this a group return filed for affiliates? ☐ Yes ☒ No
If "Yes," enter the number of affiliates for which this return is filed: ▶ N/A
Is this a separate return filed by a group affiliate? ☐ Yes ☒ No

I If either answer in H is "Yes," enter four-digit group exemption number (GEN) ▶ N/A

J If address changed, check box ▶ ☒

K Check here ▶ ☐ if your gross receipts are normally not more than $25,000. You do not have to file a completed return with IRS; but if you received a Form 990 Package in the mail, you should file a return without financial data. **Some states require a completed return.**

Note: *Form 990EZ may be used by organizations with gross receipts less than $100,000 and total assets less than $250,000 at end of year.*

Section 501(c)(3) organizations and 4947(a)(1) trusts must also complete and attach Schedule A (Form 990).

Part I Statement of Revenue, Expenses, and Changes in Net Assets or Fund Balances

Revenue	1	Contributions, gifts, grants, and similar amounts received:			
	a	Direct public support	1a 2,153,258		
	b	Indirect public support	1b		
	c	Government grants	1c		
	d	**Total** (add lines 1a through 1c) (attach schedule—see instructions)		1d	2,153,258
	2	Program service revenue (from Part VII, line 93)		2	
	3	Membership dues and assessments (see instructions)		3	
	4	Interest on savings and temporary cash investments		4	817
	5	Dividends and interest from securities		5	
	6a	Gross rents	6a		
	b	Less: rental expenses	6b		
	c	Net rental income or (loss)		6c	
	7	Other investment income (describe ▶)		7	
	8a	Gross amount from sale of assets other than inventory — (A) Securities / (B) Other	8a		
	b	Less: cost or other basis and sales expenses	8b		
	c	Gain or (loss) (attach schedule)	8c		
	d	Net gain or (loss) (combine line 8c, columns (A) and (B))		8d	
	9	Special fundraising events and activities (attach schedule—see instructions):			
	a	Gross revenue (not including $ _____ of contributions reported on line 1a)	9a		
	b	Less: direct expenses	9b		
	c	Net income		9c	
	10a	Gross sales less returns and allowances	10a		
	b	Less: cost of goods sold	10b		
	c	Gross profit or (loss) (attach schedule)		10c	
	11	Other revenue (from Part VII, line 103)		11	
	12	**Total revenue** (add lines 1d, 2, 3, 4, 5, 6c, 7, 8d, 9c, 10c, and 11)		12	2,154,075
Expenses	13	Program services (from line 44, column (B)) (see instructions)		13	
	14	Management and general (from line 44, column (C)) (see instructions)		14	
	15	Fundraising (from line 44, column (D)) (see instructions)		15	
	16	Payments to affiliates (attach schedule—see instructions)		16	
	17	**Total expenses** (add lines 16 and 44, column (A))		17	41,298
Net Assets	18	Excess or (deficit) for the year (subtract line 17 from line 12)		18	2,112,777
	19	Net assets or fund balances at beginning of year (from line 74, column (A))		19	22,729
	20	Other changes in net assets or fund balances (attach explanation)		20	-0-
	21	Net assets or fund balances at end of year (combine lines 18, 19, and 20)		21	2,135,506

Part II Statement of Functional Expenses All organizations must complete column (A). Columns (B), (C), and (D) are required for section 501(c)(3) and (c)(4) organizations and 4947(a)(1) charitable trusts but optional for others. (See instructions.)

	Do not include amounts reported on line 6b, 8b, 9b, 10b, or 16 of Part I.	(A) Total	(B) Program services	(C) Management and general	(D) Fundraising
Expenses	22 Grants and allocations (attach schedule)				
	23 Specific assistance to individuals				
	24 Benefits paid to or for members				
	25 Compensation of officers, directors, etc.				
	26 Other salaries and wages				
	27 Pension plan contributions				
	28 Other employee benefits				
	29 Payroll taxes				
	30 Professional fundraising fees				
	31 Accounting fees				
	32 Legal fees	40,197			40,197
	33 Supplies	604			604
	34 Telephone				
	35 Postage and shipping				
	36 Occupancy	440			440
	37 Equipment rental and maintenance				
	38 Printing and publications				
	39 Travel	52			52
	40 Conferences, conventions, and meetings				
	41 Interest				
	42 Depreciation, depletion, etc. (attach schedule)				
	43 Other expenses (itemize): a				
	b Bank charges	5			5
	c				
	d				
	e				
	f				
	44 Total functional expenses (add lines 22 through 43) Organizations completing columns (B)-(D), carry these totals to lines 13-15	41,298			41,298

Part III Statement of Program Service Accomplishments (See Instructions.)

Describe what was achieved in carrying out your exempt purposes. Fully describe the services provided; the number of persons benefited; or other relevant information for each program title. Section 501(c)(3) and (4) organizations and section 4947(a)(1) charitable trusts must also enter the amount of grants and allocations to others.

		Expenses (Required for 501(c)(3) and (4) organizations and 4947(a)(1) trusts optional for others.)
a	See attached schedule (Grants and allocations $ -0-)	-0-
b	(Grants and allocations $)	
c	(Grants and allocations $)	
d	(Grants and allocations $)	
e	Other program services (attach schedule) (Grants and allocations $)	-0-
	Total (add lines a through e) (should equal line 44, column (B)) ▶	-0-

Part IV **Balance Sheets**

Note: *Where required, attached schedules and amounts within the description column should be for end-of-year amounts only.*		(A) Beginning of year		(B) End of year
Assets				
45 Cash—noninterest-bearing			45	
46 Savings and temporary cash investments		22,559	46	2,010
47a Accounts receivable	47a			
b Less: allowance for doubtful accounts	47b		47c	
48a Pledges receivable	48a			
b Less: allowance for doubtful accounts	48b		48c	
49 Grants receivable			49	
50 Receivables due from officers, directors, trustees, and key employees (attach schedule)			50	
51a Other notes and loans receivable (attach schedule)	51a			
b Less: allowance for doubtful accounts	51b		51c	
52 Inventories for sale or use			52	
53 Prepaid expenses and deferred charges			53	
54 Investments—securities (attach schedule)			54	
55a Investments—land, buildings, and equipment: basis	55a			
b Less: accumulated depreciation (attach schedule)	55b		55c	
56 Investments—other (attach schedule)			56	
57a Land, buildings, and equipment: basis	57a 2,128,451			
b Less: accumulated depreciation (attach schedule)	57b -0-	-0-	57c	2,128,451
58 Other assets (describe ▶ Organization costs)		170	58	5,045
59 **Total assets** (add lines 45 through 58) (must equal line 75)		22,729	59	2,135,506
Liabilities				
60 Accounts payable and accrued expenses			60	
61 Grants payable			61	
62 Support and revenue designated for future periods (attach schedule)			62	
63 Loans from officers, directors, trustees, and key employees (attach schedule)			63	
64 Mortgages and other notes payable (attach schedule)			64	
65 Other liabilities (describe ▶)			65	
66 **Total liabilities** (add lines 60 through 65)		-0-	66	-0-
Fund Balances or Net Assets				
Organizations that use fund accounting, check here ▶ ☒ and complete lines 67 through 70 and lines 74 and 75 (see instructions).				
67a Current unrestricted fund		22,729	67a	7,055
b Current restricted fund			67b	2,128,451
68 Land, buildings, and equipment fund			68	
69 Endowment fund			69	
70 Other funds (describe ▶)			70	
Organizations that do not use fund accounting, check here ▶ ☐ and complete lines 71 through 75 (see instructions).				
71 Capital stock or trust principal			71	
72 Paid-in or capital surplus			72	
73 Retained earnings or accumulated income			73	
74 Total fund balances or net assets (add lines 67a through 70 OR lines 71 through 73: column (A) must equal line 19 and column (B) must equal line 21)		22,729	74	2,135,506
75 **Total liabilities and fund balances/net assets** (add lines 66 and 74)		22,729	75	2,135,506

Form 990 is available for public inspection and, for some people, serves as the primary or sole source of information about a particular organization. How the public perceives an organization in such cases may be determined by the information presented on its return. Therefore, please make sure your return is complete and accurate and fully describes your organization's programs and accomplishments.

Part V List of Officers, Directors, and Trustees (List each one even if not compensated. See instructions.)

(A) Name and address	(B) Title and average hours per week devoted to position	(C) Compensation (If not paid, enter zero)	(D) Contributions to employee benefit plans	(E) Expense account and other allowances
See attached schedule				

Part VI Other Information

		Yes	No
76	Did you engage in any activity not previously reported to the Internal Revenue Service? If "Yes," attach a detailed description of each activity.		X
77	Were any changes made in the organizing or governing documents, but not reported to IRS? If "Yes," attach a conformed copy of the changes.		X
78a	Did your organization have unrelated business gross income of $1,000 or more during the year covered by this return?		X
b	If "Yes," have you filed a tax return on **Form 990-T**, Exempt Organization Business Income Tax Return, for this year?	N/A	
c	At any time during the year, did you own a 50% or greater interest in a taxable corporation or partnership? If "Yes," complete Part IX.		X
79	Was there a liquidation, dissolution, termination, or substantial contraction during the year? (See instructions.) If "Yes," attach a statement as described in the instructions.		X
80a	Are you related (other than by association with a statewide or nationwide organization) through common membership, governing bodies, trustees, officers, etc., to any other exempt or nonexempt organization? (See instructions.)		X
b	If "Yes," enter the name of the organization ► N/A and check whether it is ☐ exempt OR ☐ nonexempt.		
81a	Enter amount of political expenditures, direct or indirect, as described in the instructions ▸ 81a -0-		
b	Did you file **Form 1120-POL**, U.S. Income Tax Return for Certain Political Organizations, for this year?		X
82a	Did you receive donated services or the use of materials, equipment, or facilities at no charge or at substantially less than fair rental value?	X	
	If "Yes," you may indicate the value of these items here. Do not include this amount as revenue in Part I or as an expense in Part II. See instructions for reporting in Part III ▸ 82b N/A		
83a	Did anyone request to see either your annual return or exemption application (or both)?		X
b	If "Yes," did you comply as described in the instructions? (See General Instruction L.)	N/A	
84a	Did you solicit any contributions or gifts that were not tax deductible?		X
b	If "Yes," did you include with every solicitation an express statement that such contributions or gifts were not tax deductible? (See General Instruction M.)	N/A	
85a	*Section 501(c)(5) or (6) organizations.*—Did you spend any amounts in attempts to influence public opinion about legislative matters or referendums? (See instructions and Regulations section 1.162-20(c).)	N/A	
b	If "Yes," enter the total amount spent for this purpose ▸ 85b N/A		
86	*Section 501(c)(7) organizations.*—Enter:		
a	Initiation fees and capital contributions included on line 12 ▸ 86a N/A		
b	Gross receipts, included on line 12, for public use of club facilities (See instructions.) ▸ 86b N/A		
c	Does the club's governing instrument or any written policy statement provide for discrimination against any person because of race, color, or religion? (See instructions.)	N/A	
87	*Section 501(c)(12) organizations.*—Enter amount of:		
a	Gross income received from members or shareholders ▸ 87a N/A		
b	Gross income received from other sources (Do not net amounts due or paid to other sources against amounts due or received from them.) ▸ 87b N/A		
88	*Public interest law firms.*—Attach information described in the instructions.		
89	List the states with which a copy of this return is filed ► N/A		
90	During this tax year did you maintain any part of your accounting / tax records on a computerized system?	X	

91 The books are in care of ► Mrs. Sharon Anderson Telephone no. ► (907) 224-5506
Located at ► P.O. Box 1315 Seward, AK ZIP code ► 99664

92 *Section 4947(a)(1) charitable trusts filing Form 990 in lieu of Form 1041, U.S. Fiduciary Income Tax Return,* should check here ► ☐ and enter the amount of tax-exempt interest received or accrued during the tax year ▸ 92 N/A

4780 Cambridge Way
Anchorage, AK 99503
June 4, 1992

JUN 04 REC'D

EXXON VALDEZ Oil Spill Trustee Council
645 G Street
Anchorage, AK 99501

Comments on the EXXON VALDEZ Oil Spill Restoration Framework and 1992 Draft Work Plan, Vols. I and II, date April 1992.

Restoration activities funded from the joint trust fund are limited to:

* Restoring
* Replacing
* Enhancing
* Rehabilitating
* Acquiring equivalent natural resources injured as a result of the spill and for reduced or lost services provided by such resources

Available data (until recently) indicates baseline information of injured resources in the spill area are limited and in some cases, completely absent. To this extent, it is difficult to determine the naturally operating relationships of the ecosystems within the area. Further, it is suggested that the impacts of the oil spill have been identified for at least 500 miles away from Bligh Reef (pollack, p. 36 Vol I). Conversely, song birds were not documented as being injured and bald eagles were not "measurably affected"-"in Prince William Sound" (p. 30 and 27 respectively). The impact to other bald eagle populations was not discussed.

Recommendation 1: The area of concern, or impact area, attributable to the EXXON VALDEZ be identified for each resource or services impacted.

01

Rationale: This will assist the public in understanding the importance of the various resources and their habitats and potential impacts from subsequent restoration plans and for proposed federal and state resource development, protection, or enhancement programs. For example, would a resource development program, such as timber harvest or a new resort, in an oiled area add to already stressed conditions attributable to the Spill? Would the same resource development program in an unoiled area affect the rate of recovery of damaged resources in an oiled area? Would the same resource development program in either an oiled or unoiled area impact the biodiversity of the spill area as a whole or a significant part? Better public understanding of the impacted resources and its distribution is needed. This would facilitate public input to federal and state plans and for subsequent permits to use public resources in the Spill area.

Recommendation 2: Use consistent descriptors for describing resource impacts associated with the Spill.

Rationale: This will assist the public in understanding the degree of impact so that an independent assessment can be made of the proposed restoration activity or proposed federal or state land use authorization/plan. Most of Vol. I describes impacts between oiled and unoiled area in terms of percent change of a life stage. Cutthroat trout, however, discusses mortality in term of percent difference between oiled and unoiled streams (p. 32). Since the overall population of cutthroat trout is small, the rate of mortality can not be judged on the same basis as sea otters or Orcas. These descriptors should be used consistently by all resource planners in the Spill area to facilitate public understanding.

NEPA compliance documents prepared before the Spill and those prepared before the complete damage studies are available need to be re-evaluated to determine whether the proposed action would cause an unexpected cumulative impact to resources or uses damaged by the Spill.

Recommendation 3: Each federal action agency should review its pending actions in the light of the recently released information. This can best be done through a professional review of the cumulative impacts analysis originally prepared (see CEQ 40 CFR 1508.8 and 1502.14, 1502.15, 1502.16, and 1508.9).

Rationale: Public input to existing, approved plans for federal and state lands in the Spill area were without benefit of the knowledge just now becoming public. Prior NEPA compliance is, therefore, potentially incomplete since there may not have been a rigorous discussion of the potential impacts of biodiversity or on the rate of recovery of impacted or stressed environmental components in the Spill area. This Recommendation would include describing and evaluating cumulative impacts on resources and uses in inter-relationships of oiled and unoiled areas associated with the Spill for potential impacts to the rate of recovery. Do unoiled areas act as reservoirs for natural recovery? Are there especially sensitive areas, such as sheltered bays, in the oiled and unoiled areas that act as basic genetic reservoirs for the ecosystems in the Spill area?

Recommendation 4: Each state agency should develop a review process for pending actions similar to that suggested in Recommendation 3 for federal actions.

Recommendation 5: A specific, coordinated public involvement process should be developed for Recommendations 4 and 5.

Acquisition of private lands creates polarized controversy. Restricting uses of public resources on state or federal lands also creates controversy. Unless condemnation authority exists, acquisitions of private lands takes funding and a willing seller and a willing buyer. Restriction of uses on public lands, except for limited emergency conditions, requires a lengthy

public involvement process. Frequently federal or state enabling legislation is required. Courts are increasingly asked to intervene, further delaying the final decision and ultimate implementation. Resource development programs (timber harvest, hatchery operations, lodges, subdivisions, roads, airports, marinas, anchor buoys, etc.) create a variety of primary and secondary economic assets and liabilities. These economic changes extend throughout and well beyond the Spill area.

There is an opportunity to reduce, or eliminate controversy through about resource development/preservation/use in the Spill by prudent use of the Restoration funds.

Recommendation 6: Explore the option of acquiring timber rights for the period that it would take for a cut-over area to return naturally to its present existing condition.

Rationale: Lands are not removed from the tax roles and other uses, such as marinas and specified term lease subdivisions, could generate income. This also leaves to the future the decision on the proper role of timber resources in the natural ecosystem and in the state and local economy.

Recommendation 7: Acquisition of resources with Restoration funds should identify and compensate for net secondary economic gains that would have been realized if the resource were not purchased.

Rationale: In addition to the in-place value of a resource (such as timber, hatchery site, or a commercial recreation use) there are secondary economic gains that are impacted when a proposed use is foregone. These include tax revenues from the operation of a local sawmill and local suppliers, taxes paid by workers, sales taxes generated by suppliers, etc. The Forest Service has developed economic models to display the economic impact to local communities from timber operations in Alaska. This methodology should be used in determining the extent of secondary impact to the local communities. These modeled secondary economic gains should be paid directly to the concerned local community to assure that there are no cumulative economic losses resulting from the Spill as a result of a Restoration action. Payment for secondary economic losses to the local community should be on a "net" basis. This takes into account the fact that local utilities, schools, or other public services would not be stressed, upgraded, or expanded.

Recommendation 8: Restoration funds should be used as matching funds for state and federal grants in the Spill area. These sources should be identified immediately.

Rationale: The Restoration fund has been created from a non-public source. Therefore, these monies may be used for matching existing programs. Potential sources of federal matching monies include the Land and Water Conservation Fund for state programs to acquire private

lands and resources for public outdoor recreation purposes. Pittman-Robertson and Dingell-Johnson funds also may apply to state wildlife and fishery programs associated with the Spill. The Land and Water Conservation Fund also is available for federal land and resource inholding acquisition. The National Science Foundation supports good science.

Desires for research and monitoring funding expands to exceed the amount of funding available. Examples of research programs and monitoring programs in Alaska that lacked good planning and follow through are studies for the Trans-Alaska Pipeline System (TAPS), and NPRA. Scientists and state and federal land managers in both cases insisted there were important and substantial gaps in the knowledge needed to make good land use decisions. Numerous studies were generated and initiated. When the special funding for research or monitoring dried-up there was little effort to obtain regular state or federal or scientific institutional funding from within an agencies' or researcher's normal budget. This was very apparent when Alyeska, after the pipeline was in operation, started asking why a particular research program designed to answer construction issues was still underway. Similarly, studies on NPRA largely stopped when special Congressional funding ended. Sometimes there is an attitude "if not mine, data are not useable". This leads to duplication of effort. Often, publication takes years to become available and has only limited distribution. In the meantime, land management decisions continue without benefit of the data. One example was the discovery of dinosaur fossils in NPRA and federal oil and gas leasing decisions.

Recommendation 9: Research and monitoring programs should be within the framework of pending management decisions associated with expenditure of the Restoration fund for restoration.

Rationale: Each research and monitoring proposal should be within an approved scientific design that clearly shows--

* how the proposed expenditure supplies missing data;
* how that missing data would be used in restoring, enhancing, replacing, rehabilitation, or acquisition of natural resources or services reduced or lost as a result of the Spill;
* other missing data that must be collected or evaluated before the proposal can be used in decision making;
* why the proposed research or monitoring proposal can not be funded from existing fund sources and programs; and
* when and where data and results will be available.

Recommendation 10: Research and monitoring programs should generally be funded from existing federal, state, and private sources rather than from the Restoration funding.

Recommendation 11: Research and monitoring programs requiring several phases over a period of time should not be approved for subsequent funding without data and progress reports being subject to peer review and available to the general public.

Rationale: There is a perception that research and monitoring are used by state and federal agencies and researchers as a means to meet shortfalls in their normal operating budgets or by researchers for collection of esoteric data that has no value for land management decisions. Recommendations 9, 10, and 11 will help provide better public input and understanding of research and monitoring programs paid for by the Restoration fund.

Sincerely,

Jules V. Tileston

ID # 920604114

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

- ✓ ID stamped/Input completed
- ✓ Name
- Affiliation
- Costs

✓ Category

~~DAMAGE ASSESSMENT~~ Management Action

✓ Lead Agency

ADNR

_____ Cooperating Agency(ies)

All

Ø N Passed initial screening criteria

type: education

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

1993 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

Part VII Analysis of Income-Producing Activities

Enter gross amounts unless otherwise indicated.	Unrelated business income (a) Business code	Unrelated business income (b) Amount	Excluded by section 512, 513, or 514 (c) Exclusion code	Excluded by section 512, 513, or 514 (d) Amount	(e) Related or exempt function income (See instructions.)
93 Program service revenue:					
(a)					
(b)					
(c)					
(d)					
(e)					
(f)					
(g) Fees from government agencies					
94 Membership dues and assessments					
95 Interest on savings and temporary cash investments					817
96 Dividends and interest from securities					
97 Net rental income or (loss) from real estate:					
(a) debt-financed property					
(b) not debt-financed property					
98 Net rental income or (loss) from personal property					
99 Other investment income					
100 Gain or (loss) from sales of assets other than inventory					
101 Net income from special fundraising events					
102 Gross profit or (loss) from sales of inventory					
103 Other revenue: (a)					
(b)					
(c)					
(d)					
(e)					
104 Subtotal (add columns (b), (d), and (e).)					817
105 TOTAL (add line 104, columns (b), (d), and (e).) ▶					817

Note: *(Line 105 plus line 1d, Part I, should equal the amount on line 12, Part I.)*

Part VIII Relationship of Activities to the Accomplishment of Exempt Purposes

Line No. ▼	Explain how each activity for which income is reported in column (e) of Part VII contributed importantly to the accomplishment of your exempt purposes (other than by providing funds for such purposes). (See instructions.)
95	The organization earned interest income on Checking and Savings Accounts. Unexpended cash was left in these accounts to earn interest.

Part IX Information Regarding Taxable Subsidiaries (Complete this Part if you answered "Yes" to question 78c.)

Name, address, and employer identification number of corporation or partnership	Percentage of ownership interest	Nature of business activities	Total income	End-of-year assets
N/A				

Please Sign Here

Under penalties of perjury, I declare that I have examined this return, including accompanying schedules and statements, and to the best of my knowledge and belief, it is true, correct, and complete. Declaration of preparer (other than officer) is based on all information of which preparer has any knowledge.

TAXPAYER COPY

Signature of officer ▶ Date ▶ Title

Paid Preparer's Use Only

Preparer's signature ▶ [signature] CPA Date 5/6/92 Check if self-employed ▶ ☐

Firm's name (or yours if self-employed) and address ▶ Olson & Cade, C.P.A.s, P.S.
1048 W. James St. #101 Kent, WA ZIP code 98032-4600

91-1385129

FORM 990
1991
SEWARD ASSOCIATION FOR THE ADVANCEMENT
OF MARINE SCIENCES
2-0132479

Page 2, Part III, Statement of Program Service Accomplishments:

The organization was created to provide scientific facilities to promote the education of the public about the Alaskan Marine Ecosystem, to support on-going scientific research of marine mammals and to provide facilities in which stressed marine mammals can be rehabilitated until they can be returned to their natural habitat.

Page 4, Part V, List of Officers, Directors and Trustees:

Name/Address	Title/Average Hrs./Wk	Comp.	Contrib. Ben. Pln	Expanse Acct./ Other Allowance
Willard Dunham P.O. Box 27 Seward, Ak 99664	Pres./20 hrs.	-0-	-0-	-0-
Karen Swartz P.O. Box 172 Seward, AK 99664	V.P./ 4 hrs.	-0-	-0-	-0-
Carol A. Lindsey .O. Box 389 ɐward, AK 99664	Sec./4 hrs.	-0-	-0-	-0-
Sharon E. Anderson P.O. Box 1315 Seward, AK 99664	Treas./20 hrs.	-0-	-0-	-0-
William C. Noll P.O. Box 1789 Seward, AK 99664	Dir./1 hr.	-0-	-0-	-0-
Lee McAnerney P.O. Box 406 Seward, AK 99664	Dir./1 hr.	-0-	-0-	-0-
John C. Anderson III P.O. Box 1315 Seward, AK 99664	Dir./1 hr.	-0-	-0-	-0-
Darryl Schaefermeyer P.O. Box 167 Seward, AK 99664	Dir./8 hrs.	-0-	-0-	-0-
Keith Gordaoff 300 A St. Ste. 400 Anchorage, AK 99503	Dir./4 hrs.	-0-	-0-	-0-

SCHEDULE A (Form 990)

Department of the Treasury
Internal Revenue Service

Organization Exempt Under 501(c)(3)

(Except Private Foun[illegible]), 501(e), 501(f), 501(k), or Section 4947(a)(1) Cl[illegible]le Trust

Supplementary Information

► Attach to Form 990 (or Form 990EZ).

OMB No. 1545-0047

1991

Name: SEWARD ASSOCIATION FOR THE ADVANCEMENT OF MARINE SCIENCES

Employer identification number: 92 : 0132479

Part I **Compensation of the Five Highest Paid Employees Other Than Officers, Directors, and Trustees**
(See specific instructions.) (List each one. If there are none, enter "None.")

(a) Name and address of employees paid more than $30,000	(b) Title and average hours per week devoted to position	(c) Compensation	(d) Contributions to employee benefit plans	(e) Expense account and other allowances
NONE				
Total number of other employees paid over $30,000 ►				

Part II **Compensation of the Five Highest Paid Persons for Professional Services**
(See specific instructions.) (List each one. If there are none, enter "None.")

(a) Name and address of persons paid more than $30,000	(b) Type of service	(c) Compensation
NONE		
Total number of others receiving over $30,000 for professional services ►		

Part III **Statements About Activities**

			Yes	No
1	During the year, have you attempted to influence national, state, or local legislation, including any attempt to influence public opinion on a legislative matter or referendum?	1		X
	If "Yes," enter the total expenses paid or incurred in connection with the legislative activities: $ N/A			
	Organizations that made an election under section 501(h) by filing Form 5768 must complete Part VI-A. For other organizations checking "Yes," attach a statement giving a detailed description of the legislative activities AND either complete Part VI-B or attach a classified schedule of the expenses paid or incurred.			
2	During the year, have you, either directly or indirectly, engaged in any of the following acts with a trustee, director, principal officer, or creator of your organization, or any taxable organization or corporation with which such person is affiliated as an officer, director, trustee, majority owner, or principal beneficiary:			
a	Sale, exchange, or leasing of property?	2a		X
b	Lending of money or other extension of credit?	2b		X
c	Furnishing of goods, services, or facilities?	2c		X
d	Payment of compensation (or payment or reimbursement of expenses if more than $1,000)?	2d		X
e	Transfer of any part of your income or assets?	2e		X
	If the answer to any question is "Yes," attach a detailed statement explaining the transactions.			
3	Do you make grants for scholarships, fellowships, student loans, etc.?	3		X
4	Attach a statement explaining how you determine that individuals or organizations receiving grants or loans from you in furtherance of your charitable programs qualify to receive payments. (See specific instructions.)			

Part IV Reason for Non-Private Foun n Status (See instructions for definition

The organization is not a private foundation because it is (please check only **ONE** applicable box):

5 ☐ A church, convention of churches, or association of churches. Section 170(b)(1)(A)(i).

6 ☐ A school. Section 170(b)(1)(A)(ii). (Also complete Part V, page 3.)

7 ☐ A hospital or a cooperative hospital service organization. Section 170(b)(1)(A)(iii).

☐ A Federal, state, or local government or governmental unit. Section 170(b)(1)(A)(v).

☐ A medical research organization operated in conjunction with a hospital. Section 170(b)(1)(A)(iii). **Enter name, city, and state of hospital** ▶ .....

10 ☐ An organization operated for the benefit of a college or university owned or operated by a governmental unit. Section 170(b)(1)(A)(iv). (Also complete Support Schedule.)

11a ☐ An organization that normally receives a substantial part of its support from a governmental unit or from the general public. Section 170(b)(1)(A)(vi). (Also complete Support Schedule.)

11b ☐ A community trust. Section 170(b)(1)(A)(vi). (Also complete Support Schedule.)

12 ☒ An organization that normally receives: **(a)** no more than ⅓ of its support from gross investment income and unrelated business taxable income (less section 511 tax) from businesses acquired by the organization after June 30, 1975, and **(b)** more than ⅓ of its support from contributions, membership fees, and gross receipts from activities related to its charitable, etc., functions—subject to certain exceptions. See section 509(a)(2). (Also complete Support Schedule.)

13 ☐ An organization that is not controlled by any disqualified persons (other than foundation managers) and supports organizations described in: **(1)** boxes 5 through 12 above; or **(2)** section 501(c)(4), (5), or (6), if they meet the test of section 509(a)(2). See section 509(a)(3).

Provide the following information about the supported organizations. (See instructions for Part IV, box 13.)

(a) Name(s) of supported organization(s)	(b) Box number from above
N/A	

14 ☐ An organization organized and operated to test for public safety. Section 509(a)(4). (See specific instructions.)

Support Schedule (Complete only if you checked box 10, 11, or 12 above.) Use cash method of accounting.

	Calendar year (or fiscal year beginning in) ▶	(a) 1990	(b) 1989	(c) 1988	(d) 1987	(e) Total
15	Gifts, grants, and contributions received. (Do not include unusual grants. See line 28.)	22,514	1990			22,514
	Membership fees received	-0-	Was			-0-
	Gross receipts from admissions, merchandise sold or services performed, or furnishing of facilities in any activity that is not a business unrelated to the organization's charitable, etc., purpose	-0-	initial year			-0-
18	Gross income from interest, dividends, amounts received from payments on securities loans (section 512(a)(5)), rents, royalties, and unrelated business taxable income (less section 511 taxes) from businesses acquired by the organization after June 30, 1975	225				225
19	Net income from unrelated business activities not included in line 18	-0-				-0-
20	Tax revenues levied for your benefit and either paid to you or expended on your behalf	-0-				-0-
21	The value of services or facilities furnished to you by a governmental unit without charge. Do not include the value of services or facilities generally furnished to the public without charge	-0-				-0-
22	Other income. Attach schedule. Do not include gain or (loss) from sale of capital assets	-0-				-0-
23	Total of lines 15 through 22	22,739				22,739
24	Line 23 minus line 17	22,739				22,739
25	Enter 1% of line 23	227				

26	Organizations described in box 10 or 11:	
a	Enter 2% of amount in column (e), line 24	N/A
b	Attach a list (not open to public inspection) showing the name of and amount contributed by each person (other than a governmental unit or publicly supported organization) whose total gifts for 1987 through 1990 exceeded the amount shown in line 26a. Enter the sum of all excess amounts here ▶	N/A

(Continued on page 3)

724,040 page

Part IV **Support Schedule** (continue–, complete only if you checked box 10, or 12 on page 2.)

27 Organizations described in box 12, page 2:

a Attach a list for amounts shown on lines 15, 16, and 17, showing the name of, and total amounts received in each year from, each "disqualified person," and enter the sum of such amounts for each year:

(1990) -0- (1989) ..... (1988) ..... (1987) .....

b Attach a list showing, for 1987 through 1990, the name and amount included in line 17 for each person (other than "disqualified persons") from whom the organization received more during that year than the larger of: **(1)** the amount on line 25 for the year; or **(2)** $5,000. Include organizations described in boxes 5 through 11 as well as individuals. Enter the sum of these excess amounts for each year:

(1990) -0- (1989) ..... (1988) ..... (1987) .....

28 For an organization described in box 10, 11, or 12, page 2, that received any unusual grants during 1987 through 1990, attach a list (not open to public inspection) for each year showing the name of the contributor, the date and amount of the grant, and a brief description of the nature of the grant. Do not include these grants in line 15 above. (See specific instructions.) N/A

Part V **Private School Questionnaire**
(To be completed ONLY by schools that checked box 6 in Part IV) N/A

		Yes	No
29 Do you have a racially nondiscriminatory policy toward students by statement in your charter, bylaws, other governing instrument, or in a resolution of your governing body?	29		
30 Do you include a statement of your racially nondiscriminatory policy toward students in all your brochures, catalogues, and other written communications with the public dealing with student admissions, programs, and scholarships?	30		
31 Have you publicized your racially nondiscriminatory policy through newspaper or broadcast media during the period of solicitation for students, or during the registration period if you have no solicitation program, in a way that makes the policy known to all parts of the general community you serve?	31		
If "Yes," please describe; if "No," please explain. (If you need more space, attach a separate statement.)			
Do you maintain the following:			
Records indicating the racial composition of the student body, faculty, and administrative staff?	32a		
b Records documenting that scholarships and other financial assistance are awarded on a racially nondiscriminatory basis?	32b		
c Copies of all catalogues, brochures, announcements, and other written communications to the public dealing with student admissions, programs, and scholarships?	32c		
d Copies of all material used by you or on your behalf to solicit contributions?	32d		
If you answered "No" to any of the above, please explain. (If you need more space, attach a separate statement.)			
33 Do you discriminate by race in any way with respect to:			
a Students' rights or privileges?	33a		
b Admissions policies?	33b		
c Employment of faculty or administrative staff?	33c		
d Scholarships or other financial assistance? (See instructions.)	33d		
e Educational policies?	33e		
f Use of facilities?	33f		
g Athletic programs?	33g		
h Other extracurricular activities?	33h		
If you answered "Yes" to any of the above, please explain. (If you need more space, attach a separate statement.)			
34a Do you receive any financial aid or assistance from a governmental agency?	34a		
b Has your right to such aid ever been revoked or suspended?	34b		
If you answered "Yes" to either 34a or b, please explain using an attached separate statement.			
Do you certify that you have complied with the applicable requirements of sections 4.01 through 4.05 of Rev. Proc. 75-50, 1975-2 C.B. 587, covering racial nondiscrimination? If "No," attach an explanation. (See instructions for Part V.)	35		

Part VI-A **Lobbying Expenditures by Electing Public Charities** (see instructions)
(To be completed **ONLY** by an eligible organization that filed Form 5768) N/A

Check here ▶ a ☐ If the organization belongs to an affiliated group (see instructions).
Check here ▶ b ☐ If you checked a and "limited control" provisions apply (see instructions).

Limits on Lobbying Expenses		(a) Affiliated group totals	(b) To be completed for ALL electing organizations
36 Total (grassroots) lobbying expenses to influence public opinion	36		
37 Total lobbying expenses to influence a legislative body	37		
38 Total lobbying expenses (add lines 36 and 37)	38		
39 Other exempt purpose expenses (see Part VI instructions)	39		
40 Total exempt purpose expenses (add lines 38 and 39) (see instructions)	40		
41 Lobbying nontaxable amount. Enter the smaller of $1,000,000 or the amount determined under the following table—			
If the amount on line 40 is— / The lobbying nontaxable amount is—			
Not over $500,000 — 20% of the amount on line 40	41		
Over $500,000 but not over $1,000,000 — $100,000 plus 15% of the excess over $500,000			
Over $1,000,000 but not over $1,500,000 — $175,000 plus 10% of the excess over $1,000,000			
Over $1,500,000 — $225,000 plus 5% of the excess over $1,500,000			
42 Grassroots nontaxable amount (enter 25% of line 41)	42		
(Complete lines 43 and 44. File Form 4720 if either line 36 exceeds line 42 or line 38 exceeds line 41.)			
43 Excess of line 36 over line 42	43		
44 Excess of line 38 over line 41	44		

4-Year Averaging Period Under Section 501(h)

(Some organizations that made a section 501(h) election do not have to complete all of the five columns below. See the instructions for lines 45–50 for details.)

	Lobbying Expenses During 4-Year Averaging Period				
Calendar year (or fiscal year beginning in) ▶	(a) 1991	(b) 1990	(c) 1989	(d) 1988	(e) Total
45 Lobbying nontaxable amount (see instructions)					
46 Lobbying ceiling amount (150% of line 45(e))					
47 Total lobbying expenses (see instructions)					
48 Grassroots nontaxable amount (see instructions)					
49 Grassroots ceiling amount (150% of line 48(e))					
50 Grassroots lobbying expenses (see instructions)					

Part VI-B **Lobbying Activity by Nonelecting Public Charities**
(For **optional** reporting by organizations that did not complete Part VI-A.) N/A

During the year, did you attempt to influence national, state or local legislation, including any attempt to influence public opinion on a legislative matter or referendum, through the use of:	Yes	No	Amount
a Volunteers			
b Paid staff or management (include compensation in expenses reported on lines c through h)			
c Media advertisements			
d Mailings to members, legislators, or the public			
e Publications or published or broadcast statements			
f Grants to other organizations for lobbying purposes			
g Direct contact with legislators, their staffs, government officials, or a legislative body			
h Rallies, demonstrations, seminars, conventions, speeches, lectures, or any other means			
i Total lobbying expenses (add lines c through h)			

If "Yes" to any of the above, also attach a statement giving a detailed description of the activities.

Part VII **Information Regarding Tra[illegible]rs To and Transactions and Relationsl[illegible] With Noncharitable Exempt Organizations**

51 Did the reporting organization directly or indirectly engage in any of the following with any other organization described in section 501(c) of the Code (other than section 501(c)(3) organizations) or in section 527, relating to political organizations?

		Yes	No
a	Transfers from the reporting organization to a noncharitable exempt organization of:		
	(i) Cash	51a(i)		X
	(ii) Other assets	a(ii)		X
b	Other Transactions:		
	(i) Sales of assets to a noncharitable exempt organization	b(i)		X
	(ii) Purchases of assets from a noncharitable exempt organization	b(ii)		X
	(iii) Rental of facilities or equipment	b(iii)		X
	(iv) Reimbursement arrangements	b(iv)		X
	(v) Loans or loan guarantees	b(v)		X
	(vi) Performance of services or membership or fundraising solicitations	b(vi)		X
c	Sharing of facilities, equipment, mailing lists or other assets, or paid employees	c		X

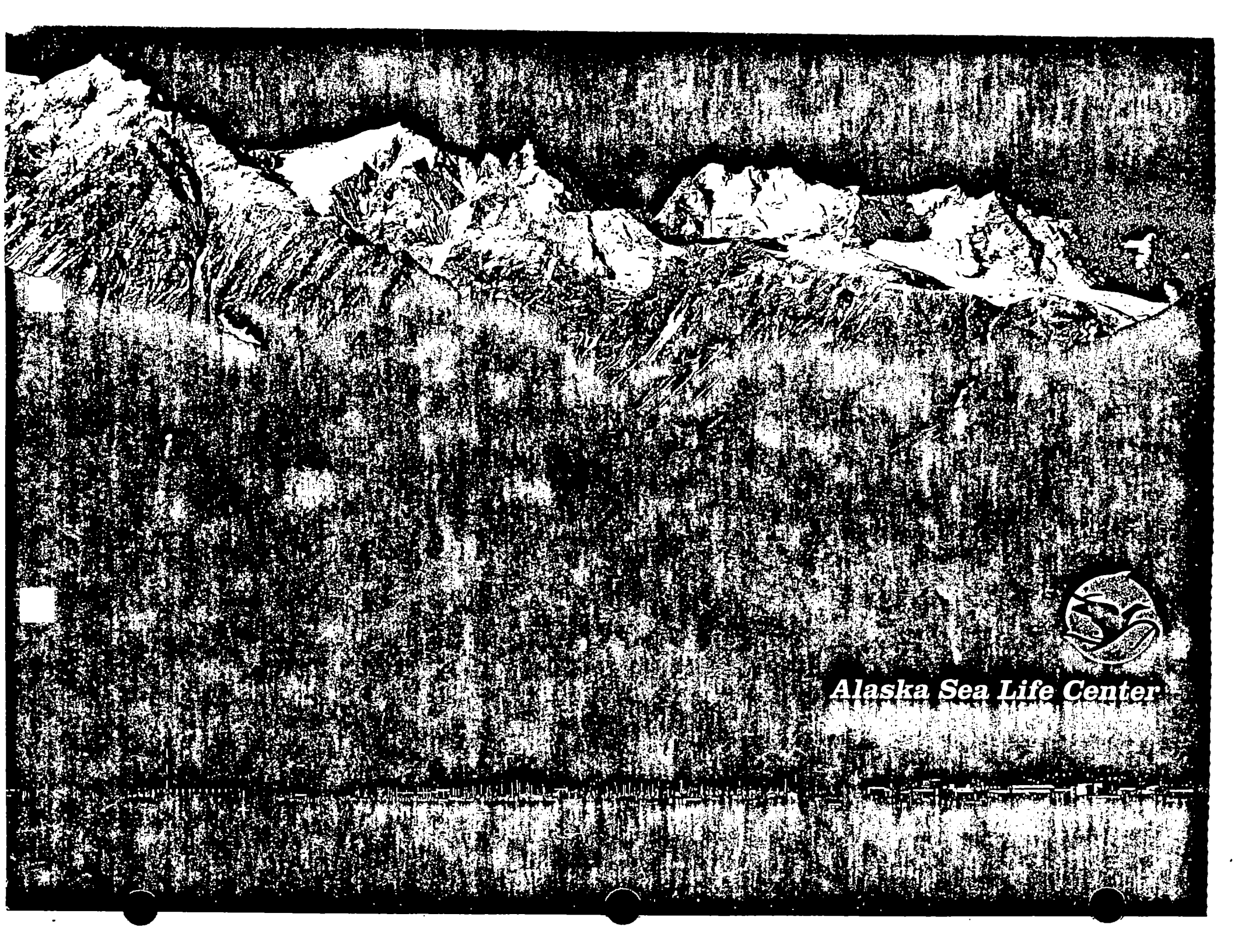
d If the answer to any of the above is "Yes," complete the following schedule. The "Amount involved" column below should always indicate the fair market value of the goods, other assets, or services given by the reporting organization. If the organization received less than fair market value in any transaction or sharing arrangement, indicate in column (d) the value of the goods, other assets, or services received.

(a) Line no.	(b) Amount involved	(c) Name of noncharitable exempt organization	(d) Description of transfers, transactions, and sharing arrangements
		N/A	

52a Is the organization directly or indirectly affiliated with, or related to, one or more tax-exempt organizations described in section 501(c) of the Code (other than section 501(c)(3)) or in section 527? ☐ Yes ☐ No

b If "Yes," complete the following schedule.

(a) Name of organization	(b) Type of organization	(c) Description of relationship
	N/A	


Alaska Sea Life Center

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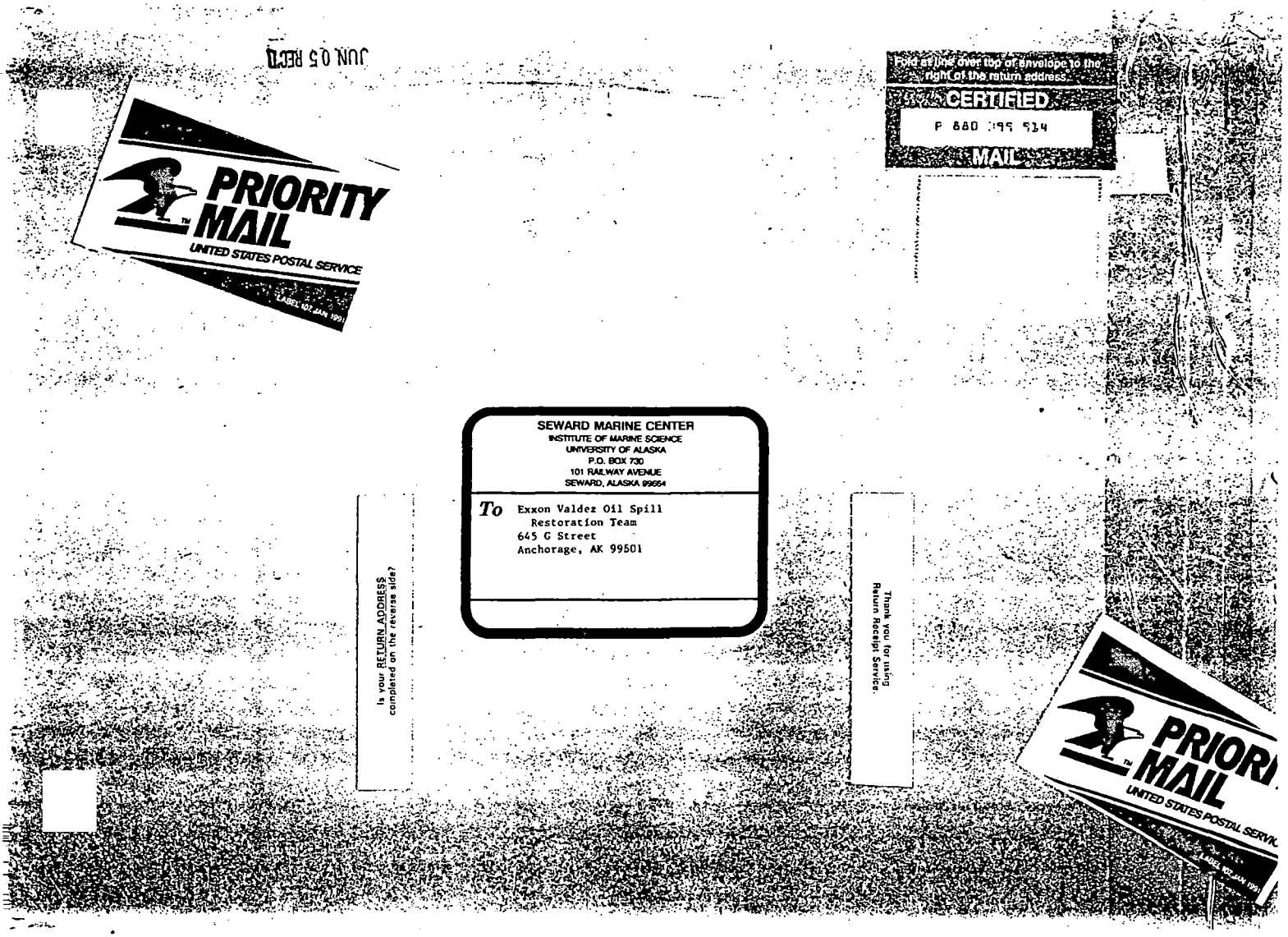

1993 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
		✓	1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

ID # 20615297-35

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

Genetic study rcd salmon

✓ Checked for Completeness

- ✓ ID stamped/Input completed
- ✓ Name
- ✓ Affiliation
- ✓ Costs

✓ Category

Restoration - ~~Enhancement~~ management

Lead Agency

ADF&G

Cooperating Agency(ies)

Ø N Passed initial screening criteria

Type: F/S

RANKING H M L Rank Within Categories

H M L Rank Overall

Project Number - if assigned

920615 247-35

1993 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

29735

EXXON V...DEZ OIL SPILL TRUSTEE COU...

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project: Genetic Stock Identification of Kenai River Sockeye for Protection in Mixed Harvest Areas

---

Justification: (Link to Injured Resource or Service) Kenai R. sockeye salmon depressed due to EVOS

Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach)

The cohorts of sockeye salmon originating from the 1989 spawning in the Kenai River drainage are so depleted that a severe reduction or complete elimination of their harvest may be necessary starting in 1993 to insure even minimally adequate escapements. Genetic stock identification (GSI) techniques will be implemented to manage the harvest of these EVOS-damaged stocks in Cook Inlet mixed harvest areas. GSI has only recently been applied as an in-season management tool, and it has proven to be extremely effective for allocating and adjusting the harvest of stocks intercepted in stock mixtures such as those that occur in Cook Inlet. Starting in 1992, baseline genetic data will be collected from 28 subpopulations from the Kenai, Kasilof, and Susitna Rivers. Samples from the Cook Inlet commercial harvest will be annalyzed and reduced to stock components using these data and GSI techniques during the 1993 and 1994 seasons. Area managers will use this information to modify fishing areas and openings in order to facilitate harvest of the surplus Kasilof River and Susitna River stocks while protecting the EVOS-damaged Kenai River stocks.

Estimated Duration of Project: 3 years

Estimated Cost per Year: $410,000

Other Comments: Continuation of R59

Name, Address, Telephone:

James E. Seeb 267-2385
Genetics Program
...aska Dept. Fish and Game 333
...aspberry Road, Anc., AK 99518

Oil spill restoration is a public process. Your ideas and suggestions will not be proprietary, and you will not be given any exclusive right or privilege to them.

EXXON V)EZ OIL SPILL TRUSTEE COU[illegible] 297 74

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project: DEVELOPMENT OF OTOLITH MASS MARKING AS AN INSEASON STOCK SEPARATION TOOL TO REDUCE EXPLOITATION ON DAMAGED WILDSTOCK SALMON

Justification: Wild pink and chum salmon populations in Prince William Sound (PWS) were injured by the Exxon Valdez oil spill. Fishery managers must have inseason stock composition data to direct exploitation away from damaged wildstocks. This project will develop otolith mass marking as an inseason stock separation tool. Otolith marking is expected to reduce the cost of catch sampling and increase the precision of stock composition estimates, because every hatchery fish will be marked. Wildstock salmon are identified by default as unmarked fish. Because every hatchery fish is marked, otolith mass marking will also have important benefits for studies of hatchery-fish straying and wild-hatchery fish interactions during the early marine period.

Description of Project: This project will take otolith mass marking technology out of the laboratory and solve the problems necessary to apply the technique to protect damaged wildstock salmon. The project will focus on the following three objectives: (1) develop a banding code that can be applied and deciphered at a reasonable cost, (2) refine existing otolith mass processing techniques, and (3) develop a catch sampling program that will provide inseason stock composition data for fishery managers. In the first and second years of the project, embryos in two production hatcheries in PWS will be marked using an initial set of codes constructed to answer specific questions related to the speed and cost of otolith mass processing as well as the accuracy of mark identification in returning adults. In the third and fourth years, marked fish will return as adults and a catch sampling program will be conducted to estimate the variability of stock composition within and between fish tender boats and fish processors. Data obtained from the first generation will be used to refine techniques applied to the second generation. It is expected that the information obtained from the project will enable implementation of a full scale otolith mass marking program at the end of the four year period.

Estimated Duration of Project: 4 years

Estimated Cost per Year:

First Year	$ 152,000
Second Year	89,500
Third Year	198,000
Fourth Year	198,000

Other Comments: This concept proposal is being jointly submitted by the Alaska Department of Fish and Game, Prince William Sound Aquaculture Corporation, and the Valdez Fisheries Development Association, Inc.

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Alaska Department of Fish and Game
P.O. Box 669
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ID # 9?2615297-74

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

Study of Salmon Pink Chum

✓ Checked for Completeness

- ✓ ID stamped/Input completed
- ✓ Name
- ✓ Affiliation
- ✓ Costs

✓ Category

Restoration ~~enhancement~~ management actions

✓ Lead Agency

ADF&G

____ Cooperating Agency(ies)

____ N Passed initial screening criteria

Type F/S

RANKING H M L Rank Within Categories

H M L Rank Overall

____ Project Number - if assigned ____

1993 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

ID # 9206122(4

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

_____ ✓ Checked for Completeness

restor > Salmon.

- ✓ ID stamped/Input completed
- ✓ Name
- ✓ Affiliation
- ✓ Costs

_____ Category ~~Restoration Monitoring~~ MANAGEMENT ACTION.

_____ Lead Agency
NOAA

_____ Cooperating Agency(ies)
AOFW E

(Y) N Passed initial screening criteria

Type: F/S

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

9206122 44

1993 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

6(2-114

- ☐ A-92 WPWG
- ☑ B-93 WPWG
- ☐ C-RPWG
- ☐ D-PAG
- ☐ E-MISC.

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project : C-LAB – A system for monitoring meteorological and oceanographic variables that affect growth conditions experienced by juvenile salmon in the northern Gulf of Alaska

Justification: Evidence indicates consequential damage to the Alaska salmon population resulting from the oil spill. Means to restore, replace and enhance the affected fishery include proven methods of monitoring environmental conditions that positively influence the annual migration of fry to the ocean and rates of fry growth and survival. Expenditures to emplace the system described below will aid in the management of wild salmon stocks and the release of hatchery fry during optimal growth conditions.

Description of Project: (e.g., goal(s), objectives, location, rationale, and technical approach)

The goal is to improve the early survival of hatchery released fry and to increase the reproductive success of the injured wild salmon stocks.

The project will establish a network of five satellite-linked meteorological and oceanographic buoys in coastal flow fields between Port Valdez and the Alaska Peninsula west of Kodiak Island. The buoys will measure surface weather (wind speed and direction, barometric pressure, air temperature, incoming light), and upper-layer oceanography (currents, phytoplankton, temperatures from the surface to 100 m).

Data gathered from the C-LAB system will help match hatchery releases with optimal growth conditions for salmon fry. Increased knowledge of the physical, chemical and biological factors of early ocean marine conditions will also improve management precision for preseason forecasting. Use of this information may protect and help restore the injured salmon resource through altering harvest levels. In addition to data useful to salmon management, the C-LAB system will create an environmental data base that will provide information relating physical conditions and phytoplankton production to a variety of species that were directly impacted by the oil spill.

A prototype buoy currently in Prince William Sound, designated C-LAB 1, transmits data hourly to members of a consortium – The Cooperative Fisheries and Oceanographic Studies (CFOS) program. A complete C-LAB system adds to efforts to predict and describe available food supply for juvenile salmon. Prediction of growth ecology and energy composition of fry food stocks will be determined using buoy generated oceanographic data. Available satellite-determined sea surface data will now become more usable by intercomparison with measured buoy data.

The five buoys telemeter their data to a polar-orbiting satellite. The data are routinely retrieved from the satellite using a telephone link and modems. The digital information is assembled, processed and archived in a PC type computer which in turn is directly accessible by all CFOS members for their use.

Estimated Duration of Project: 5 years with option to extend

Estimated Cost per Year: $1,100,000 for year 1 – $250,000 for years 2-5

Other Comments: Only proven technology is involved in the proposed C-LAB system. C-LAB 1, which will be operated as part of the network, has been successfully monitoring surface weather and upper-layer oceanography since December 1991. In addition, it is important to note that an established working group, the CFOS consortium, assures that the C-LAB data base will be used for priority fisheries research, undertaken by acknowledged experts.

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Oil spill restoration is a public process. Your ideas and suggestions will not be proprietary, and you will not be given any exclusive right or privilege to them.

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Institute of Marine Science
School of Fisheries & Ocean Sciences
University of Alaska Fairbanks
Fairbanks, Alaska 99775-1080

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Exxon Valdez Oil [illegible]
645 G St.
Anchorage, AK 99501

Document ID Number 9206122744

☐ A-92 WPWG ☒ B-93 WPWG ☐ C-RPWG ☐ D-PAG

University of Alaska - Fairbanks
Fairbanks Alaska 99775-1080
U.S.A.

JUN 12 REC'D

Document ID Number
920612240
☐ A-92 WPWG
☐ B-93 WPWG
☐ C-RPWG
☐ D-PAG
☐ E-MISC

UNIVERSITY OF ALASKA FAIRBANKS
INSTITUTE OF MARINE SCIENCE
SCHOOL OF FISHERIES AND OCEAN SCIENCE
FAIRBANKS, ALASKA 99775-1080

To Exxon Valdez Oil Spill Restoration Te
645 G St.
Anchorage, AK 99501

From: R.T. Cooney, IMS

ID # 20615-279-10

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

Survey Red salmon in ReEvge

✓ Checked for Completeness

ID stamped/Input completed
Name
Affiliation
Costs

✓ Category Management actions

[redacted]

✓ Lead Agency
ADF&G

✓ Cooperating Agency(ies)
DOI CRS FWS

(Y) N Passed initial screening criteria

Type F/S

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

9206152794

1993 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

9202 15279 16

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Received ID Number 19201527 A-92 WPPWG B-93 WPPWG C-RPWG D-PAG E-MISC.

Title of Project:

Ayakulik River Sockeye Salmon Escapement Evaluation

Justification: (Link to Injured Resource or Service)

Over escapement due to the oil spill resulted in reduced productivity. Escapement may be reduced to assist the recovery of the system.

Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach)

The goal of this project will be to evaluate the effects of various in-season levels of salmon abundance on brown bear and bald eagle use of key tributaries. The project will determine the escapement level necessary to maintain brown bear and bald eagle use within + 20 percent of the current level.

This information is needed to determine the minimum number of salmon needed to maintain brown bear and bald eagle feeding habitat. This data will ensure that proposed changes in escapement do not adversely impact refuge purposes, i.e. maintenance of populations and habitat.

Aerial surveys will be used to index in-season salmon escapement and wildlife abundance on several tributaries on a weekly basis from mid-June through August 30.

Estimated Duration of Project: Three years

Estimated Cost per Year: $6,000/year

Other Comments: All cost will be salaries and flight charges for refuge aircraft.

This proposal addresses Options 2, 3, 7, and 11 in the Exxon Valdez Oil Spill Restoration Framework, Volume I.

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Kodiak, Alaska 99615
(907) 487-2600

Oil spill restoration is a public process. Your ideas and suggestions will not be proprietary, and you will not be given any exclusive right or privilege to them.

ID # 9206010 58-05

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

Survey red salmon in Refuge

✓ Checked for Completeness

✓ ID stamped/Input completed
✓ Name
✓ Affiliation
✓ Costs

✓ Category

~~Other - Science~~ Management Action

Lead Agency

ADF&G

Cooperating Agency(ies)

DOI USFWS

(Y) N Passed initial screening criteria

Type: F/S

RANKING H M L Rank Within Categories

H M L Rank Overall

Project Number - if assigned

058-05

1993 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

SOCKEYE SALMON ESCAPEMENT EVALUATION
AYAKULIK RIVER
OIL SPILL SETTLEMENT FUNDS

Proposed Development:

The Kodiak National Wildlife Refuge proposes to develop a method to identify the minimum number of sockeye salmon needed to maintain brown bear feeding habitat on specific tributaries of the Ayakulik River drainage. The Connecticut and Southeast Creeks which drain into the Red Lake sub-drainage of the Ayakulik have been indexed during the months of July and August for brown bear abundance and composition since 1960 (Barnes, 1990). This information is used by management to monitor bear population trends and use of critical habitats on the southern portion of the refuge. The relationship of sockeye escapement into these key tributaries to brown bear abundance is unknown.

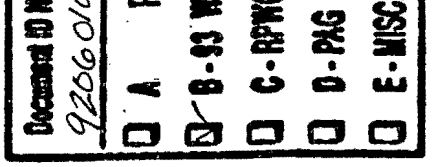
This study would evaluate the effects of various in-season levels of salmon abundance on brown bear use of these key tributaries and determine sockeye escapement necessary to maintain brown bear use within ±20 percent of the current use level. To accomplish this aerial surveys will be used to index in season salmon escapement and brown bear abundance on these tributaries on a weekly basis from mid-June through August 30. Salmon escapement and bear use through the season will be determined using the area under the curve method (Johnson and Barrett, 1988). The study is proposed for a period of 3 years (1992-1994) to obtain replicate data sets.

Facilities Required:

No facilities are required for this project. All field work to be conducted will be accomplished through aerial surveys on the key tributaries of the Ayakulik drainage.

Estimated Facilities Cost:

Salaries GS/5 (3pp @ $915/pp)	$ 2,750
Aerial Surveys US Government Aircraft (44 hrs @ $59/hr)	2,600
Sub total	$ 5,350
Total (1992-1994)	$16,050



Justification:

From the early 1970's, with the exception of 1975, sockeye salmon escapement into the Ayakulik drainage has generally exceeded 150 thousand fish annually. This escapement level has been sufficient to maintain high brown bear use of the Red Lake tributaries during summer. The current maximum desired early and late run sockeye escapement for the system is 300 thousand fish. In 1989 an overescapement of approximately 780 thousand sockeye was recorded as a result of the Exxon oil spill. In addition, escapement into the system during 1990 and 1991 exceeded the desired maximum of 300 thousand by approximately 25 percent. As a result, the sockeye juvenile rearing capacity of the system may have been overstressed which may result in substantially decreased returns in future years. A reduction in escapement may effect brown bear use on the key index streams. Information is needed to identify the minimum number of sockeye necessary to maintain the seasonal brown bear feeding habitat in these tributaries and to effectively utilize bear survey data so that population or use trends are accurately and quickly detected.

Literature Cited:

Barnes Jr, Victor G. 1990 The influence of salmon availability on movements and range of brown bears on southwest Kodiak Island. Int. Conf. Bear Res. and Manage. 8:305-313.

Johnson, B.A. and B.M. Barrett. 1988. Estimation of salmon escapement based on stream survey data: a geometric approach. Alaska Dep. Fish and Game. Regional Inf. Rpt. 4K88. Kodiak.

Submitted By:

U. S. Fish and Wildlife Service - Kodiak National Wildlife Refuge.

ID #_ 0615297-39

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

Salmon
Pink salmon
Inventory

✓ Checked for Completeness

- ✓ ID stamped/Input completed
- ✓ Name
- ✓ Affiliation
- ✓ Costs

✓ Category

Restoration ~~- Enhancement~~ management

✓ Lead Agency

ADF&G

✓ Cooperating Agency(ies)

USFS

(Y) N Passed initial screening criteria

Type: F/S

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

42661S241-34

1993 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project: Inventory and Effects of Straying Hatchery Pink Salmon on Wild Pink Salmon Populations in Prince William Sound

Justification: Wild pink salmon stocks in oiled portion of Prince William Sound (PWS) have experienced higher egg mortalities, larval deformities, and lower juvenile growth rates than stocks from unoiled streams and hatcheries. There is also evidence that they may also have persistent genetic damage which has resulted in reduced egg survival in generations following the spill. Streams located on headlands in western Prince William Sound were most heavily impacted by oil and also lie along migratory corridors for fish destined to the large hatcheries in the western Sound. Results from NRDA F/S Study #3 tag recoveries indicate that wild salmon populations in these streams experience a high incidence of genetic interchange from the burgeoning hatchery populations which stray from migratory corridors into wild streams. Ample evidence in the literature suggests that hatchery fish are ill adapted to wild conditions and that genetic interchange between hatchery and wild stocks may lead to reduced fitness of wild stocks. The stocks that are most susceptible to straying are also those which were most vulnerable to oil damage. The combined effects of oil damage, genetic burden, and excessive harvest of wild fish in fisheries which target on more numerous hatchery returns in migratory corridors may result in an overall reduction in the genetic diversity and fitness of PWS salmon populations. Given the magnitude of straying discovered in the western areas of PWS in 1991, it is vital that wild stocks in all areas of Prince William Sound be examined for further evidence of straying.

Description of Project: This project will serve primarily to catalogue and inventory the location and degree of straying by hatchery stocks and help direct future restoration efforts. Our knowledge regarding the magnitude of straying by enhanced populations of pink salmon is presently limited to what was learned through the recovery of coded wire tagged fish from 45 streams surveyed daily in 1991. These streams represent a small percentage of the over 900 anadromous spawning streams used by wild stock pink salmon in Prince William Sound. The initial objective of this project will be to expand tag recovery efforts to include more streams in all regions of Prince William Sound. Tag recoveries will be accomplished through multiple ground surveys during periods of peak salmon returns. Salmon carcasses in escapements will be examined for the presence of a coded wire tag. Areas with a low incidence or no evidence of straying could be designated as genetic sanctuaries and future management efforts could be directed towards protecting these unimpacted stocks. Those oiled areas with documented high levels of straying could be monitored to examine the long term effects of straying and the resultant wild/hatchery salmon hybridization on the overall fitness of wild stock populations.

Estimated Duration of Project: Two years, in order to examine both odd and even year returns.

Estimated Cost of Project: $253,000 per year.

Other Comments: The issues surrounding enhanced and wild stock fisheries interactions, including the issue of straying by hatchery fish, has been identified by Alaska's Senate Special Committee on Domestic and International Commercial Fisheries as needing increased research efforts, thus allowing policy makers to make informed decisions and to consider the risks associated with those decisions. Success in this effort will be measured by the future protection of the genetic resources of affected stocks. Without understanding the full

magnitude of the straying [illegible]omena, the evaluation of other [illegible]toration efforts aimed at restoring injur[illegible] stocks of wild pink salmon will continue to be confounded by this issue.

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Alaska Department of Fish and Game
Box 880
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2974/

EXXON DEZ OIL SPILL TRUSTEE COUNCIL

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project: Adult Tagging to Determine Stock Specific Distributions, Migratory Timing, and Rates of Movement for Pink Salmon in Prince William Sound Fisheries.

Justification: Pink salmon populations in oiled streams in Prince William Sound (PWS) have experienced higher egg mortalities, larval deformities, and lower juvenile growth rates than stocks from unoiled streams and hatcheries. There are also observations which suggest that oiled pink salmon have sustained genetic damage which has resulted in reduced egg survival following the spill. Commercial fisheries in PWS harvest salmon from damaged and healthy wild stocks and the numerically superior hatchery returns. Depleted and less productive oiled wild populations cannot sustain as high an exploitation rate as unoiled wild and hatchery stocks; consequently, they require special protection from commercial fisheries if adequate numbers are to escape and spawn. Oil spill funding and research programs will inevitably decline and it is important to design current research with long term less expensive management tools in mind. Run reconstruction is a computer modeling process which predicts stock specific time and area abundance in fishing district of PWS. Such a model can take advantage of data accumulated from some past and current salmon research projects and be used as a low cost future, albeit less precise, restoration tool. A model has been partially constructed for PWS but stock specific migratory timing and distributions for at least one even and one odd year return of pink salmon are needed to complete it.

Description of Project: This project will use adult tagging and recovery data to describe the migratory timing and routes of wild and hatchery stocks of pink salmon and fulfill the data needs for a complete run reconstruction model. Adult salmon will be tagged at weekly intervals in key entrances and along migratory corridors of PWS. Tags for each week and tagging location will be uniquely coded by color and number. Tags will be recovered throughout the season from all commercial catches, hatchery harvests, and at regular weekly intervals in approximately 150 spawning streams. Commercial catch recovery data by color and numeric code will be combined with tagging data to reconstruct the direction and rate of movement for individual migratory fish in fishing districts. Recovery data from escapements will be used to estimate the migratory speed of individual stocks through commercial fishing districts to their natal stream. Stock specific migratory timing, spatial distribution, and movement rates will be incorporated into a run reconstruction model.

Estimated Duration of Project: A minimum of two years to insure that timing and distribution of both even and odd year cycles of pink salmon are characterized.

Estimated Cost per Year:

Year 1	Year 2
$495,000	$450,000

Other Comments:

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ID # 0615297-41

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

Tagging
Pink Salmon

✓ Checked for Completeness

- ✓ ID stamped/Input completed
- ✓ Name
- ✓ Affiliation
- ✓ Costs

✓ Category

Restoration - Enhancement management

✓ Lead Agency

ADF&G

_____ Cooperating Agency(ies)

_____

Ⓨ N Passed initial screening criteria

_____

Type: F/S

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

1993 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

ID # 0615297-42

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

tagging
Pink Salmon

✓ Checked for Completeness

- ✓ ID stamped/Input completed
- ✓ Name
- ✓ Affiliation
- ✓ Costs

✓ Category

Restoration · ~~enhancement~~ management

✓ Lead Agency

ADF&G

_____ Cooperating Agency(ies)

_____

Ⓨ N Passed initial screening criteria

_____

Type: F/S

_____

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

97-015297-42

1993 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

29742

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project: Coded-wire Tag Recoveries from Commercial Catches in Prince William Sound Pink Salmon Fisheries (Restoration Study 60A)

Justification: Pink salmon populations in oiled streams in Prince William Sound (PWS) have experienced higher egg mortalities, larval deformities, and lower juvenile growth rates than stocks from unoiled streams and hatcheries. There are also observations which suggest that oiled pink salmon have sustained genetic damage which has resulted in reduced egg survival following the spill. Commercial fisheries in PWS harvest salmon from damaged and healthy wilds stocks, and the numerically superior hatchery returns. Depleted and less productive oiled populations cannot sustain as high an exploitation rate in PWS commercial fisheries as unoiled wild and hatchery stocks; consequently, they require special protection from commercial fisheries if adequate numbers are to escape and spawn. Coded wire tags are a stock identification tool which will enable managers to identify stock specific temporal and spatial distributions in PWS, alter fisheries inseason, direct fishing efforts towards numerically superior hatchery stocks, away from damaged wild stocks, and monitor the recovery of damaged wild stocks.

Description of Project: This project will recover coded-wire tags from salmon caught in the commercial salmon fisheries in Prince William Sound. Recoveries will be conducted at shore based processing plants. Tag extractions will be completed by the ADF&G tag laboratory in Juneau and data analyses will be completed by ADF&G staff in Cordova. Tag recovery data will be used to estimate hatchery and wild stock contributions to commercial catches by time and area. Catch contribution results coupled with wild stock escapement and hatchery stock brood data will be used to estimate total returns and survival rates for hatchery and wild stocks. Time and area hatchery and wild stock contribution information will be used to direct fishing fleet toward aggregations of hatchery fish and away from areas where damaged wild fish are present in significant numbers. Estimates of total return and survival for hatchery and wild stocks will enable managers to monitor wild stock specific recovery from oil damage and assess the effectiveness of revised management strategies. Coded-wire tagging technology, recovery procedures in processing plants, tag retrieval procedures, tagging and recovery data archiving, and tag data analysis methods have long histories of success. Coded-wire tagging of all hatchery salmon is already funded and conducted by aquaculture associations. A wild pink salmon fry tagging project would compliment this project and has been requested in a separate proposal.

Estimated Duration of Project: Both even and odd year pink salmon populations should be monitored until management strategies have been shown to be successful and oiled effects have been shown to have diminished below levels apt to cause significant reductions in survival.

Estimated Cost per Year: $855,000 per year

Other Comments: This is a currently funded restoration project (R60C)

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(907) 424-5900

ID # -1 20615297 - 17

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

Tagging Salmon

__✓__ Checked for Completeness

- ✓ ID stamped/Input completed
- ✓ Name
- ✓ Affiliation
- ✓ Costs

__✓__ Category

Restoration - Management action

__✓__ Lead Agency

ADF&G

_____ Cooperating Agency(ies)

Ø N Passed initial screening criteria

Type: F/S

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

1995 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

EXXON V. EZ OIL SPILL TRUSTEE COUN

297.17

FORMAT FOR PUBLIC IDEAS FOR RESTORATION PROJECTS

Title of Project: Quality assurance for PWS coded-wire tagging and fish production records for improved management ability.

Justification: (Link to Injured Resource or Service)

Wild juvenile salmon populations were damaged by the EVOS. Management strategies have been intensified to avoid additional damage by overharvesting while attempting to focus more effort on the abundant hatchery produced stocks. This project is designed to support the extra needs for the required management intensity by providing the necessary quality assurance and improved precision for tagging and record keeping for the hatchery stocks.

Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach)

Goal - To support and expand the means of recording data, maintaining data records and data reporting quality assurance to support and improve management precision.

Objectives - Develop, test and implement data recording system for fish production and coded-wire tagging projects.

Location - PWS fish production and tagging projects.

Rationale - Improved management strategies to prevent overharvest of damaged wild stocks require improved quality, and precision of record keeping for all projects that include fish marking, release and recapture.

Technical approval - A computer program will be developed to record, cross-reference and error-check production and release data and coded-wire tagging information to assure precise, high quality records for the fisheries managers to improve accuracy, precision and efficiency in the fishery to avoid over-harvest of wild stocks.

Estimated Duration of Project: FY93, 1994.

Estimated Cost per Year: $66,000.

Other Comments: Information from this project, when completed, will benefit other parts of the state and other agencies as well as greater efficiency will be realized among other projects.

Name, Address, Telephone (907) 267-2172

William Hauser
Alaska Department of Fish and Game
) Division
.aspberry Road
Anchorage AK 99518

Because the Oil Spill Restoration is a public process, your ideas and suggestions will not be proprietary, and you will not be given any exclusive right or privilege to them.

ID # 1 >615297-38

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

- ✓ ID stamped/Input completed
- ✓ Name
- ✓ Affiliation
- ✓ Costs

tagging
Pink. Salmon

✓ Category

Restoration - ~~Enhancement~~ management

✓ Lead Agency

ADF&G

_____ Cooperating Agency(ies)

_____

(N) N Passed initial screening criteria

_____

Type: F/S

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

1993 OJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

EXXON DEZ OIL SPILL TRUSTEE COUNCIL

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project: Coded Wire Tagging of Wild Stock Pink Salmon For Stock Identification

Justification: Wild stock pink salmon production in Prince William Sound (PWS) has ranged from 10 to 15 million fish in recent years. Up to 75% of pink salmon spawning in PWS occurs in intertidal areas. Pink salmon populations in oiled streams have experienced higher egg mortalities, larval deformities, and lower juvenile growth rates than stocks from unoiled streams and hatcheries. There is also evidence that pink salmon from oiled streams sustained genetic damage which has resulted in persistent reduced egg survival following the spill. Commercial fisheries in PWS harvest salmon from damaged and healthy wilds stocks, and the numerically superior hatchery returns. Depleted and less productive oiled populations cannot sustain as high an exploitation rate in PWS commercial fisheries as unoiled wild and hatchery stocks; consequently, they require special protection from commercial fisheries if adequate numbers are to escape and spawn. Coded wire tags are a stock identification tool which will enable managers to identify stock specific temporal and spatial distributions in PWS, alter fisheries inseason, direct fishing efforts towards numerically superior hatchery stocks, away from damaged wild stocks, and monitor the recovery of damaged wild stocks.

Description of Project: Wild pink salmon fry from the intertidal and upstream portions of five oiled and five control streams will be enumerated. Portions of the upstream and intertidal sub-populations in each stream will be coded-wire tagged throughout the outmigration. Tag codes unique to each stream and sub-population will provide marked fish of known origin and exposure history. Tag recoveries from adults will be used to estimate hatchery and wild stock contributions to commercial catches by time and area. Catch contribution results coupled with wild stock escapement and hatchery stock brood data will be used to estimate total returns and survival rates for hatchery and wild stocks. Time and area hatchery and wild stock contribution information will be used to direct fishing fleet toward aggregations of hatchery fish and away from areas where damaged wild fish are present in significant numbers. Estimates of total return and survival for hatchery and wild stocks will enable managers to monitor wild stock specific recovery from oil damage and assess the effectiveness of revised management strategies. Intertidal fry weirs were pioneered in PWS (see NRDA F/S Study 3). Half length coded-wire tagging technology, recovery procedures in processing plants, tag retrieval procedures, tagging and recovery data archiving, and tag data analysis methods also have long histories of success.

Estimated Duration of Project: Damaged even and odd year pink salmon populations should be tagged and their returns monitored and managed independently until oiled effects have been shown to have diminished below levels apt to cause significant reductions in survival.

Estimated Cost of Project: $990,000 per year.

Other Comments: The estimated cost includes only the cost of enumerating and tagging wild fry. Recovery activities are funded in separate proposals.

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Alaska Department of Fish and Game
Box 880
Cordova, Alaska 99574
907-424-5900

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS 9206/5279-11

✓ Checked for Completeness

- ✓ ID stamped/Input completed
- Name
- ✓ Affiliation
- ✓ Costs

Salmon Fish weir

✓ Category

Management Need

✓ Lead Agency

ADF&G

Cooperating Agency(ies)

Y N Passed initial screening criteria

type: F/S

RANKING H M L Rank Within Categories

H M L Rank Overall

Project Number - if assigned

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
		✓	1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

Restoration Framework, 1992, pp 43-44.

9206112 17-11

EXXON V[illegible]DEZ OIL SPILL TRUSTEE CO[illegible]IL

15279-11

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Document ID Number 92061529
☐ A-92 WPWG ☐ B-93 WPWG ☐ C-RFWG ☐ D-PAG ☐ E-MISC.

Title of Project:

Uganik River Fish Weir

Justification: (Link to Injured Resource or Service)

Over escapement during the oil spill resulted in a weir being placed in this system in 1990.

Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach)

The goal of this project would be to maintain this weir for at least three additional years (at present the U.S. Fish and Wildlife Service and Alaska Department of Fish and Game are not funded past 1992 for the project).

Continuing this project through the next three years will allow analysis of sockeye and coho returning adults resulting from the 1989 over escapement year.

Estimated Duration of Project: Three years

Estimated Cost per Year: $28,000/year

Other Comments: This proposal addresses Options 2, 3, and 7 in the Exxon Valdez Oil Spill Restoration Framework, Volume I.

Name, Address, Telephone:

Kodiak National Wildlife Refuge
1390 Buskin River Road
Kodiak, Alaska 99615
(907) 487-2600

Oil spill restoration is a public process. Your ideas and suggestions will not be proprietary, and you will not be given any exclusive right or privilege to them.

ID # 9206010 58-06

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

Salmon weir

✓ Checked for Completeness

✓ ID stamped/Input completed
NO ~~✓~~ Name
✓ Affiliation
✓ Costs

✓ Category Management

~~Other - Science~~ Monitoring — Salmon

Lead Agency DOI CIS FWS

Cooperating Agency(ies) ADFG

(Y) N Passed initial screening criteria

type - F/S

RANKING H M L Rank Within Categories

H M L Rank Overall

Project Number - if assigned

UGANIK RIVER FISH COUNTING WEIR
OIL SPILL SETTLEMENT FUNDS

06

Proposed Development:

The Kodiak National Wildlife Refuge proposes the continued operation of a salmon fish counting weir on the Uganik River. Uganik salmon runs are used by sport, commercial and subsistence fishermen in addition to wildlife as a food source. The initial development of this counting weir was started in 1990, one year after the impacts to Kodiak coastal habitats from the oil spill occurred. The weir was again operated in 1991. This weir is needed to provide accurate information on salmon escapement for management and ensure an optimum seasonal food source (salmon) for wildlife within the drainage.

Facilities Required:

The principal component of these facilities is a high-tech fish counting weir located immediately above the tidal area on the Uganik River. The weir allows operators to effectively count migrating salmon from mid-May to September 30. In addition to the weir a support camp consisting of a large weatherport tent and cooking facilities is located at the site.

Estimated Facilities Cost:

Salaries - GS/5 technicians (21 pp @ $915/pp)	$ 19,200
Groceries - (20 weeks @ $175/wk)	3,500
Aircraft US Government (14 hrs @ $110/hr)	1,540
Vessel Support US Government (4 days @ $500/day)	2,000
Supplies (Communications gear and misc. weir materials)	2,000
Annual sub-total	$ 28,240
Total 1992-1995	$112,960

Justification:

Funding for continuing this project in 1992 through 1995 is lacking. This fish counting project would enhance management activities related to the return of coho and sockeye salmon which spawned during the parental escapement year 1989. Coho and sockeye salmon have extended rearing in the freshwater environment and Uganik stocks may have been impacted by overescapement in 1989.

Submitted By:

U. S. Fish and Wildlife Service - Kodiak National Wildlife Refuge

ID #9206/2243

Fish ladder
Salmon

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

C Checked for Completeness

- ID stamped/Input completed
- Name
- Affiliation
- Costs

✓ Category Restoration Manipulation + Enhancement

✓ Lead Agency AOF+G

✓ Cooperating Agency(ies)

(Y) N Passed initial screening criteria

Type: F/S

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

9206/2243

1993 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

Yes
? new State Mineral Plan for Point K. area

* Restoration Framework, 1992, pp 43-44.

920612243

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project:
Paint River Fish Ladder Salmon Stocking Program

Justification: (Link to Injured Resource or Service)
Salmon resource damaged

Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach)

Adequately fund salmon program at Paint River.

Estimated Duration of Project: 4 years

Estimated Cost per Year: Consecutive years – $50,000
324,000
119,000
122,000

Other Comments:

Name, Address, Telephone:
Brad Chisholm
Box 1585
Homer, AK 99603
235-4189

Oil spill restoration is a public process. Your ideas and suggestions will not be proprietary, and you will not be given any exclusive right or privilege to them.

EXXON V[illegible]DEZ OIL SPILL TRUSTEE COU[illegible]L

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project:
Paint River Fish Ladder Salmon Stocking Program

Justification: (Link to Injured Resource or Service)
The Salmon Resource was Damaged by the Oil

Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach)
A Fish ladder in Kamishak Bay at
r + River was constructed during 1991 and
em needs funding for stocks of Pink
Salmon to be introduced into
ing would benifit Salmon
who were directly impacted
Oil Spill
ing would also benifit the
urce, that was impacted by
ams on the Beaches, in
rounds, and in the water

Document ID Number
92061243
☐ A-92 WPWG
☑ B-93 WPWG
☐ C-RFWG
☐ D-PAG
☐ E-MISC.

ct: Four Years

50,000, 324,000, 119,000, and 122,000

Project deserves some
n one considers some
e seen funded that are outside
ll Affected area.

, Address, Telephone:
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Oil spill restoration is a public process. Your ideas and suggestions will not be proprietary, and you will not be given any exclusive right or privilege to them.

fold here

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JUN 12 REC'D

DAMAGED IN HANDLING IN THE POSTAL SERVICE

Exxon Valdez Trustee Council
645 G St.
Anchorage, Alaska 99501

Attn: 1993 Work Plan

Document ID Number
920612243
☐ A-92 WPWG
☑ B-93 WPWG
☐ C-RFWG
☐ D-PAG
☐ E-MISC.

ID #_ 0615297-40

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

Restore Salmon Pink Enumeration

✓ Checked for Completeness

- ✓ ID stamped/Input completed
- ✓ Name
- ✓ Affiliation
- ✓ Costs

✓ Category

Restoration Enhancement management

✓ Lead Agency

ADF&G

_____ Cooperating Agency(ies)

Ⓨ N Passed initial screening criteria

Type: F/S

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

1993 OJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

RS 60B

* Restoration Framework, 1992, pp 43-44.

297-40

EXXON DEZ OIL SPILL TRUSTEE COUNCIL

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project: Pink Salmon Escapement Enumeration (Restoration Study 60B)

Justification: Wild stock pink salmon production in Prince William Sound has ranged from 10 to 15 million fish in recent years. Up to 75% of pink salmon spawning occurs in intertidal areas of streams with the proportion of intertidal spawning highest in streams flowing into the southwest portion of PWS, the area most heavily impacted by oil from the Exxon Valdez oil spill. Data from continuing pink salmon egg and pre-emergent fry projects have shown that spawning ground contamination by oil has resulted in increased mortality of eggs and higher incidence of somatic, cellular and genetic abnormalities in alevins and fry. Reduced survivals for pink salmon in oiled areas versus unoiled areas persists three years after the spill.

Description of Project: The most effective method of restoring injured wild pink salmon populations to their pre-spill condition will be the modification of human uses associated with the resource. The commercial harvest is the major factor controlling wild stock pink salmon spawning escapement and reproductive success. The ability to impose stock specific management on the commercial fishery and reduce exploitation on oil impacted wild stocks will be vital to their restoration. One of the most important pieces of information for stock specific fisheries management is a timely and accurate estimate of escapement. This project will provide fisheries managers with more accurate and more timely estimates of pink salmon escapements in oil impacted areas of Prince William Sound using aerial surveys for escapement estimation and weirs for total enumerations of escapement. Adult salmon will be enumerated through weirs at ten streams where, in addition, outmigrating fry enumeration and coded wire tagging are proposed. Field crews at each site will perform daily ground surveys of intertidal and upstream portions of the streams, enumerating live and dead pink salmon and recovering coded-wire tagged fish. Paired aerial and weir data will be used to calibrate aerial estimation procedures and estimate observer bias. Improved stock specific estimates of spawning escapements combined with commercial catch contribution data will allow fisheries managers to accurately assess the impacts of the commercial harvest and management strategies on impacted stocks.

Estimated Duration of Project: Both even and odd year pink salmon populations should be monitored until management strategies have been shown to be successful and oiled effects have been shown to have diminished below levels apt to cause significant reductions in survival.

Estimated Cost of Project: $705,000 per year.

Other Comments: This is a currently funded restoration project (R60B)

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907-424-5900

ID # 9?615297-43

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

Restore Salmon

✓ Checked for Completeness

- ✓ ID stamped/Input completed
- ✓ Name
- ✓ Affiliation
- ✓ Costs

✓ Category

Restoration - ~~Enhancement~~ management

✓ Lead Agency

ADF&G

_____ Cooperating Agency(ies)

_____

Ø N Passed initial screening criteria

RS 53

Type: F/S

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

1993 OJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

29743

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL
IDEAS FOR RESTORATION PROJECTS

Title of Project: Kenai River Sockeye Salmon Restoration (Restoration Project 53)

Justification: Sockeye salmon *Oncorhynchus nerka* which spawn in the Kenai River system were injured by the *Exxon Valdez* oil spill. Greatly reduced fishing time in the Upper Cook Inlet area due to the oil spill caused sockeye spawning escapement levels in the Kenai River system to exceed the desired amount by three times. The biological impact of the oil spill on Kenai River sockeye salmon stocks is expected to be serious. Data collected by NRDA Fish/Shellfish Study 27, *Sockeye Salmon Overescapement*, resulted in greatly reduced survival of juvenile sockeye salmon during the winter-spring rearing period. The extremely high escapement may have initially produced more rearing juvenile sockeye salmon than could be supported by nursery lake productivity. In general, when rearing salmon abundance greatly exceeds lake carrying capacity, the species and size composition of prey resources are altered which affects all trophic levels. Because of such changes, juvenile sockeye growth is reduced, freshwater mortality is increased, greater proportions of fry remain in the lake for another year of rearing, and smolt condition is reduced and marine mortality is increased. Limiting sockeye salmon fry production by closely regulating the number of spawning adults may be the only way to restore the productivity of these rearing areas. However, the number of adult sockeye salmon returning from the 1989 escapement may be so low that a severe reduction, or complete elimination, of human use of this species may be necessary starting in 1993 to ensure minimum escapements.

Description of Project: The goal of this project is to restore Kenai River sockeye salmon stocks injured by the oil spill. This will be accomplished through improved stock assessment capabilities, more accurate regulation of spawning levels, and modification of human use. Specific objectives of this proposal are to (1) improve stock identification capabilities by combining parasite and genetic stock identification information with available scale growth data in algorithms to provide estimates of Kenai River stocks in the mixed stock fishery of Upper Cook Inlet (UCI), (2) increase the accuracy and precision of escapement monitoring by replacing obsolete hydroacoustic equipment used in the Kenai River, and (3) provide more accurate estimates of abundance of Kenai River sockeye salmon within UCI by increasing the sampling power of an offshore test fishing program through increasing the number of boats or by incorporating hydroacoustic assessment techniques.

Estimated Duration of Project: Four additional years will be required to meet project objectives. Adult returns from the injured 1989 brood year will occur during 1993-1995, but information on the 1990, 1991, and 1992 brood years will also be needed to monitor recovery of the system. Adult returns from the 1992 brood year will not be observed until 1996.

Estimated Cost (per year): $640,000

Comments: Currently funded as Restoration Study 53

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Alaska Department of Fish and Game
34828 Kalifornsky Beach Road, Suite B
Soldotna, AK 99669-3150

ID # 9206[illegible] -05

41206[illegible]294-05

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

release
Restore runs
king salmon
Silver Salmon

Hatchery related

✓ Checked for Completeness

ID stamped/Input completed
Name
Affiliation
Costs

✓ Category Rest. Manip. and/or enhancement

✓ Lead Agency ADF&G

✓ Cooperating Agency(ies)

(Y) N Passed initial screening criteria

Type: F/S

RANKING H M L Rank Within Categories

H M L Rank Overall

Project Number - if assigned

4c 93-294-Q

1993 OJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Chemical site designation must be confirmed by T.C. hrs

Comments:

* Restoration Framework, 1992, pp 43-44.

RESTORATION PROJECT

TITLE OF PROJECT:

Chenega Chinook And Silver Salmon Release Program.

JUSTIFICATION:

Due to the oil spill, stocks of salmon were seriously impacted on account of gross pollution.

DESCRIPTION OF PROJECT:

A. Goals: To replace subsistence resources by permitted private releases of chinook and silver salmon at sites to be designated by Chenega from stock of Prince William Sound Aquaculture Corporation Hatchery at Main Bay.

B. Objective: To replant subsistence and sport salmon stock.

C. Location: Southwestern Prince William Sound, at Deadend Bay to be designated by Chenega.

D. Rationale: The replenishment of chinook and silver salmon is consistent with restoration of the Sound.

E. Technical Approach: Knowledge of hatchery projects, and release and feeding of stock.

ESTIMATED DURATION OF PROJECT: Upwards to 10 years.

ESTIMATED COST PER YEAR: $3,000-$5,000.

OTHER COMMENTS:

Chenega Corporation has a lease agreement with Prince William Sound Aquaculture Corporation with regard to the San Juan Hatchery. Under the terms of the agreement, PWSAC is required to provide salmon fry for release. The fry to be supplied to Chenega include chinook and silver salmon. Chenega Corporation is responsible for the holding pens and feed, the fry to be supplied by PWSAC. Therefore, the cost is low. However, licensing, holding pens, and feed as well as caretakership have not yet been covered.

NAME, ADDRESS, TELEPHONE:

CHENEGA CORPORATION
Charles W. Totemoff, President
P.O. Box 60
Chenega Bay, Alaska 99574
(907) 573-5118

ID # 0615286-02

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

✓ ID stamped/Input completed
✓ Name
✓ Affiliation
✓ Costs

restore salmon Hatchery

✓ Category

Restoration - Enhancement

✓ Lead Agency

ADF&G

_____ Cooperating Agency(ies)

Y N Passed initial screening criteria

unknown

Type: F/S

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

92061528 6-02

1993 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
__	__	✓	1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓	__	__	2. Technical feasibility.*
✓	__	__	3. Consistency with applicable Federal and State laws and policies.*

Comments:

Ref will pursue in EIS

* Restoration Framework, 1992, pp 43-44.

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project:
Silver Lake Fish Hatchery

Justification: (Link to Injured Resource or Service)
Rebuild the fish stock in the Lagoon below Silver Lake - East end of Galena Bay

Description of Project:
Construct a fish hatchery at the lagoon near the East end of Galena Bay and below Silver Lake.
OBJECTIVE: to recover the salmon species lost by the oil spill that occurred a few miles away on Bligh Reef. This will make it easier to construct a hydropower plant at Silver Lake. The hydropower plant will provide all of the water and electricity needed to run and operate the fish hatchery. The hydropower plant could either be constructed with private funding or with funding from this Exxon Restoration.
LOCATION: at the Lagoon at the east end of Galena Bay, below Silver Lake, on the east side of Valdez Arm.
RATIONALE: The oil spill destroyed much of the salmon habitat. This is an opportunity to restore the salmon habitat near the Valdez/Cordova area and build the fish hatchery near a proposed hydropower plant that could provide water and electricity for the hatchery.
TECHNICAL APPROACH: Prince William Sound Aquaculture Association would play a role along with Copper Valley Electric Association and Whitewater Engineering Corporation who has the preliminary FERC permit to construct the hydropower project.

Estimated Duration of the Project: 30 years

Estimated Cost per Year: $ 1,000,000

Thom A. Fischer, P.E.
Whitewater Engineering Corporation
1050 Larrabee Ave., Suite 104-707
Bellingham, WA 98225
(206) 733-3008

ID # 920615273-37

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

Subsistence project

ID stamped/Input completed
Name
Affiliation
Costs

✓ Category
Post. Management Actions

Lead Agency
ADF+G

Cooperating Agency(ies)
DOI-FWS

(Y) N Passed initial screening criteria

Type: F/S

RANKING H M L Rank Within Categories

H M L Rank Overall

Project Number - if assigned

920615273-37

1993 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

ON VALDEZ OIL SPILL TRUSTEE COUN
FORMAT FOR IDEAS FOR RESTORATION PROJECTS

TITLE OF PROJECT: Follow-Up Survey of EVOS Impacted Native Communities - Subsistence

JUSTIFICATION: It appears that (1) widespread concerns for safety, relating to the consumption of customary subsistence foods, persist; and (2) certain customary subsistence harvest areas are viewed as requiring further clean-up mitigations.

The need to conduct the follow-up survey is essential in that it will document the magnitude of (1) and (2) above, and therefore provide a relative measure of significance establishing "consequential injury," i.e. loss of human and resource uses.

DESCRIPTION OF PROJECT: The project is viewed as requiring three (3) distinct phases as outlined:

Phase I: Survey of each target community to identify:

a. Discrete customary subsistence harvest locations requiring further clean-up, etc.
b. Listing of subsistence species by harvest location for which safety concerns remain.

Estimated Time Line: 4-6 months.
Estimated Cost: 25-60K

Phase II: Planning/logistics and conducting on-site visits to:

a. *Corroborate oiling
*Estimate degree of impact remaining
*Develop recommendations to mitigate
b. *Initiate and conduct a sampling program to collect target species for analysis
*Send (NOAA?) for analysis

Estimated Time Line: One (1) year
Estimated Cost: 200-600K

Phase III:

a. Initiate and conduct recommended site mitigations, etc.
b. *Review results of analysis regarding toxicity (safe-unsafe) determinations
*For each species/discrete location, identified as unsafe, quantify annual loss (estimated annual harvest) by weight/volume/other, i.e. best estimate acceptable
*Develop "Replacement" schedule showing suggested comparable replacement food(s)/(other) for each customary subsistance harvest location species verified unsafe.
*Planning/execution of distributions.

Estimated Time Line[1]: One (1) year
Estimated Cost: 300-700K

TARGET COMMUNITIES: (Subject to additions/deletions following further review).

Tatitlik	Soldotna	Port Lions
Cordova	Larsen Bay	Ouzinkie
Chenega Bay	Karluk	Kodiak
Tyonek	Seldovia	Valdez
Kenai	Homer	Chignik Lake
English Bay	Old Harbor	Chignik
Port Graham	Akhiok	Chignik Lagoon

Document ID Number
92061527337
☐ A-92 WPWG
☑ B-93 WPWG
☐ C-RPWG
☐ D-PAG
☐ E-MISC.

[1]The estimated time lines and costs may be subject to considerable adjustment as they are directly related to the completion of Phase I goals/objectives.

Other Comments: We argue, the best way to establish a high confidence level for the safety of subsistence foods in Native communities, is to test the species routinely harvested from customary subsistence harvest locations. The weakness of extrapolating safety conclusions from the testing of a limited number of target species collected from widely dispersed sampling stations, while useful information, is that it has done little to dispel doubts.

Name, Address, Telephone:

Serg Astra
Fishery & Wildlife Biologist
Bureau of Indian Affairs
P.O. Box 25520
Juneau, Alaska 99802-5520
(907) 586-7618

ID # 9206/5294-06

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

Subsistence project

✓ Checked for Completeness

ID stamped/Input completed
Name
Affiliation
Costs

✓ Category Rest. Manage Action

✓ Lead Agency ~~USFS~~ USDA

Cooperating Agency(ies) DOI - FWS

(Y) N Passed initial screening criteria

Type: F/S

RANKING H M L Rank Within Categories

H M L Rank Overall

Project Number - if assigned

920615-294-06

1993 OJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
		✓	3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

RESTORATION PROJECTS

920615294 06

☐ A-92 WPWG
☑ B-93 WPWG
☐ C-RPWG
☐ D-PAG
☐ E-MISC.

TITLE OF PROJECT:

Chenega Bay Replacement Subsistence Resource Project.

JUSTIFICATION:

Due to oil spill, subsistence resources are either grossly polluted or populations are seriously reduced.

DESCRIPTION OF PROJECT:

A. Goals: To replace subsistence resources by permitting residents of Chenega Bay to travel to the Eastern Prince William Sound area for subsistence resources, to provide funding for such travel, to provide funding for other villages, e.g. Yakatat, to assist us in gathering, preserving, sending subsistence goods from other villages, until either the resources in areas we use are no longer polluted or are in sufficient quantities for our use.

B. Objective: To preserve the health and welfare of residents of Chenega Bay and their subsistence way of life and to restore injured subsistence resources.

C. Location: Southwestern Prince William Sound.

D. Rationale: The NRDA studies have established the depletion of subsistence resources in our area.

E. Technical Approach: None.

ESTIMATED DURATION OF PROJECT:

10-15 years in most areas; others, up to 25 years.

ESTIMATED COST PER YEAR:

$50,000.

OTHER COMMENTS:

This approach was suggested to Exxon in 1989 and to the State, D.C.R.A. in 1990. Budgets are available.

NAME, ADDRESS, TELEPHONE:

CHENEGA CORPORATION
Charles W. Totemoff, President
P.O. Box 60
Chenega Bay, Alaska 99574
(907) 573-5118

CHENEGA CORPORATION

Post Office Box 8060
Chenega Bay, Alaska 99574-8060
(907) 573-5118

June 15, 1992

Exxon Valdez Oil Spill
Trustees Council
645 "G" Street
Anchorage, Alaska 99501

Dear Ladies and Gentlemen:

Chenega Corporation responds to the Trustees' Request for Restoration Proposal for 1993 per the attached proposed Restoration Projects.

If you have questions, please contact either the undersigned or Charles W. Totemoff at Chenega Corporation.

Very truly yours,

CHENEGA CORPORATION

By: _____
Gail Evanoff, V.P. Operations

ID # 297-01

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

Restore Rockfish Hatchery

✓ Checked for Completeness

✓ ID stamped/Input completed
✓ Name
✓ Affiliation
✓ Costs

✓ Category Management ~~Science~~

✓ Lead Agency
ADF&G

✓ Cooperating Agency(ies)
NOAA

Y N Passed initial screening criteria

Type: F/S

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

1993 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project:

Restoration of Prince William Sound Rockfish and Lingcod Resources

Justification: (Link to Injured Resource or Service)

Rockfish and lingcod tend to be late-maturing (8-18 yrs), long-lived (50-100 years old), slow-growing, with strong homing tendencies, sporadic recruitment and high juvenile mortality. Consequently, rockfish and/or lingcod recover very slowly from any stock disturbances.

Rockfish were some of the first spill-related mortalities, evidenced by many dead specimens found floating on the water surface. Rockfish collected by NRDA Study F/S #17 indicate rockfish suffered lethal and sub-lethal hydrocarbon damage. Economic opportunities created by the EVOS combined with biological or economical declines in alternative fishery resources, increased fishing effort on rockfish and lingcod after the EVOS. Protection and rebuilding of rockfish and lingcod resources through management of human use require biological and stock information, of which little is available. Further, stock protection may also conflict with the fishing industry's efforts to increase the nearshore groundfish fisheries. A failure to identify and protect damaged rockfish and lingcod stocks could result in a closure of all groundfish fisheries with catches of the threatened species.

Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach)

The data collected in this project will be used to create management strategies that allow a long-term, sustainable harvest of rockfish and lingcod while providing for the reproduction and growth of the stocks. Age composition data will be used to estimate growth and production rates from recruitment and mortality curves. Fishery data will be used to estimate gear- and area-specific harvest and discard rates. Stock composition data will be used to delineate areas of greater impact and assign priorities. Fishery- and area-specific strategies will be developed to insure that growth rates remain ahead of harvest rates for the many species and stocks involved. Such strategies include avoidance of spawning periods, bycatch reductions, trip limits, area-closures, etc. This project would collect species and age composition data from the directed and bycatch fisheries as well as genetic stock identification data. Samples will be collected from port and on-board sampling throughout the EVOS-impacted area, concentrating on Prince William Sound.

Estimated Duration of Project: 5 years

Estimated Cost per Year: $440,000

Other Comments:

This study will be designed to coordinate with other investigators to synthesize an ecosystem picture. This study project is tied to Option 3 of the Restoration Framework category Management of Human Uses entitled, "Increase Management for Fish and Shellfish that Previously Did Not Require Intensive Management" and Option 31, "Develop Comprehensive Monitoring Program".

Name, Address, Telephone:
Bill Bechtol
ADF&G, Commercial Fisheries
3298 Douglas Street
Homer, AK 99603
907-235-8191

ID # 0615297-28

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

leads to restoring of Trout Dolly Varden

✓ Checked for Completeness

- ✓ ID stamped/Input completed
- ✓ Name
- ✓ Affiliation
- ✓ Costs

✓ Category

~~Restoration - Enhancement~~ Management Action

✓ Lead Agency

ADF&G

✓ Cooperating Agency(ies)

USFS

0 N Passed initial screening criteria

Type: F/S

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

920613241-28

1993 OJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

29720

920615297

- [ ] A-92 WPWG
- [x] B-93 WPWG
- [ ] C-RPWG
- [ ] D-PAG
- [ ] E-MISC.

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

FORMAT FOR PUBLIC IDEAS FOR RESTORATION PROJECTS

Also see 920615249-1 which was dropped as a duplicate

Title of Project: Enhanced management for cutthroat trout and Dolly Varden in Prince William Sound.

Justification: Recreational fishing for Dolly Varden and cutthroat trout was curtailed by emergency closures and changes in sport regulations following the oil spill. These actions were based on higher mortality and slower growth for fish in oiled areas than in non-oiled areas, and also based on the small population sizes of cutthroat trout at two of the three oiled areas that were studied, as well as predicted faster recovery times for the stocks if they were closed to sport fishing. In other parts of Prince William Sound (PWS), however, there is insufficient information about stock sizes of these two species to know what management actions are appropriate. Without appropriate information on which to base management action, injury may occur to other stocks or overly conservative regulations may be made which would restrict recreational sport fishing opportunities.

Description of Project: The goal of this project is to continue to collect the information needed to develop a management plan which will provide for the responsible management of Dolly Varden and cutthroat trout fisheries in PWS. The management plan will allow for recovery of depressed stocks while assuring that anglers can fish for Dolly Varden and cutthroat trout where stocks are healthy enough to withstand fishing pressure. The major objectives of this project are; to identify sites that support major populations of Dolly Varden and cutthroat trout fisheries in PWS, to estimate undance of major overwintering population of Dolly Varden and cutthroat trout in PWS, and to in additional information about cutthroat trout and Dolly Varden movement in PWS.

This proposed project has the same objectives and goals as R106; the "Technical Support Study for the Restoration of Dolly Varden and cutthroat trout populations in Prince William Sound". R106 collected information in 1991 but was not funded for 1992. Therefore this proposed plan will pick up where R106 left off. The major objective that needs to be completed is the estimation of population abundance for major overwintering populations of Dolly Varden and cutthroat trout. Abundance will be estimated utilizing weirs and mark-recapture methods.

Estimated Duration of Project: 4 years

Estimated Cost per Year: $275,000

Other Comments: This project was started in 1991, therefore, some materials are already available.

Name, Address, Telephone
Suzanne McCarron
333 Raspberry Rd.
Anchorage, AK 99518

(907) 267-2148

Because the Oil Spill Restoration is a public process, your ideas and suggestions will not be proprietary, and you will not be given any exclusive right or privilege to them.

ID # 0615270-02

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

- ✓ ID stamped/Input completed
- ✓ Name
- ✓ Affiliation
- ✓ Costs

restore shellfish beds

✓ Category

Restoration - manipulation

✓ Lead Agency

ADF&G

_____ Cooperating Agency(ies)

_____

(Y) N Passed initial screening criteria

Type: F/S

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

1993 PROJECT SCORING SHEET 92061521B-82

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project: Village Mariculture Project

Justification: (Link to Injured Resource or Service) Lost economic opportunities and shellfish beds were destroyed by the spill.

Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach)
Establish commercial shellfish and kelp businesses in villages effected by the spill (Tatitlek, Chenega Bay, Eyak, Port Graham and Nanwalek). The goal is to create self sustaining business enterprises and be able to support 4 - 10 individuals full time. A shellfish mariculture specialist will be hired to train villagers how to set up oyster farms utilizing hanging culture to create a high quality product. Economic and subsistnece opportunities will be enhanced.

Estimated Duration of Project: Four years to develop farms until operations are self-sustaining.

Estimated Cost per Year: Capitol Cost: $100,000 per village per million oysters*
Annual operating costs: $250;000

Other Comments: These projects are designed to be self sustaining after initial startup. * Figures are based upon oyster farms but potential in clams, scallops and kelp needs to be investigated.

Name, Address, Telephone:
Tasha Chmielewski
Chugach Regional Resources Commission
3300 C Street
Anchorage, Alaska 99503
(907) 562-4155

Oil spill restoration is a public process. Your ideas and suggestions will not be proprietary, and you will not be given any exclusive right or privilege to them.

ID # 9206/2242

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

restore shellfish bed,

✓ Checked for Completeness

✓ ID stamped/Input completed
✓ Name
✓ Affiliation
✓ Costs

Category
Restoration Manipulation and/or Enhancement

Lead Agency
A D F+G

Cooperating Agency(ies)

(Y) N Passed initial screening criteria

Type: F/S

RANKING H M L Rank Within Categories

H M L Rank Overall

Project Number - if assigned

9206 12242

1993 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

Document ID Number
920612242

- [ ] A-92 WPWG
- [x] B-93 WPWG
- [ ] C-RPWG
- [ ] D-PAG
- [ ] E-MISC.

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project: Seward Shellfish Hatchery

Justification: (Link to Injured Resource or Service) Shellfish beds in Prince William Sound were destroyed by the spill and lost economic opportunities.

Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach)

Many shellfish beds were adversely impacted by the spill. Mariculture, or shellfish farming, holds great promise as a way of recreating lost subsistence resources and creating long term employment and business opportunities in the impacted areas. Initial development work with oyster culture in the villages has met with great success. However, in order to obtain commercial size production levels, a reliable source of shellfish seed needs to be developed in Alaska. After investigations by the Alaska Department of Fish and Game (ADF&G) and the Alaska Shellfish Grower's Association, Seward emerged as an excellent place to locate a shellfish hatchery from both a biological and accessibility standpoint. Another attractive aspect of Seward is that the Institute of Marine Science (IMS) is located there and has agreed to provide space and technical assistance in the development of this hatchery. In addition, the (ADF&G) is requesting $1.8 million from the state to construct a mariculture research and development center. When funding becomes available, a qualified shellfish hatchery development specialist will be hired to manage the project.

Estimated Duration of Project: Design and engineering, construction, and shakedown: 2 years

Estimated Cost per Year: Capital cost: $1.3 million Operating: $350,000 per year.

Other Comments: Within six years the facility will be able to support itself.

Name, Address, Telephone:

Richard Rolland
Chugachmiut
3300 C Street
nchorage, AK 99503
907) 562-4155

Oil spill restoration is a public process. Your ideas and suggestions will not be proprietary, and you will not be given any exclusive right or privilege to them.

fold here

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Exxon Valdez Trustee Council
645 G St.
Anchorage, Alaska 99501

Attn: 1993 Work Plan

Document ID Number
920612242
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- [ ] C-RPWG
- [ ] D-PAG
- [ ] E-MISC.

ID # 920615298-34

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

Fish Stocks
Compile info

✓ Checked for Completeness

ID stamped/Input completed
Name
Affiliation
Costs

Category ~~Monitoring~~ Manage actions

Lead Agency USFS

Cooperating Agency(ies) ADF&G

(Y) N Passed initial screening criteria

Type: F/S

RANKING H M L Rank Within Categories

H M L Rank Overall

Project Number - if assigned

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

29834

Title of Project: Wild Fish Stock Information Assessment

Justification: Information data base that will guide and prioritize on the ground enhancement activities for the injured cutthroat, dolly varden, coho salmon, pink salmon and all other freshwater fish and anadromous fish in PWS.

Description of Project: Recognizing the cultural, social, economic, and health benefits of maintaining genetic diversity, in 1973 Congress passed the Endangered Species Act (ESA), setting forth a policy that we would not be indifferent to the loss of plant and animal species. In addition to the ESA, the National Forest Management Act (1968) requires the maintenance of viable populations of all native and desirable non-native vertebrates by maintaining plant, animal, and habitat diversity. The Prince William Sound has long been a significant producer of wild salmon in Alaska. These salmon stocks, along with other fish species, support a diverse, economically important, and culturally significant fisheries. As witnessed by the collapse of the salmon fisheries in the Columbia River, as well as numerous other drainages in Washington, Oregon, Idaho, and California, fish stocks in the Prince William Sound are not immune to depletion. The recent Exxon Valdez oil spill has further heightened awareness for the vulnerability of wildlife species to habitat destruction. To maintain the genetic diversity, and hence, the commercial, subsistence and sport fisheries in the Sound, thereby; avoiding legal and social complications associated with threatened or endangered species, it is imperative that systematic land planning measures be taken now.

To manage habitat for the fish populations that were affected by the Exxon Valdez oil spill, the Forest Service and other federal and state agencies require adequate knowledge of where the populations exist, their significance (eg., biological, commercial, and cultural), habitat limiting factors, susceptibility to disturbance, and potential impacts to the populations. Currently, a substantial amount of information on fish in Prince William Sound is available. However, the amount and variety of information available is somewhat overwhelming. Not only is the information unconsolidated but furthermore it is not available in a format that allows the Forest Service, as a land manager, to readily make use of it with regards to maintaining population diversity.

We propose to systematically compile and review existing information on all wild freshwater and anadromous fish stocks in the Sound, making this information available in a readily useable format, which is catalogued by stream and species. The ultimate goal is to use the information to evaluate and prioritize fish stocks based on their biological, economic, and cultural significance. Compiling and reviewing the existing information will be the first step towards systematically identifying the various fish stocks (including those that were injured as a result of the Exxon Valdez oil spill), defining potential impacts on them, and developing appropriate programs for maintaining or enhancing them.

Project Duration: 2 years.

Estimated Cost per Year: $50,000.

Name, Address, Telephone:
Bruce Van Zee
Forest Supervisor
Chugach National Forest
201 E. 9th Avenue, Suite 206
Anchorage, AK 99567

Technical contact: Kim Barber 271-2836

ID # 9[illegible]615297 - 47 Duplicate

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

Survey Crustaceans

/ Checked for Completeness

- / ID stamped/Input completed
- / Name
- / Affiliation
- / Costs

/ Category

Restoration - ~~enhancement~~ management action

/ Lead Agency

ADF&G

____ Cooperating Agency(ies)

Ⓝ N Passed initial screening criteria

Type: F/S

RANKING H M L Rank Within Categories

H M L Rank Overall

____ Project Number - if assigned _____

1993 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

29747

EXXON V[redacted]DEZ OIL SPILL TRUSTEE COU[redacted]L

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project:

Intertidal/Shallow Subtidal Crustacean (Decapod) Composition

Justification: (Link to Injured Resource or Service)

Crustaceans are a major prey species for most fishes, at some life stage of the fish. Further, decapods specifically provide food for not only various fishes but also birds (harlequin ducks, common murres) and mammals (sea otters, river otters). This study will provide information on the shallow subtidal/intertidal species composition of decapods within different areas in Prince William Sound, and provide this useful information to other studies, whose subject may be affected by decapod species availability.

Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach)

The goal of this study will be to find decapod species composition within specific areas (specified by substrate and oiling characteristics) of Prince William Sound and to document any changes in composition over time. Using this information in cooperation with other studies, specific species of importance may be identified. By managing human usage and, if deemed necessary, transplanting from other areas these species, recovery of both the decapod species and predator species may be expedited. The study sites would be determined by research done by previous NRDA studies, to make efficient use of existing information. The surveys would be run with various meshed pots, scuba and possibly (on sandy bottoms) trawls. The data collected would be, the number of different species, number of each species and weight per species. Statistical analysis would be run on this data to test differences between areas in species composition, specifically dominant species proportions. Cooperation with other studies would be imperative.

Estimated Duration of Project: Four years

Estimated Cost per Year: $275,000

Other Comments:
This study will be designed to coordinate with other investigators to synthesize an ecosystem picture and an ecosystem recovery. Further, this study ties into Option 31, "Develop Comprehensive Monitoring Program", in the Restoration Framework.

Name, Address, Telephone:
Ivan Vining
ADF&G, Commercial Fisheries
333 Raspberry Rd
Anchorage, AK 99518
907-267-2129

ID # 20615297-34

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

herring

✓ Checked for Completeness

- ✓ ID stamped/Input completed
- ✓ Name
- ✓ Affiliation
- ✓ Costs

✓ Category

Restoration - ~~Enhancement~~ Management

✓ Lead Agency

~~DB~~ ADF&G

____ Cooperating Agency(ies)

____

(Y) N Passed initial screening criteria

Type: F/S

RANKING H M L Rank Within Categories

H M L Rank Overall

____ Project Number - if assigned ____

199[illegible] ROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

29734

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project:

Genetic Stock Identification for Herring in Prince William Sound (PWS)

Justification: (Link to Injured Resource or Service)

Herring embryos, larvae, adults were injured by the Exxon Valdez oil spill.

Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach)

Genetic stock identification techniques will be used to estimate the discreetness and distribution of herring stocks inside and outside of PWS. Stock identification will aid in understanding the dynamics of the population and will improve targeting of restoration measures as well as monitoring efforts. The information gained is expected to improve the current stock assessment model employed with the PWS population adding accuracy to forecasting procedures. In addition, the information can be used to study non-spawning aggregations contributing to the fisheries in PWS. Genetic techniques surveying the nuclear and mitochondrial genomes will be used to test the differences between major groupings of spawning and non-spawning herring within PWS and between populations in Cook Inlet, Southeast Alaska, Kodiak, and PWS providing insight to stock mixing and migration.

Estimated Duration of Project: 2 years: full effort in year one; reduced effort and cost during year two.

Estimated Cost per Year: $205,000

Other Comments: This project falls within the category of management of human use since the information derived will be used directly in the stock assessment and management of the resource (Restoration Option No. 2 - Intensify Management of Fish and Shellfish).

Name, Address, Telephone:
Lisa Seeb, Statewide Geneticist
Alaska Department of Fish and Game
Division of Commercial Fisheries
333 Raspberry Road
Anchorage, AK 99518-1599
(907)267-2249

ID # 297-03

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

herring

✓ Checked for Completeness

- ✓ ID stamped/Input completed
- ✓ Name
- ✓ Affiliation
- ✓ Costs

✓ Category

Restoratin ~~Monitoring~~ Manage ocliv

Lead Agency

ADF&G

Cooperating Agency(ies)

Ø N Passed initial screening criteria

Type: F/S

RANKING H M L Rank Within Categories

H M L Rank Overall

Project Number - if assigned

297-03

1993 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project:

Prince William Sound (PWS) Herring Spawn Deposition Survey

Justification: (Link to Injured Resource or Service)

Herring embryos, larvae, adults were injured by the Exxon Valdez oil spill.

Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach)

The spawn deposition survey program provides a real time estimate of the spawning herring population by measuring egg deposition within PWS. The survey period was extended by sampling more intensively in 1989 as a direct result of the spill to improve the accuracy of the estimate. Maintaining the spawn deposition survey at the current level of effort will help in maintaining the level of accuracy in the resulting stock assessment and forecasting procedures. The survey can also provide information pertaining to eventual stock recruitment such as egg density, egg survival, and age composition details. The information derived can be used to direct and monitor restoration. The techniques employed are standard in Southeast Alaska and British Columbia for spawn deposition surveys. Transects are allocated randomly over the spawning areas and run perpendicular to the shoreline across the width of spawn deposited. Egg densities are estimated every five meters and average egg deposition is expanded over an area. Diver libration curves (used to correct the diver estimates) are developed by sampling eggs on kelp samples and comparing the actual count of eggs to diver estimates. Variance measurements can be estimated at each step in the model and confidence intervals can be applied to the resulting biomass estimate.

Estimated Duration of Project: Continuing

Estimated Cost per Year: $231,000

Other Comments: This project falls within the category of management of human use since the information derived will be used directly in the stock assessment and management of the resource (Restoration Option No. 2. Intensify Management of Fish and Shellfish). In addition, this project falls within the category of Restoration Option No. 31, development of a comprehensive monitoring program. Since herring constitute a large portion of the fish biomass in PWS and since they are an important prey item for many species of birds, mammals and other fish, the health of the herring population may be tied to the health and reproductive success or growth of other species in PWS.

Name, Address, Telephone:

Evelyn Biggs, Herring Research Biologist, Alaska Department of Fish and Game Division of Commercial Fisheries, Box 669, Cordova, AK 99574-0669. (907)424-3213

ID # 0615297-44

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

Shrimp

✓ Checked for Completeness

- ✓ ID stamped/Input completed
- ✓ Name
- ✓ Affiliation
- ✓ Costs

✓ Category

Restoration - ~~enhancement~~ management actions

✓ Lead Agency

ADF&G

____ Cooperating Agency(ies)

Q N Passed initial screening criteria

Type: F/S

RANKING H M L Rank Within Categories

H M L Rank Overall

____ Project Number - if assigned _____

1993 ROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

29744

92061529?

- ☐ A-92 WPWG
- ☑ B-93 WPWG
- ☐ C-RPWG
- ☐ D-PAG
- ☐ E-MISC.

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project: Prince William Sound (PWS) Spot Shrimp Recovery Management Plan

Justification: (Link to Injured Resource or Service)

Spot shrimp have supported intensive commercial, sport and subsistence fisheries within Prince William Sound (PWS). The harvests from these fisheries confounded the ability of the NRDA project F/S # 15 to identify damages to spot shrimp. Depressed shrimp stocks were identified in EVOS-affected areas prior to the spill and further depression has caused the closing of the spot shrimp commercial fishery within PWS. Additionally, this species is prey for a variety of animals identified as damaged under NRDA (sea otters, harlequin ducks, rockfish and chum salmon). Given the condition of the spot shrimp stock in spill-affected areas and their effect on other species, a management plan is necessary to ensure the recovery of the stock.

Description of Project: (eg. goals, objectives, location, rationale, and technical approach)

Development of a managment plan for spot shrimp will require the establishment of new bases of information. The information to be collected would include genetic diversity, larval drift, juvenile habitat requirements, growth rate and fecundity. The adult life history information (growth rate and fecundity) was started during NRDA F/S #15, and the management plan would put this valuable information to use, however a more comprehensive study is needed. The management plan will be based upon the above life history parameters and employ various methods of analysis to incorporate them into a useable document. The management document will recognize the place spot shrimp have in the ecosystem and provide a framework for managing human use (other than complete closure) in PWS.

Estimated Duration of Project: Two years

Estimated Cost of Project: $ 715,000

Other Comments: This project is tied to Option 3 of the Restoration Framework category Management of Human Uses entitled, "Increase Management for Fish and Shellfish that Previously Did Not Require Intensive Management".

Name, Address, Telephone: Charlie Trowbridge
Alaska Department of Fish and Game
Box 669
Cordova, Alaska 99574 ph: 907-424-3212

ID # 5615297-46

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

/ Checked for Completeness

- ✓ ID stamped/Input completed
- ✓ Name
- ✓ Affiliation
- ✓ Costs

Shrimp

/ Category

Restoration - ~~enhancement~~ management factor

/ Lead Agency

ADF&G

_____ Cooperating Agency(ies)

_____

Ⓝ N Passed initial screening criteria

_____

Type: F/S

_____

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

920613a

1993 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

BM

Comments:

* Restoration Framework, 1992, pp 43-44.

EXXON V)EZ OIL SPILL TRUSTEE COU 29746

Document ID Number
920615297
☐ A-92 WPWG
☑ B-93 WPWG
☐ C-RFWG
☐ D-PAG
☐ E-MISC.

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Duplicate - same as 920610224 -

Title of Project:

Juvenile Spot Shrimp Habitat

Justification: (Link to Injured Resource or Service)

This study will provide information to better manage the recovery of the spot shrimp population and provide useful information for other studies (for example rockfish, which prey upon spot shrimp) within Prince William Sound.

Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach)

The principal goal of this study will be to ascertain relative abundance of juvenile spot shrimp within specific areas of Prince William Sound and to document changes in these abundances over time. By identifying the relative abundance in different areas, inference may be possible to relative abundance of adult spot shrimp stocks and other oil affected species (such as rockfish). The types of inference would be: correlation between juvenile concentration and adult concentration; stock fluctuations (both spot shrimp and other benthic species); relative importance of juvenile spot shrimp as a prey species; juvenile spot shrimp mortality rate; and relative proportion of juvenile spot shrimp when compared to other crustaceans. The study would focus on areas near adult spot shrimp sample sites, as performed in previous years. Collection of crustaceans, specifically spot shrimp, will be performed by small meshed pots. All species caught in the pots would be sorted, counted and weighed. Further measurement records for spot shrimp would be length and gross health observations. The data would be used to run statistical analysis for the above inferences. Lastly, coordinate with other studies on benthic organisms would be pursued extensively.

Estimated Duration of Project: Three years

Estimated Cost per Year: $110,000

Other Comments:

This study will be designed to coordinate with other investigators to synthesize an ecosystem picture. This study project is tied to Option 3 of the Restoration Framework category Management of Human Uses entitled, "Increase Management for Fish and Shellfish that Previously Did Not Require Intensive Management" and Option 31, "Develop Comprehensive Monitoring Program".

Name, Address, Telephone:
Ivan Vining
ADF&G, Commercial Fisheries
333 Raspberry Rd.
Anchorage, AK 99518
907-267-2129

ID # 20615298 - 28

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

Recreation User Survey

ID stamped/Input completed
Name
Affiliation
Costs

Category Mgmt Actions

Lead Agency USFS

Cooperating Agency(ies)

(Y) N Passed initial screening criteria

Type: Recreation

RANKING H M L Rank Within Categories

H M L Rank Overall

Project Number - if assigned

920615298-28

1993 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

29828

EXXON VALD OIL SPILL TRUSTEE COUNCIL

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project: POST-OIL SPILL RECREATION BASED USER SURVEY FOR PRINCE WILLIAM SOUND

Justification: (Link to Injured Resource or Service)

The oil spill altered lifestyles of those who live, work and recreate in Prince William Sound. Since that time, public scrutiny and involvement with management of resources has increased. Our efforts will focus on recreational opportunities, resources affected by the spill and how management and planning can meet the needs and desires of the public.

Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach)

The goal of this project would be to collect and synthesize information concerning resource conditions, post-oil spill recreation use, user needs, and perceptions in order to develop long term management plans.

We plan on utilizing the services and expertise of Customer Survey personnel who are presently conducting recreation surveys for the Forest Service nationwide. This particular survey would focus on the effects of the spill in relation to recreational opportunities and resources. The survey would also continue to monitor post-oil spill recreational use in Prince William Sound.

Estimated Duration of Project: Three Years, 1993-1995

Estimated Cost per Year: $58,000

Other Comments:

Name, Address, Telephone:

Cal Baker, District Ranger
Cordova Ranger District
P.O. Box 280
Cordova, Alaska 99574 (907)424-7661

ID # 20615298-12

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

recreation
user survey
long range Plan

_____ Checked for Completeness

ID stamped/Input completed
Name
Affiliation
Costs

_____ Category Mgmt Actions

_____ Lead Agency USFS

_____ Cooperating Agency(ies) ADNR

(Y) N Passed initial screening criteria

Type: Recreation

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

920615298-12

1993 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

29812

Title of Project: **Sustainable Tourism in Prince William Sound**

Justification:

Recreational use decreased or was displaced as a result of the oil spill, and the quality of the experience for visitors was degraded. Negative perceptions of the Sound were also created as a result of the media coverage of the spill and clean-up. Such lingering perceptions may continue to affect people's choice of PWS as a recreational destination.

Description of Project:

GOAL: 1) To research perceptions of PWS as a recreation destination among the travel industry and key segments of the public in Alaska, the lower 48, and international markets; (2) to develop sustainable tourism opportunities in PWS; and (3) to market and promote existing and new opportunities in such a way as to counteract negative perceptions.

PROJECT: Existing perceptions about the desirability of PWS as a recreation destination may be affecting the level of visitation. Lost or displaced recreation use may be restored by a focused effort to determine existing perceptions and then undertaking promotional efforts to overcome inaccurate, negative perceptions.

In addition to promotional efforts for existing opportunities, recreation use may be enhanced by careful development of sustainable tourism. Sustainable tourism is an approach to tourism development that seeks to provide opportunities at a level consistent with "limits of acceptable change", for both the natural environment and the social environment. In other words, resource and land managers working with local populations and interested groups define the amount of change that is acceptable, both environmentally and socially, in an area due to tourism development. For a remote and relatively untouched area such as PWS, low impact tourism such as eco-, heritage, and adventure tourism, provided in such a way that economic benefits stay in the local area, would probably be the most sustainable types of tourism opportunities.

Developing and marketing sustainable tourism would require three-way partnerships between land managers, native corporations, commercial operators, and tourism promoters. Low-interest loans and/or grants would aid in the start-up costs for new ventures.

Estimated Duration of Project: **Five years**

Estimated Cost per Year: **$240,000 per year (average)**

Name, Address, Telephone:
Bruce Van Zee, Forest Supervisor
Chugach National Forest
201 E. 9th Ave
Anchorage, Alaska 99501

Technical contact:
Susan Rutherford, Rec Staff Office

ID # 920615296-86

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

recreation user plan

ID stamped/Input completed
Name
Affiliation
Costs

✓ Category Rest. Manage. actions

✓ Lead Agency DNR

_____ Cooperating Agency(ies) All

(Y) N Passed initial screening criteria

type: recreation

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

1993 JECT SCORING SHEET

, 20615296-06

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

PROPOSAL FOR OIL SPILL RESTORATION PROJECT

Title of Project: Marine Recreation Plan for the Spill Area

Justification: The oil spill affected outdoor recreation over a large area. Once-popular sites and areas have seen dramatic reductions in use by boaters, campers, and anglers. Other locations have seen increased visitation as displaced users search for substitute resources and opportunities. During cleanup, workers became familiar with previously little used areas, and many sites have since seen increased visitation. The spill thus precipitated a large scale shift in use patterns over a wide area.

In addition, public opinion has changed fundamentally since the spill. Residents, land owners, and users have different attitudes toward recreation management and development, resource development, tourism, and other issues in the affected area.

These shifting use patterns and public attitudes oblige the state and other jurisdictions and interests to re-examine outdoor recreation in the spill affected area. Pre-spill plans and programs can no longer be assumed to be appropriate in light of post-spill realities. A plan for marine recreation in the spill area should be considered a first step towards restoring lost or damaged recreation opportunities.

Description of Project: Alaska State Parks/DNR proposes a two year planning project, addressing the entire spill affected area, which would: 1) set overall objectives, policies, and priorities; 2) identify major issues to be addressed; 3) inventory recreational facilities, opportunities, and services; 4) prepare and analyze alternative proposals; 5) conduct a public review process; and 6) develop a comprehensive series of recommendations.

The state would take the lead role in this process, but would solicit the active participation of federal and local governments as well as property owners, service providers, interest groups and users. The plan would examine the entire spill affected area, concentrating on state and federal lands but also consider private lands, facilities, and services.

Estimated Duration of Project: Two years, beginning in 1993.

Estimated Cost Per Year: $120,000 per year.

Name, Address, Telephone: Neil Johannsen or
David Stephens
Alaska State Parks
Box 107001
Anchorage, AK 99510
907-762-2602

ID # 20615298-10

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

Educate Recreation users

✓ Checked for Completeness

ID stamped/Input completed
Name
Affiliation
Costs

Category Mgmt Action

Lead Agency USFS

Cooperating Agency(ies)

(Y) N Passed initial screening criteria

Type: ~~BOR~~ Recreation

RANKING H M L Rank Within Categories

H M L Rank Overall

Project Number - if assigned

920615298-10

1993 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

29810

Title of Project: Protect Resources and Enhance Visitor Enjoyment through Increased Administrative Presence

Justification:

Attention drawn to Prince William Sound due to the oil spill has resulted in publicity for sensitive resources, including cultural resources. On-site agency employees can reduce additional human impacts to injured resources through public contact, education, and law enforcement.

Description of Project

GOAL: To reduce additional adverse impacts to wildlife, fisheries, and archeologic resources caused by unintentional or willful actions of visitors.

PROJECT: Current efforts by agencies to protect the resources of PWS are hindered by the remoteness and difficulty of travel in the Sound, as well as low staffing levels. This project would direct additional resources to responsible agencies to enable them to maintain a greater presence in PWS.

Specifically, kayak and powerboat rangers would be stationed throughout the Sound to contact visitors, educate them about the resources of the Sound, and provide guidance on minimizing their impacts through 'Leave No Trace' practices. Additional law enforcement officers would be assigned to the Sound, with cross-jurisdictional authority to enforce all resource protection statutes.

Estimated Duration of Project: Ten years

Estimated Cost per Year: $500,000

Other Comments:

Name, Address, Telephone:
Bruce Van Zee, Forest Supervisor
Chugach National Forest
201 E. 9th Ave
Anchorage, Alaska 99501
(907)271-2500

Technical contacts:

Susan Rutherford, Staff Officer
Jim Davis, Special Agent

ID # 20615298-26

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

Educate
Recreation users

✓ Checked for Completeness

✓ ID stamped/Input completed
No Name
No Affiliation
✓ Costs

Category Manage. Actions
~~Management Enhancement~~

Lead Agency
USFS

Cooperating Agency(ies)

(Y) N Passed initial screening criteria

Type. Recreation

RANKING H M L Rank Within Categories

H M L Rank Overall

Project Number - if assigned

9206010 30 -
(01 - 18)
#15

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project: City of Valdez projects

Justification: (Link to Injured Resource or Service)

Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach)

18 projects - see list attached

see also - 92060105a ~~Hazen~~ William Walker

#5 Improve Marine Parks

Estimated Duration of Project:

Estimated Cost per Year:

Other Comments:

Name, Address, Telephone:

Doug Griffin
City Manager
City of Valdez

Oil spill restoration is a public process. Your ideas and suggestions will not be proprietary, and you will not be given any exclusive right or privilege to them.

CITY OF VALDEZ, ALASKA
GATEWAY TO THE INTERIOR

March 9, 1992

Mr. Dave Gibbons
Interim Executive Director
Exxon Valdez Oil Spill Restoration Team
645 "G" Street
Anchorage, Alaska 99501

FAX: 276-7178
Original Mailed

RE: VALDEZ PROJECT COSTS

Dear Mr. Gibbons:

I believe a January 27, 1992 letter from me to Mr. William Walker has been provided to you listing examples of projects I believe might qualify and be useful as part of the Prince William Sound restoration effort. I know that exact criteria to determine project eligibility is still in its formative stages and the City of Valdez intends to fully engage in this process.

In the meantime, the City of Valdez Engineer has provided a supplement to my earlier letter by preparing estimates of costs for the eleven projects listed in my January 27 letter. The estimates are general and "ball park" in nature and are primarily designed to give you a sense of magnitude for funding. As these projects are deemed eligible for funding under the Exxon restoration criteria, more detailed and exacting estimates can be performed.

If you have any questions about this, please contact me.

Sincerely,

Doug Griffin
City Manager

DG:blp

Enclosure

cc: Mayor John Harris
City Councilmembers
William Walker, Valdez City Attorney
William Wilcox, Valdez City Engineer

P.O. BOX 307 • VALDEZ, ALASKA 99686
TELEPHONE (907) 835-4313 • TELEX 25-381 • TELECOPIER (907) 835-2992

MEMORANDUM

92 01050
- [ ] A-92 WPWG
- [x] B-93 WPWG
- [ ] C-RPWG
- [ ] D-PAG
- [ ] E-MISC.

CITY OF VALDEZ, ALASKA · GATEWAY TO THE INTERIOR

TO: Doug Griffin

FROM: Bill Wilcox

DATE: March 9, 1992

SUBJECT: ~~Exxon Settlement~~ Suggestion Costs

The following are rough costs for the suggestions that you had in your memo to Bill Walker dated Jan 27, 1992. Because some of the ideas are general, some of the costs are approximate. Approximate project costs are:

	Project	PROJECT COST	ANNUAL COSTS
1	Oil & Grease Separator/Small Boat Harbor	$ 50,000.00	$ 500.00
2	Oil & Grease Separator/Fidalgo	150,000.00	5,000.00
3	Oil & Grease Separator/Hazelet	150,000.00	5,000.00
4	Valdez Landfill Upgrade	250,000.00	100,000.00
5	cycling	100,000.00	50,000.00
6	age treatment and collection plant upgrade	2,000,000.00	50,000.00
7	Garbage scow facilities for fisherman's trash	250,000.00	200,000.00
8	Remedial of existing landfills	2,000,000.00	
9	Hazardous waste collection and disposal	200,000.00	150,000.00
0	Landfill liner	1,000,000.00	200,000.00
1	Maritime wing of museum. Public education facility to display and interpret maritime and natural history of Prince William Sound	2,000,000.00	150,000.00
2	Oil Spill Cooperative and Training Center	5,000,000.00	500,000.00
3	Oversight of Oil Industry by City of Valdez		150,000.00
4	Increased access to Prince W.S.	25,000,000.00	1,000,000.00
5	Improve Marine Parks	1,000,000.00	100,000.00

P.O. BOX 307 • VALDEZ, ALASKA 99686
TELEPHONE (907) 835-4313 • TELECOPIER (907) 835-2992

	PROJECT COST	ANNUAL COSTS
Assist City handle waste oil	$ 250,000.00	$ 50,000.00
Training of Personnel to handle Environmental Incidents	200,000.00	50,000.00
Improved Public Health Facilities for residents of Prince W.S.	2,500,000.00	250,000.00

Hopefully, the cost will help to assure a better allocation of the Exxon Spill Settlement. This funding should be used to enhance the quality of life of the people most affected, the people of Prince William Sound.

c: Bill Walker, Esq.

ID # 920601050-15
Improve Marine Parks
$1 Million
100K/yr.

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

- ✓ ID stamped/Input completed
- ✓ Name
- ✓ Affiliation
- ✓ Costs

✓ Category
Restoration - Management Action

Lead Agency
NOAA

Cooperating Agency(ies)

(Y) N Passed initial screening criteria

typo: recreation

RANKING H M L Rank Within Categories

H M L Rank Overall

Project Number - if assigned

920615298-26

1993 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

29826

Document ID Number
92061529B

- [ ] A - 92 WPWG
- [x] B - 93 WPWG
- [ ] C - RFWG
- [ ] D - PAG
- [ ] E - MISC.

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project: INTERPRETATION OF PRINCE WILLIAM SOUND

Justification: (Link to Injured Resource or Service)

Each year, tens of thousands of visitors travel through Prince William Sound. However, there is no present program for presenting the oil spill and recovery story to those visitors. People throughout the United States and the world shared the experience of the Exxon Valdez oil spill through the ongoing media coverage. Past surveys have shown that people care deeply about the Sound, the oil spill, and the continued efforts to discover the effects of the spill and the efforts to mitigate those effects.

Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach)

This proposal would fund the development of interpretive services and products that would supplement exisiting programs in Prince William Sound. Although the Chugach National Forest manages a successful interpretive program aboard the Alaska Marine Highway ferries in Prince William Sound, there are many other interpretive opportunities available to provide information to other audiences. For example, existing FS kiosks are located in Cordova, Valdez and Whittier.

These "missed" audiences include recreational boaters, private charter boat patrons, airline passengers, foreign visitors, and handicapped visitors. Several specific projects targeted for each unique audience will be developed to interpret Prince William Sound and our effects upon it.

One project will be the development of a 90 minute audio-cassette tape "travelogue" of a voyage through Prince William Sound. This interpretation will be available to a wide-range of "under-served" customers, including visually impaired visitors, recreational boaters, cruise ship passengers and international visitors. The project would also fund the purchase of inexpensive tape players that will be loaned to travelers.

Another project will be the development of an aerial map of Prince William Sound to be used by airline passengers in their trip over the area. This map would integrate natural and cultural information with information about our impacts upon the ecosystem. Initial reaction to this information has been very favorable by the airlines.

Through planning and public scoping, other projects will be developed that meet the needs of the resource, the public and the responsible agencies.

Estimated Duration of Project: Five years +, 1993-1997

Estimated Cost per Year: $10,000

Other Comments: This proposal can be easily and effectively combined with other areas' and agencies' interpretive proposals. Any interpretation about the Exxon Valdez Oil Spill should be coordinated throughout the region to maximize efficiency and effectiveness.

This proposal addresses item *#7 - increase management in parks and refuges* and *#33 - develop integrated public information and education program* identified in the Restoration Framework.

ID # 2615297 -13

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

Can Ecosystem model at Rivr otter?

/ Checked for Completeness

- / ID stamped/Input completed
- / Name
- / Affiliation
- / Costs

/ Category Management Actions

~~Damage Assessment~~ ~~Close out~~

/ Lead Agency

ADF&G

_____ Cooperating Agency(ies)

_____

Ø N Passed initial screening criteria

_____

Type: TM

_____

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

1993 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

426

Comments:

* Restoration Framework, 1992, pp 43-44.

920615-29713

EXXON V[illegible]EZ OIL SPILL TRUSTEE COU[illegible]

FORMAT FOR PUBLIC IDEAS FOR RESTORATION PROJECTS

Title of Project: **Synthesis of Information on Ecology and Injury to River Otters in Prince William Sound**

Justification: (Link to Injured Resource or Service) A large amount of data on biochemical and ecological injury to river otters in PWS has been gathered over the past four years. It is clear that there has been significant injury to PWS otters in the oiled areas. To determine appropriate restoration measures, it is necessary to integrate and synthesize all relevant information on the PWS otter habitat, on otters from PWS and elsewhere, and on biochemical effects of oil on mammals.

Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach)

Objectives: Build a conceptual model of the river otter population in PWS, in both oiled and unoiled areas. Relevant factors might include basic ecology, food habits, blood chemistry, and genetics. A final report would detail the model and supporting information base.

Location: Workshop to be held in Anchorage in Spring 1993.

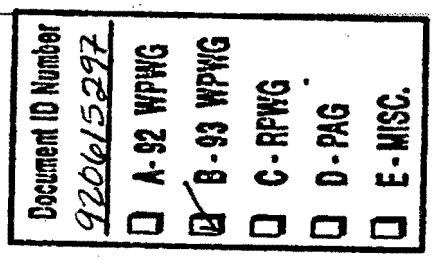
Technical Approach: A planning/scoping meeting would be held with the contractor to describe a basic model of the river otter population in PWS, including the factors related to the effects of oil on the otters and their environment. Based on the results of this meeting, the relevant issues and expertise would be identified. Expertise required could include biochemists, physiologists, parasitologists, otter ecologists, marine ecologists (invertebrate and fish), and a person skilled in building conceptual models (per the adaptive environmental assessment, AEA, process).

The model-building workshop lasting two or three days, would lead to a much better synthesis of all relevant information than exists at present. This synthesis will produce a clearer understanding of how EVOS and other factors may have affected the river otter population of PWS, whether there is continuing injury from EVOS and what additional restoration and/or monitoring activities should be undertaken.

Estimated Duration of Project: One (1) year

Estimated Cost per Year: $40,000

Other Comments:



Name, Address, Telephone
Mark A. Fraker
Alaska Dept of Fish and Game
333 Raspberry Road
Anchorage AK 99518
(907) 267-2136

Because the Oil Spill Restoration is a public process, your ideas and suggestions will not be proprietary, and you will not be given any exclusive right or privilege to them.

ID # 1206122C0-05
Watchable Wildlife Program

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

✓ ID stamped/Input completed
✓ Name
✓ Affiliation
Costs

Compile info from observations enlist public aid

✓ Category
Restoration Management Actions

✓ Lead Agency
AO F+G

_____ Cooperating Agency(ies)

(Y) N Passed initial screening criteria

Type: TM

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

92086

1993 PROJECT SCORING SHEET

Critical Factors

Potential projects must meet all of the following to be considered further. Check the blank for "yes", "no", or "unknown".

YES	NO	UNKNOWN	
✓			1. Linkage to resources and/or services injured by the Exxon Valdez oil spill.
✓			2. Technical feasibility.*
✓			3. Consistency with applicable Federal and State laws and policies.*

Comments:

* Restoration Framework, 1992, pp 43-44.

EXXON VALL OIL SPILL TRUSTEE COUNCI

02
03
04
05

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project: 5 Projects

Justification: (Link to Injured Resource or Service)

Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach)

01) Habitat Acquisition — a Comment

02) Restore shorelines damaged by beach berm relocation

03) Institute program to annually clean garbage from oil spill impacted area beaches

04) Publish + distribute brochures on damaged species and ways to prevent additional stress.

05) Institute watchable wildlife survey program to give and receive information with Tourism and Recreation users.

Estimated Duration of Project: _____

Estimated Cost per Year: _____

Other Comments:

Name, Address, Telephone:

Nancy Lethcoe, Pres.
Alaska Wilderness
Sailing Safaris
Alaska Wilderness
Recreation and Tourism
Assoc.

PO Box 1353
Valdez, AK 99686

Oil spill restoration is a public process. Your ideas and suggestions will not be proprietary, and you will not be given any exclusive right or privilege to them.

Alaska Wilderness Recreation and Tourism Association

Dave Gibbons
EVOS Restoration Team
645 "G" Street,
Anchorage, AK 99501

Dear Dave,

On behalf of our members operating tourism businesses or recreationally using the oil spill impacted area, AWRTA would appreciate it if the Restoration Team would consider recommending to the Trustee Council the following projects designed to restore lost natural resources and services:

1. Timber buybacks to provide habitat protection for recovery of species damaged by the spill and to protect the area's scenic qualities damaged by the spill from additional harm. — 01

2. Restoration of shorelines damaged by beach berm relocation including the removal of logs and rock debris pushed into adjacent uplands areas and re-planting of damaged beach and uplands areas with local species. — 02

3. Institution of a program to annually clean garbage from oil spill impacted area beaches to help enhance damaged visual quality and habitat. — 03

4. Publication of high quality, full-color brochures on damaged species aimed at recreational users and tourism operators that give information on the following topics: 1) significant aspects of a species' life history and behavior that may be adversely affected by human contact; 2) damages suffered by the species from spill and other causes (disease, human disturbance, etc.); 3) ways to prevent additional stress such as not disturbing seals during pupping and molting periods, use of hydrophones to enhance whale watching at a distance, etc. Distribute the fliers to harbors, Visitor Centers, Tour and Charter boat operators, kayak rental outlets, recreational equipment stores, etc. — 04

5. Institution of a watchable wildlife survey program soliciting input from tourism companies and others on the following topics: a) species observed, — 05

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date and number; and b) anecdotal information on human/animal encounters. This information could help document the possible changes and movements in marine mammal populations, give tourism operators and tourists a chance to "participate" in the recovery, 3) document changes, both positive and adverse, in human/animal encounters, and 4) provide planners with information that may be helpful in developing additional programs.

Tourism and recreational users have suffered considerably from the visual damage done to marine and shoreline areas through the loss of marine mammals, removal of intertidal and shoreline zone flora and fauna, beach relocation, and staining and sterilization of beaches. The U.S. F.S. recognizes visual quality as a natural resource; the state and tour operators have spent considerable amounts of money to market Alaska's superscenery and superwildlife viewing opportunities, and consumers choose destinations on the bases of visual quality and wildlife viewing experiences. The ability of the tourism industry to recover from economic damages sustained as a result of the spill depends on the ability of tour operators to deliver a product that lives up to consumer expectations and is competitive with other supersenecry/superwildlife areas in the world.

Respectfully submitted,

Nancy R. Lethcoe

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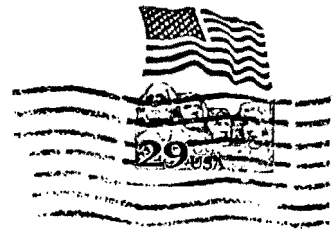

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