see 92051400[illegible]
92051400[illegible]5

NORTH GULF OCEANIC SOCIETY

P.O. BOX 15244
HOMER, ALASKA 99603
(907) 235-6590

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Document ID Number
92051400[illegible]
☐ A-92 WPWG
☑ B-93 WPWG
☐ C-RPWG
☐ D-PAG
☒ E-MISC.

Dr. Dave Gibbons
Exxon Valdez Oil Spill Trustee Council
645 "G" Street
Anchorage, Ak. 99501

May 3, 1992

Dear Dr. Gibbons

As you may know we were contracted for three years by the National Marine Mammal Laboratory to conduct killer whale research in Prince William Sound following the Exxon Valdez oil spill. We used data collected in years prior to the EVOS while operating under grants and donations. We have made every attempt to make the killer whale population dynamics project a long term project that is capable of measuring long and short term changes in the population.

This year funding was dropped by the Trustees Council. We have managed to find enough funding elsewhere to keep the project alive. We are hopeful that next year the Council will see fit to reinstate funds for the killer whale research under the restoration program, monitoring this damaged resource.

However, we feel it will be much more equitable as well as cost effective if the project is put out to competitive bid rather than just put in the hands of the National Marine Mammal Laboratory via NMFS. There is no reason that private organizations such as our own should not be allowed to bid on such a project. We have the expertise and experience needed to accomplish the project and can most certainly reduce costs. I would appreciate it if the Council would address this question of an open bidding process rather than a monopoly of oil spill research and monitoring monies by the government agencies.

Sincerely,

Craig O. Matkin, Director

NOAA

ID # 920514001

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

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

✓ Category Restoration Monitoring

~~DAMAGE ASSESSMENT~~ - Killer Whales

✓ Lead Agency

NMFS

✓ Cooperating Agency(ies)

(Y) N Passed initial screening criteria

type: NM

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

ID # 9206152610-01

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

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

✓ Category

Restoration - Monitoring

✓ Lead Agency

~~AMFS~~ NOAA

_____ Cooperating Agency(ies)

_____

(Y) N Passed initial screening criteria

Killer whale

type: mm

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

ID # 920514005

SCC 920514001

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project: Restoration of Killer Whales in Prince William Sound

Justification: (Link to Injured Resource or Service)
Strong evidence of damage to AB pod & possible other pods in PWS

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

Goal: To monitor recovery or other changes that occur in PWS killer whale pods 1993 - 1998.

Rationale: The mortality rate for KW's in AB pod in 1989 and 1990 was approximately 10 times normal. The pod was viewed in oil sheens 6 days after the spill. It is strongly suspected that the unprecedented mortalities are related to the Exxon Valdez Oil spill.

Technical approach: Study is based on the photoidentification of each individual killer whale, a technique perfected in the past ten years of work in PWS.

* It is important that projects such as this be open to public competitive bid, rather than simply be doled out to [redacted] government agencies. All of the killer whale work in Prince William Sound (1989-1992) was accomplished by the North Gulf Oceanic Society under contract to NMFS/NMML. It would be much more cost effective to bid it directly.

Estimated Duration of Project: 5 yrs

Estimated Cost per Year: $ 90,000

Other Comments:

Document ID Number
920514005
- [ ] A-92 WPWG
- [x] B-93 WPWG
- [ ] C-RPWG
- [ ] D-PAG
- [ ] E-MISC.

Name, Address, Telephone:

CRAIG MATKIN/ALGOS
P.O. BOX 15244
HOMER, AK 99603
907 235 6590

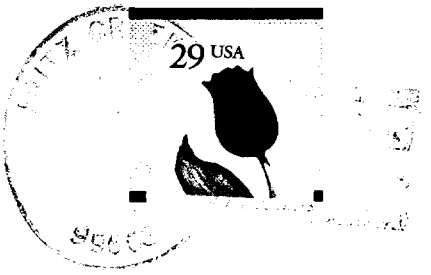
Oil spill restoration is a public process. Your ideas and suggestions will not be proprietary, and you will not be given any exclusive right or privilege to them.

June 22 July 2

fold here

MATKIN
BOX 15244
HOMER, AK 99603

MAY 13 REC'D



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

Attn: 1993 Work Plan

ID # 9205140005

see 9205140001

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

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

✓ Category

DAMAGE ASSESSMENT - Killer whale

✓ Lead Agency

NMFS

_____ Cooperating Agency(ies)

_____

Ⓝ N Passed initial screening criteria

_____

type 1 mm

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

9205140003

see 92051400I

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:

Killer whale D.A.

* Restoration Framework, 1992, pp 43-44.

10 ℞ 920514001

SCE 920514005

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project:

Killer Whale Population Dynamics Project

Justification: (Link to Injured Resource or Service)

The killer whales are a resource damaged by the oil spill.

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

Study killer whale population dynamics to measure short and long term changes in the population

Estimated Duration of Project: 4 years prior to '93, expect 5 years into future

Estimated Cost per Year: $90,000

Other Comments: would like opportunity to bid against other groups and government agencies

Name, Address, Telephone:

Craig O. Matkin, Director
North Gulf Oceanic Society
P.O. Box 15244
Homer, Ak 99603
907 235 6590

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 # 920514001

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

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

✓ Category

~~DAMAGE ASSESSMENT~~ Recovery Monitoring

✓ Lead Agency

NOAA

_____ Cooperating Agency(ies)

_____

(Y) N Passed initial screening criteria

_____

_____ typo: mm

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

fold here

PLACE
STAMP
HERE

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

Attn: 1993 Work Plan

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Document ID Number
92051501G
☐ A-92 WPWG
☑ B-93 WPWG
☐ C-RPWG
☐ D-PAG
☐ E-MISC.

Title of Project: Toxicological Profile of Prince William Sound.

Justification: (Link to Injured Resource or Service)

Assess damage to food chain caused by oil spill

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

Injury assessment of Prince William Sound, specifically the long term effects on food chains needs to be addressed. Extensive research to look at the fate pathways and toxicological effects of crude oil metabolites should be done. The location for such studies should include primary spill zones to include representative benthic, pelagic and tidal zone species. The same species in an adjacent non-spill area should be used as a control. An injury assessment of Prince William Sound can not be considered complete without such data and analysis as the toxic effects of crude oil metabolites are much more insidious than early spill contaminants. Certain species identified as "indicators" and food chain data will give a more accurate and in depth assessment of injury to the PWS ecosystem.

A research team comprised of aquatic ecologists, environmental toxicologists, chemists and veterinary pathologists and other relevant disciplines should carry out the studies. It would be up to this interdisciplanary team to design the research methods and protocols. Such a team would provide an in depth, unbiased interpretation of the oil spills affect on this ecosystem.

Estimated Duration of Project: 3-5 years

Estimated Cost per Year: $150,000 minimum

Other Comments:

Name, Address, Telephone:

Paul Jackson
Environmental Specialist
The North Pacific Rim
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 # 920515016

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

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

✓ Category

DAMAGE ASSESSMENT

✓ Lead Agency

~~ADF&G~~ NOAA

✓ Cooperating Agency(ies)

ADF&G

(Y) N Passed initial screening criteria

type: ecosystem

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project: Testing of the Patch-response/Patch dependence hypothesis - the testing of an ecosystem model.

Justification: Patchiness of nekton is a critical aspect to the survival of its predators. Nekton patchiness is primarily a function of the available light. The direct affect of an oil spill is to reduce the available light which affects patchiness and survival of its predators. This damage was not assessed for lack of a representative model.

Description of Project: Although there is limited understanding of how physical processes, both direct and indirect, influence the success of individual animals in the sea (GLOBEC 1991), it has been long recognized that the phenomenon of "patchiness" of prey in the sea explains the basis for survival of pelagic marine organisms, and it is now believed that herein lies the key to understanding more about feeding, reproduction and survivorship (Hunter and Thomas 1973). Given the importance of "patchiness," I propose that the approach to advancing our understanding of marine ecosystems is to study: (1) how the distribution of animals in the sea respond to ocean physics, or what I call the "patch-response hypothesis," and (2) how predators depend on patch configurations, or what I have termed the "patch-dependence hypothesis."

The "patch-response" and "patch-dependence" hypotheses are ecologically linked phenomenon. Hypothetically, patch-response can be described as: good-weather/big-patches, versus bad-weather/small-patch, or possibly no-patch. For instance, during mild weather patterns (periods of time with a low frequency and severity of storms), large patches of micro- and macrozooplankton have time to form. In contrast, in severe weather patterns, patches are dispersed by the physical forces created by storms making patches either smaller or nonexistent. In terms of the oil spill impact you would model the areas under the canopy of oil as bad years, and test to see if the patches at the edge of the spill were artificially enhanced by horizontal migration.

Hypothetically, patch-dependence can be described as: big-patches promotes fast-growth and high-survival, versus small-patches yields slow-growth and moderate-survival, and where there are no-patches there is no survival. Thus, I advance two ecologically linked hypotheses, that are both testable.

These hypotheses are testable by the fact that patch characteristics of length, width, depth, volume, density, and distribution are all measurable with multi-frequency acoustics and line transect theory. By collecting the quasi-continuous acoustic measurements to provide the large scale measures of the patches, simultaneous with water quality indices and GPS measures of location and time, the hypotheses are testable by collecting a time series of transects through the study area and monitoring weather conditions. A distinct advantage of having the large scale distribution of patches is that it enables optimal sampling of the patches for biological information with the traditional discrete sampling techniques that are always questioned as to their representativeness. Towed video systems are replacing some discrete "ground truthing" techniques, but so are the development of discriminate functions to classify acoustic targets to species.

Estimated Duration of Project: 10 years

Estimated costs per Year: $ 487,632

Name, Address, Telephone:

Dr. G.L. Thomas, Director
Prince William Sound Science Center
P.O. Box 705
Cordova, AK 99574
(907) 424-5800 - FAX 424-5820

Dr. R.T. Cooney, Professor
Institute of Marine Science
University of Alaska Fairbanks
Fairbanks, Alaska
(907) 474-7407

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 # 326 - 04

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

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

✓ Category Manage actions

~~Technical Support~~

✓ Lead Agency

~~USDA~~ NOAA

✓ Cooperating Agency(ies)

~~EPA~~ AOEG

(Y) N Passed initial screening criteria

typo: ecosystem

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

Title of Project:

Prince William Sound Long-Term Monitoring Program: Acute and Chronic Toxicity of Residual Hydrocarbons to Littleneck Clams

Justification:

Assessment of potentially ongoing acute and/or chronic impacts to clam populations from residual hydrocarbons at a site in Prince William Sound.

Description of Project:

This project examines the acute and chronic toxicological effects of residual *Exxon Valdez* oil on littleneck clams (*Protothaca staminea*). Support is being sought for 1993 recovery and analysis of samples deployed into the field in 1992 under the auspices of an ongoing NOAA monitoring effort in Prince William Sound. Preliminary research results have suggested a strong correlation between concentrations of residual petroleum hydrocarbons in sediments and mortality of clams transplanted from an uncontaminated site to an oiled site on Block Island. Elevated sediment concentrations also co-occurred with elevated tissue concentrations in surviving clams.

In 1992, this experiment will be expanded to provide a statistically more robust sample size at the same site, with a longer exposure period. This phase of the experiment—i.e., establishing of study plots and baseline sample collection—will be performed under the current NOAA monitoring program. A total of fifteen marked plots of *Protothaca* clams will be deployed, with five of the plots containing clams that have been marked with calcein dye to facilitate age and growth studies. Samples for sediment chemistry will be collected at each of the fifteen plots when the clams are transplanted, and any native clams found in the transplant areas will be retained for tissue PAH analysis.

In 1993, which is the period for which funding support is being sought, clams will be recovered along with sediment samples from each of the plots. Several parameters to evaluate toxicity of residual PAHs will be measured, including percent mortality among the transplanted clams (acute toxicity), growth of clams during the exposure period (chronic toxicity), accumulated tissue concentrations, residual sediment concentrations, and sediment grain size for the plots.

Logistical requirements for this project are relatively simple and may be piggybacked onto those for other projects. The basic requirement would be vessel or helicopter access to segment EL-11A on Block Island for an approximately four to six hour period during low tide in order to recover transplanted clams and sample sediments. Exact timing of the recovery is not critical, but would preferably occur in July or August to give the clams one full season on-site.

Estimated Duration of Project:

Estimated duration of the project, from mobilization to the field, through biological and chemical analysis, to interpretation and reporting of results, is nine months. If the field collections are made in July, 1993, the final report for the project could be expected in March, 1994.

Estimated Cost per Year:

Estimated cost for the project, based on the assumption of charter vessel support not being shared with other studies and thus provided through this project alone, is $50K. If the project was piggybacked onto another cruise, this would reduce the cost by approximately $4,500. As much of the cost of this project is allocated to analytical chemistry, some economy of funds could be achieved through selective analysis of samples.

Other Comments:

Results from the limited 1991 clam transplant study that provide the rationale for continuation and expansion of this project are available upon request.

Contact Name, Address, Telephone:

Gary Shigenaka
NOAA/Hazardous Materials Response and Assessment Division
7600 Sand Point Way N.E.
Seattle, WA 98115
(206)-526-6402 (voice)
(206)-526-6329 (fax)

ID # 920615265

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

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

✓ Category

damage assessment

✓ Lead Agency

NOAA

Coordinate w/other Alaska studies.

Cooperating Agency(ies)

ADF&G

Ⓝ N Passed initial screening criteria

typo: F/S

RANKING H M L Rank Within Categories

H M L Rank Overall

Project Number - if assigned

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project:
Hydrocarbons in Mussels from Coastal Gulf of Alaska, Cook Inlet, and Shelikof Strait

Justification: (Link to Injured Resource or Service)
Mussels are known to have been heavily contaminated by petroleum hydrocarbons and this study will establish a baseline for periodic monitoring.

Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach)
To detect and quantify levels of petroleum hydrocarbons in tissues of mussels (Mytiluss spp.) in coastal areas to establish a baseline and for periodic monitoring to help determine future effects of spilled oil.

Areas to be sampled are those areas of the Alaska Outer Continental Shelf along the Exxon Valdez oil spill trajectory in the Gulf of Alaska west of Prince William Sound, Cook Inlet, and Shelikof Strait.

Rationale is to provide baseline data on the present condition of resources vulnerable to spilled oil in the Gulf of Alaska, Cook Inlet, and Shelikof Strait.

Mussels will be collected and analyzed for saturated and polynuclear hydrocarbons using state-of-the-art protocols and standards.

Estimated Duration of Project: Once every other year for 5 years.

Estimated Cost per Year: $200,000

Other Comments:

Name, Address, Telephone:
Minerals Management Service
Alaska Outer Continental Shelf Region
949 E. 36th Avenue
Anchorage, AK 99508-4302
(907) 271-6010

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 # 92065-273-33

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

ID stamped/Input completed
Name
Affiliation
Costs

✓ Category Restoration Monitoring

✓ Lead Agency NOAA

✓ Cooperating Agency(ies) DOI - FWS, ADF&G

(Y) N Passed initial screening criteria

typo: F/S

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

264-02

Title of Project: New Field Test of Bioremediation

Justification:
Contaminated sub-surface shoreline sediments.

Description of Project: Goal: Confirm that Bioremediation is both effective and causes no adverse ecological effects. Objectives: (1) Determine the effectiveness of soluble nutrients and native microorganisms on degrading sub-surface Prudhoe Bay crude oil and (2) determine the extent to which bioremediation enhances recovery of shoreline ecosystems (including infauna and clams) and enhances reduction of tissue contamination in shellfish.. Location: Cobble-boulder shoreline in western or eastern Prince William Sound. Rationale: Due to statistical inadequacies, bioremediation tests in Prince William Sound in 1989 and 1990 failed to convincingly document degradation of sub-surface oil. In addition, no measurements were made to document the improvements bioremediation might bring about in the recovery of intertidal communities, in the recruitment and growth of clams and in the reduction of oil contamination in shellfish.

Technical Approach: A joint Alaska DEC/ EPA/NOAA HMRAD 1993 effort will be devoted to monitoring trends in oil degradation, epibiota, infauna and shellfish contamination at replicate control, oiled, nutrient treated and microbially-enhanced plots. Five such plots along a yet-to-be determined cobble-mixed-soft shoreline will be oiled (less than 1000 g PBCO) and subplots left untreated, treated with repeated nutrient additions or treated with nutrients plus a controlled mix of Prince William Sound shoreline oil-degrading bacteria. Pore-water will be monitored for nutrients and redox, sediment samples for chemical indicies of biodegradation and biological samples for changes in recruitment, abundance, and growth of epibiota and infauna, including clams. Trends of petroleum hydrocarbon contamination will be monitored in selected shellfish. The study will be intensive through the summer of 1993, with a revisit in the summer of 1994. The Alaska DEC has agreed to permit experimental oiling and the EPA has agreed to conducting and funding the treatment and degradation measurements. NOAA HMRAD will conduct biological monitoring with funds from Restoration. We will use the same methods employed in a "core" monitoring program which has been underway since 1990. A five year biology contract is now in place, with work dependent on funding level.

Estimated Duration: 2 years. Cost per year: Total, $250-$300K from .

Contact: Dr. Alan J. Mearns, NOAA HMRAD, 7600 Sand Point Way NE, Seattle, 98115. (206) 526-6336; FAX (206) 526-6329. Lead PI Dr. A. Venosa, EPA, Cincinnati; Co-PI Alex Viteri, AK DEC>

ID # 920615264 -02

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

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

✓ Category

~~Restoration - enhancement~~ Monitoring

✓ Lead Agency

NOAA

_____ Cooperating Agency(ies)

~~ADF&G~~ DEC

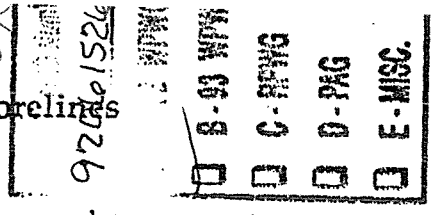
Ø N Passed initial screening criteria

type: ST

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____



Title of Project: Natural Recovery of Oiled and Treated Shorelines

Justification:
Shoreline plant and animal communities damaged by oiling and treatment.

264-01

Description of Project: **Goal:** Provide a scientific basis for restoration intervention in recovery of natural shoreline ecosystem; forecast if and when shoreline ecosystems will return to natural or pre-spill conditions.
Objectives: (1) Determine the extent to which past treatment has enhanced or delayed the recovery of abundance, diversity and population structure of intertidal communities and sub-tidal eelgrass beds at representative oiled and treated sites and (2) determine the need for specific additional restoration actions to enhance recovery and to reduce contamination of shellfish.
Location: Twenty-eight shoreline sites in western Prince William Sound.
Rationale: Treatment activities in 1989-1991 clearly cleaned the surface of almost all of the shoreline in the Sound, but it also damaged shoreline communities that otherwise survived moderate oiling, and redistributed fresh and weathered oil into lower intertidal and subtidal sediments, providing a potential source of continued contamination of shellfish (mussels, clams) which are a food source to shoreline predators. Recovery of the most damaged communities may take a decade or more, but may or may not benefit from additional intervention. Continued monitoring in 1992 will provide the first true indication of the actual rate and shape of recovery curves which are essential for forecasting. Additional annual surveys through 1994-95, and possibly beyond, are needed to support preliminary forecasts resulting from planned 1992 surveys.

Technical Approach: We will continue, at least through 1995, a shoreline recovery monitoring program initiated in 1990. The program will use a risk assessment strategy, documenting and comparing changes in the geomorphology and contamination of sediments, and possibly-related changes in the contamination, abundance, growth, recruitment and diversity of shoreline marine life at 28 unoiled, oiled and oiled-and-treated shoreline sites. Sampling wll be conducted at upper- mid- and lower-intertidal elevations on three classes of shoreline: rocky, boulder-cobble and mixed-soft, and at 14 adjacent subtidal eelgrass beds. Methods have already been standardized and verified through an open peer review process in 1991 and 1992, including successful chemical inter-laboratory agreement with one NOAA laboratory. We will continue a "core" monitoring program at least through 1995 using standard ecological, geomorphological chemical methods. A five year contract is now in place, with work dependent on funding level.

Estimated Duration: 2 to 5 more years. Cost per year: Total, $600-$700K; from Restoration, $400 K.
Contact: Dr. Alan J. Mearns, NOAA HMRAD, 7600 Sand Point Way NE, Seattle, 98115. (206) 526-6336; FAX (206) 526-6329

ID # 920615264-01

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

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

✓ Category

Restoration monitoring

✓ Lead Agency

NOAA

_____ Cooperating Agency(ies)

USDA Coordinate w/other Coastal Utah studies.

Ⓥ N Passed initial screening criteria

type: CH

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

Restoration Project Preproposal for EXXON Valdez Oil Spill Trustee Council

Title of project: Natural recovery of subtidal species in Prince William Sound

Justification: There has been extensive and continuing exposure of subtidal fish species to oil in and around Prince William Sound following the EVOS, as documented in Progress Reports from F/S 24 (OY 1 & 2) and ST 7 (OY3). Exposure is generally decreasing with time in species examined in these studies, but could still be documented in OY3. There are some data to suggest that oil has moved from intertidal areas to deeper sediments, due to wind and wave action, and also perhaps due to some cleanup procedures. The rates and extent of natural recovery of these species need to be determined.

Description of project: This project proposes to continue to document the rate and extent of the natural recovery of subtidal fish species from oil exposure following the EVOS. In addition, it is presumed that there has been concomitant exposure of subtidal invertebrate species, including crustaceans and bivalve molluscs. The exposure of subtidal invertebrates to oil needs to be assessed, and such assessment would be done under this proposal. Samples from benthic fish species taken during OY2 showed some evidence of alterations in parameters associated with reproduction, and some evidence of altered histology. However, there are few samples which can be analyzed to assess the potential for these effects to have occurred during OY1. It is therefore necessary to carry out limited assessments of the effects of known exposure to Prudhoe Bay crude oil on: 1) indicators of exposure and 2) biological processes in species indigenous to Prince William Sound, in order to allow a realistic interpretation of the data obtained during OY1. Such limited investigation will be critical both for interpretation of data obtained under the current NRDA and Restoration processes and for evaluation of potential for injury resulting from future oil spill events.

Bile, liver, and muscle from demersal fish species which have shown and/or continue to show exposure to oil will be sampled. Subtidal invertebrate species will also be sampled. Representative sediment samples will be taken from each benthic sampling site for subsequent chemical analysis. All samples will be analyzed for presence of oil and/or oil-derived products by recently developed rapid screening techniques. Several of these techniques are described in the Detailed Study Plans for F/S 24 (OY 1 & 2) and ST 7 (OY3). The use of these screening techniques has been shown to be very cost-effective, and also to result in the timely acquisition of data. Limited laboratory studies will be done in which fish and invertebrate species indigenous to Prince William Sound are exposed to known amounts of Prudhoe Bay crude oil, followed by analysis of tissues by both rapid screening and detailed chemical analysis. The potential for biological effects

(e.g. reproductive dysfunction, histopathological alterations) to occur at these doses will also be assessed.

Estimated duration of project: From two to three sampling seasons. Length of project is dependent on evaluation of results from each sampling year, thus rapid analysis of samples and acquisition of data are stressed.

Estimated cost per year: $230K, exclusive of vessel costs.

Other comments: This project is proposing to use state-of-the art techniques for determining oil exposure in subtidal species of Prince William Sound. These techniques have been largely developed, or optimized for use on oil-exposed organisms, by researchers in this Division. This Division has demonstrated its ability to provide sound chemical, biochemical, and biological data on a timely basis, both under the NRDA process and for the Subsistence Science Project, following the EVOS. Morover, this Division has considerable experience with sampling in and around Prince William Sound, and knowledge of the distribution of the species of interest.

Name, Address, Telephone

Dr. Usha Varanasi/Dr. Tracy Collier
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Northwest Fisheries Science Center
Environmental Conservation Division
2725 Montlake Blvd. E.
Seattle, WA 98112

(206)553-7737, fax (206)553-2359

ID # 920615263

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

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

✓ Category

Restoration - monitoring

✓ Lead Agency

NOAA

✓ Cooperating Agency(ies)

ADF&G

Ø N Passed initial screening criteria

typo: ST

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL
RESTORATION PROJECT - 1993

Title of Project: Recovery Monitoring of Hydrocarbon-Contaminated Subtidal Marine Sediment Resources.

Justification:

NRDA Subtidal Study Number 1 documented injury to subtidal sediments to a depth of at least 20 m at a minimum of 10 sites in Prince William Sound. Recovery rates of subtidal sediments contaminated by petroleum hydrocarbons at boreal latitudes is poorly known. This study would support other restoration studies that require documentation of hydrocarbon contamination of subtidal sediments

Description of Project:

The primary goal of the study will be to determine the level of contamination by oil of subtidal marine sediments in Prince William Sound in 1993 and to determine the extent to which recovery of those sediments has begun. The specific objectives will be to 1) monitor the recovery of hydrocarbon-contaminated, subtidal sediments at selected sites in Prince William Sound and 2) determine occurrence, persistence, and chemical composition of petroleum hydrocarbons in subtidal sediments in 1993. To facilitate comparison of data from this study with those of NRDA Subtidal Study Number 1 the same field methods and a subset of the same sites will be used. Sediments will be sampled at 10 sites in Prince William Sound (5 reference sites and 5 contaminated sites) in June 1993. Sediment samples will be collected at one intertidal station and five subtidal (3, 6, 20, 40 and 100 m) stations. Three composite samples will be collected by divers in the shallow subtidal (3, 6 and 20 m) sites and with a Smith-McIntyre grab at depths below 20 m. All samples will be taken from the surface (top 0-2 cm) of the sediment column.

Estimated Duration of Project: One year.

Estimated Cost per Year: $390K; includes vessel charter, hydrocarbon sample analysis and contract to assess hydrocarbon degrading bacteria.

Other Comments: A study of the recovery of assemblages of hydrocarbon degrading bacteria in subtidal sediments linked with the study proposed above would shed more light on the degree of recovery of subtidal sediment resources in Prince William Sound. Both hydrocarbon and bacterial data would be compared to the NRDA data base.

Charles O'Clair
Auke Bay Biological Laboratory
11305 Glacier Highway
Juneau, AK 99801

ID # 9206152 59

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

ID stamped/Input completed
Name
Affiliation
Costs

✓ Category Restoration Monitoring

✓ Lead Agency NOAA

_____ Cooperating Agency(ies)

_____

(Y) N Passed initial screening criteria

_____

Type: ST

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

Same as 920514004

920612247

- [ ] 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: 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.

Name, Address, Telephone:

Robert T. Cooney
Institute of Marine Science
University of Alaska Fairbanks
Fairbanks, Alaska 99775-1080
Phone: 474-7407

ID # 9206122C4

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

_____ Checked for Completeness

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

_____ Category ~~Restoration Monitoring~~ MANAGEMENT ACTION

_____ Lead Agency NOAA

_____ 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 _____

Submitted June 11, 92
Revised

920514004
☐ 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.

Name, Address, Telephone:

Robert T. Cooney
Institute of Marine Science
University of Alaska Fairbanks
Fairbanks, Alaska 99775-1080
Phone: 474-7407

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.

School of Fisheries and Ocean Sciences

UNIVERSITY OF ALASKA FAIRBANKS
Fairbanks, Alaska 99775-1080

FAX FORM

Exxon Valdez Oil Spill

TO: Restoration Team FAX #: 907-276-7178

FROM: R. T. Cooney, Institute of Marine Science - 0

NUMBER OF PAGES INCLUDING COVER: 2

DATE: 6/11/92 TIME: 5:40 pm

IMS FAX # 907-474-7204

IMS VOICE # 907-474-7824

TELEX # 7402055 SFOS UC

COMMENTS: Revised suggestion for a restoration project follows, according to solicitation dated May 1992.

R. Ted Cooney / Genelle Tilton
IMS Publications

submitted May 8, 92

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

old version - don't use

Title of Project: Monitoring meteorological and oceanographic variables defining coastal transport mechanisms and upper-layer biology in the northern Gulf of Alaska

---

Justification: The absence of real-time measurements of wind and density-driven ocean currents distributing oil from the *Exxon Valdez* limited the kinds of immediate damage assessment and critical mitigative efforts possible, particularly at downstream sites like lower Cook inlet, Kodiak and the Alaska Peninsula. Real-time monitoring is proposed as the means to acquire this information for this and other restoration related purposes.

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

Funding is requested to establish a network of 5 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). Measurements will be up-linked hourly to polar orbiting NOAA satellites and distributed in near real-time to agencies representing the Trustee Council (NOAA, ADF&G, DNR, DEC, USFS, USFWS) and to the University of Alaska Fairbanks using Service ARGOS. This telemetry service provides a means to access, archive, display and analyze data from one or all of the buoys in an office or field setting served by telephone. This technology is presently operating in Prince William Sound and will be used in this project.

In the event of a spill, buoy data will be immediately available for response models predicting where the oil will go and when it will arrive. During the damage assessment and restoration phases of post-spill (now underway), marine environmental data will be accessible to all agencies and investigators needing such information in real time to evaluate damage and the results of their restorative and enhancement activities. A complete data base from all buoys will be maintained by the Institute of Marine Science. A summary of oceanographic trends will be submitted annually to representatives of the Trustee Council as a UAF deliverable.

Estimated Duration of Project: 5 years with option to extend

Estimated Cost per Year: $1,100,000 yr. 1 – $250,000 yrs. 2-5

Other Comments: This project draws on experience with C-LAB 1 presently operational in Prince William Sound. This satellite-linked buoy (funded by the Alaska Science and Technology Foundation) has been monitoring surface weather and upper-layer oceanography since December, 1991. Data are being received, archived and analyzed at the Institute of Marine Science in Fairbanks and at the Prince William Sound Science Center in Cordova. The information is assisting with the enhancement and management of salmon stocks in Prince William Sound. C-LAB 1 will be operated as part of the network.

Name, Address, Telephone:
Robert T. Cooney
Institute of Marine Science
University of Alaska Fairbanks
Fairbanks, Alaska 99775-1080
Phone: 474-7407

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.

INSTITUTE OF MARINE SCIENCE

UNIVERSITY OF ALASKA
FAIRBANKS, ALASKA 99701

8 May 1992

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

Dear Council members:

Please find attached a 1-page idea proposal for the use of restoration funds. I will be in the field (Prince William Sound) beginning next week and running through June 15 so have taken the opportunity to submit this idea now. Thank you.

Sincerely,

R. Ted Cooney

R. Ted Cooney
Institute of Marine Science
University of Alaska Fairbanks
Fairbanks, Alaska 99775-1080
474-7407

Attachment

ID # 9205140004

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

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

✓ Category

Restoration - manipulation/Enhancement

✓ Lead Agency

~~NMFS~~ NOAA

✓ Cooperating Agency(ies)

ADF&G

Ⓥ N Passed initial screening criteria

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

TITLE OF PROJECT: MONITORING OF SMALL CETACEANS IN PRINCE WILLIAM SOUND.

JUSTIFICATION: There are more than 25 species of marine mammals in the Gulf of Alaska and Prince William Sound. The area impacted by the Exxon Valdez oil spill provides a variety of marine habitats seasonally critical for significant numbers of these mammals. Damage assessment studies concentrated on four marine mammal species; harbor seals, Steller sea lions, killer whales, and humpback whales, principally because the historical data base on these species was adequate for comparative purposes and the ability for demonstration of injury was high. However, other species, such as the reclusive harbor porpoise and ubiquitous Dall's porpoise may have been significantly affected by the spill. For the last three years, numerous reports have been received that the number of small cetaceans inhabiting Prince William Sound has declined. The proposed monitoring study will provide information on the status and trends of cetacean populations within the Prince William Sound ecosystem. Cetaceans are high trophic level predators and their distribution, abundance, and vital rates are viable measures of the health and stability of the ecosystem. Changes in food availability, habitat degradation, and ecosystem stability can be inferred by reduced cetacean abundance, declining trends, or reduced reproduction.

DESCRIPTION OF PROJECT: The primary objectives would be to: 1) enumerate small cetacean populations in Prince William Sound, and 2) assess critical habitat for small cetaceans by monitoring distribution and density of each species in the study area. To investigate seasonal trends, surveys would take place at different times of the year (e.g., spring, summer, and fall). Population information would be collected through the use of vessel and aerial survey platforms.

ESTIMATED DURATION OF PROJECT: Five to ten years.

ESTIMATED COST PER YEAR: $200.0K

OTHER COMMENTS: None at this time.

NAME, ADDRESS, TELEPHONE:

Drs. Marilyn E. Dahlheim and Thomas R. Loughlin
National Marine Fisheries Service
National Marine Mammal Laboratory
7600 Sand Point Way N. E.
Seattle, Washington 98115
206/526-4020 or 4040

ID # 920615261-03

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

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

✓ Category

Restoration - Monitoring

✓ Lead Agency

~~NMFS~~ NOAA

_____ Cooperating Agency(ies)

_____

(Y) N Passed initial screening criteria

_____

type : mm

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

TITLE OF PROJECT: USE OF SATELLITE TRANSMITTERS TO INVESTIGATE KILLER WHALE ECOLOGY IN PRINCE WILLIAM SOUND.

JUSTIFICATION: Restoration of killer whales could be enhanced through protection of sensitive habitats, minimizing fishery interactions, reducing or redirecting other human-use impacts, and promoting public education. At present, little or no quantitative information exists on habitat needs for killer whales in Prince William Sound and adjacent waters on which to base decisions on whether or not recommendations to limit or otherwise change human-use activities are needed. The placement of satellite transmitters on Prince William Sound killer whales could yield important information on habitat requirements of killer whales that would otherwise be unavailable.

DESCRIPTION OF PROJECT: The primary goal of this project would be to place 3-4 satellite transmitters (PTT) per year on selected individual killer whales from resident and transient pods in Prince William Sound. The primary objective would be to obtain information on the daily and seasonal movements of killer whales in Prince William Sound and adjacent waters. Tagging operations would occur in the southwestern sector of Prince William Sound during September and whales would be tracked throughout the fall and winter period. Considering the limitations of the existing information on killer whale movements and habitat requirements, any data collected from PTT's would provide valuable information on killer whale habitat requirements.

ESTIMATED DURATION OF PROJECT: Three years.

ESTIMATED COST PER YEAR: $180.0K

OTHER COMMENTS: None at this time.

NAME, ADDRESS, TELEPHONE:

Drs. Marilyn E. Dahlheim and Thomas R. Loughlin
National Marine Fisheries Service
National Marine Mammal Laboratory
7600 Sand Point Way N. E.
Seattle, Washington 98115
206/526-4020 or 4040.

ID # 920615261-02

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

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

✓ Category

Restoration - monitoring

✓ Lead Agency

~~NMFS~~ NOAA

_____ Cooperating Agency(ies)

_____

(Y) N Passed initial screening criteria

_____

type: mm

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

FORMAT FOR PUBLIC IDEAS FOR RESTORATION PROJECTS

Title of Project: Recovery Monitoring of Intertidal Oiled Mussel Beds Outside of Prince William Sound Impacted by the Exxon Valdez Oil Spill.

Justification: The highest oil concentrations in animals or sediments in 1991 were found in mussels and underlying substrates from oiled mussel beds in Prince William Sound (PWS) (Babcock, 1991 status report on oiled mussel beds). The oiled mussel bed study of 1991 exposed a potentially serious pathway of oil to predators higher in the food chain.

Description of Project: The primary objectives of this study will be to further describe the geographical extent of oiled mussel beds within the spill zone of the Exxon Valdez spill, follow the chemical recovery of untreated mussel beds, and, as indicated by results of the 1992 Oiled Mussel Restoration Study (#103), test recovery of beds following mechanical treatment.

The 1992 Oiled Mussel Restoration Study, whose results are not yet available, is examining the geographical distribution of oiled mussel beds within Prince William Sound and at a selected subsample of sites along the Kenai Peninsula, the Alaska Peninsula and the Kodiak Archipelago. Due to budget cuts, the number of sites to be sampled was reduced. Dependent upon the results of this year, additional candidate sites would be sampled, and possibly other sites outside of PWS would be tested for mechanical treatments and recovery monitoring. The methods used in 1991 and 1992 would be continued unless modifications were deemed appropriate. A combination of ultraviolet (UV) screening and gas chromatograph/mass spectroscopy (GC/MS) will be used to reduce analytical costs. The 1992 project component examining oiled mussels outside of PWS was a cooperative study involving the National Park Service and NOAA (the Auke Bay Lab).

Estimated Duration of Project: One year (dependent upon results of 1992 and 1993 studies).

Estimated Cost per Year: $175,000.

Other Comments: Any study of oiled mussel beds outside of PWS should be coordinated with continued study of PWS oiled mussel beds. The scope and specific plan for this study will be dependent on interpretation of results of the 1992 Oiled Mussel Restoration Study.

For Further Information Contact: Dan Hamson, Chief, Coastal Programs Division, National Park Service, 2525 Gambell Street, Anchorage, Alaska 99503, (907) 257-2526.

ID # 920615273-04

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

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

Category: Damage Assessment

Lead Agency: NOAA

Cooperating Agency(ies): DOI-NPS, ADF+G, DEC

Y N Passed initial screening criteria

type: CIT

RANKING H M L Rank Within Categories

H M L Rank Overall

Project Number - if assigned

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL
Restoration Projects for 1993

Title of Project: Recovery Monitoring of Intertidal Oiled Mussel Beds in Prince William Sound and the Gulf of Alaska Impacted by the *Exxon Valdez* Oil Spill.

Justification (Link to Injured Resource or Service): High concentrations of oil in mussels (*Mytilus trossulus*) from oiled mussel beds appear to be a linked to continued reproductive failure of harlequin ducks in western Prince William Sound (PWS), damage to oystercatchers, and elevated mortalities in juvenile sea and river otters - all of which feed on mussels. The presence of these contaminated beds is also of concern for human subsistence.

Description of Project (e.g. goals, objectives, location, rationale, and technical approach): 1992 goals of this project are (1) to establish the geographic extent and intensity of oiling of densely packed mussel beds in PWS and the Gulf of Alaska (GOA); (2) to document within site variation of oiling levels; and, (3) to test the feasibility of a minimally intrusive restoration technique, monitor changes in petroleum hydrocarbons (Hcs) in mussels and underlying sediments and to measure physiological recovery in mussels.

Proposed goals and objectives for 1993 are (refer to 1, above) to follow recovery in all densely packed mussel beds that have been previously documented and to sample any newly discovered potential contaminated beds; (refer to 2 and 3, above) monitor recovery in mussel beds manipulated under this project in 1992 and by AK Department of Environmental Conservation; and, (refer to 2 and 3, above) using current data from within site sampling, test different restoration techniques which are directed toward only those areas which show extremely high levels of contamination and document chemical and biological recovery of HC levels in mussels and underlying sediments.

NOAA's Auke Bay Lab has now successfully established a fast screening method (UV Fluorescence) for sediment petroleum hydrocarbons (turn around time for data is ~10 d). Using this technique, we have documented that HC distribution within an heavily contaminated mussel bed appear to be quite patchy and probably related to grain size of the sediment more than tidal height. Rapid receipt of HC data will allow targeting manipulative areas in a timely manner.

Estimated Duration of Project: 3 years

Estimated Cost per Year:
1993: $ 325,000 (salaries, HC analyses, vessel charter, logistics)
1994: $ 225,000
1995: $ 190,000

Other Comments:
This project will necessarily have other components which are specifically oriented toward higher consumers (humans, sea and river otters, oystercatchers, harlequin ducks); this focuses on chemical recovery of habitat and biological recovery of the target prey items - i. e. mussels.

Name, Address, Telephone:
Stanley D. Rice
907-789-6020

NOAA/NMFS Auke Bay Fisheries Lab
11305 Glacier Highway
Juneau, Alaska 99801-8626

ID # 12006013 230-01

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

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

✓ Category

Restoration - Recovery Monitoring

✓ Lead Agency

NOAA

✓ Cooperating Agency(ies)

DEC

(Y) N Passed initial screening criteria

type: CH

RANKING H M L Rank Within Categories

H M L Rank Overall

Project Number - if assigned

9205260039

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project: Long term monitoring of marine environment

Justification: (Link to Injured Resource or Service)
Suggests using sites at Resurrection Bay near Seward

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

Estimated Duration of Project: _____

Estimated Cost per Year: _____

Other Comments:

Name, Address, Telephone:
Dr. Rogers C. Rogers
Institute for Marine Science
U of A Fairbanks

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

PLACE
STAMP
HERE

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

Attn: 1993 Work Plan

INSTITUTE OF MARINE SCIENCE

UNIVERSITY OF ALASKA-FAIRBANKS
FAIRBANKS, ALASKA 99775-1080

May 21, 1992

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

I have been noticing a lack of studies to address the general topic of long term changes or pollution in Alaska's marine environment. Many other states in the U.S. has established programs to monitor the marine environment to be able to document such changes. To my knowledge there are no such comprehensive sampling programs in Alaska. The closest program to this is the monthly measurement of temperature and salinity versus depth profiles at the mouth of Resurrection Bay that are carried out by the Institute of Marine Science, University of Alaska under the NOAA Climate and Global Change Program. Those data are extending a record that began in December 1970, so the record is slightly more than 21 years in length.

In order to determine other changes in the marine environment we will need to expand these measurements, as soon as possible, to other parameters such as nutrients, primary production, plankton, larval fish, hydrocarbons, and others. We should attempt as complete an inventory as possible. In addition, samples should be archived for future research efforts that would address parameters that we have not presently considered.

Why should these measurements be done at Seward? First, it will be adding to a time series that already exists and one that has shown significant changes over the past twenty years (See attached figure). This location is well connect with other regions along the coast, SE Alaska and British Columbia, since the Alaska Coastal Current flows past the station. This coastal flow begins with the Columbia River and extends beyond Kodiak Island, through Unimak Pass into the Bering Sea. Conditions within this flow have been shown to be characteristic of the whole northern North Pacific and much of the Bering Sea. Finally, the logistics are very simple and inexpensive since the Institute of Marine Science ship facilities and labs are at Seward which is connected by road to Anchorage.

I hope that these data would provide better information to help manage Alaska's marine resources. I will be glad to provide further information.

Sincerely,

Thomas C. Royer
Professor of Marine Science
(907) 474-7835

ID # 9205 26039

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

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

✓ Category

Monitoring

✓ Lead Agency

NOAA

____ Cooperating Agency(ies)

Y N Passed initial screening criteria

type - ecosystem

RANKING H M L Rank Within Categories

H M L Rank Overall

____ Project Number - if assigned _____

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Alaska Fisheries Science Center
Investigations-Research
P. O. Box 1638
Kodiak, AK 99615

Document ID Number
9206001058
- [ ] A-92 WPWG
- [x] B-93 WPWG
- [ ] C-RPWG
- [ ] D-PAG
- [ ] E-MISC.

Not Dave G ID #

January 29, 1992

Coded as Selby Submission

Post-It™ brand fax transmittal memo 7671 | # of pages ▸ 2

To Dave Gruens	From Jerome Selby
Co. Oil Trustee Council	Co. KIB
Dept.	Phone # 486-9300
Fax # 1-276-7178	Fax # 486-9374

The Honorable Jerome Selby
Mayor, Kodiak Island Borough
710 Mill Bay Road
Kodiak, AK 99615

Dear Mayor Selby;

During the 21 January meeting of the KIB Shoreline Committee, you requested that I send you a written sketch of my ideas. Since these comments are simply my observations and suggestions they do not reflect NMFS policy and have not been reviewed by those more directly involved with the Exxon Valdez spill.

With regard to programs, I noted that the spill had caught everyone flat-footed with regard to baseline data. In particular there were no standard collection sites in the Kodiak archipelago where data on oil content of sediments, faunal or floral species composition or other baseline data were routinely collected. As a result various agencies (NMFS, ADF&G, Alaska DEC, etc.) were scrambling to collect data as the oil was drifting toward these islands. I suggested that a committee approach be adopted to select key or critical sites that would provide a long term series of baseline observations. I also suggested that, since there was a large area within the Borough that could potentially be impacted by oil spills, that a revolving fund be set up as a means of paying for baseline sampling and analysis. This could be in the form of an endowment. Reasonable such a fund could apply to areas outside the Borough or to the State as a whole, but I believe that some local control is desirable.

01 02 gr

The University of Alaska's suggestion that a running seawater facility be set up to assess toxicity is a good one and would serve the Borough well in various capacities.

03

With respect to criteria for evaluating various proposals I suggested only one. I believe that the major criterion should be that any given program funded from the settlements should show strong potential to improve our ability to deal with oil related catastrophes in the future.

Upon further reflection, it also occurs to me that there is a large back-log of unanalysed samples and data that were collected during the assessment process. Due to the large number of samples collected and the necessity of producing an assessment in a timely fashion, a great deal of "triage" was involved in selecting samples of data to be analyzed. Perhaps a revolving fund-endorsement approach could be used here also. 04

Sincerely,

Dr. Robert S. Otto,
Facility Director

cc: Gary Stauffer F/AKC1
RACE Reading file

ID # 920601058-04

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

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

✓ Category

Damage Assessment - Endowment to Pay for analysis

✓ Lead Agency

NOAA

_____ Cooperating Agency(ies)

_____

(Y) N Passed initial screening criteria

_____

type: endowment

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

920601058-09

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

IDEAS FOR RESTORATION PROJECTS-1993

Title of Project:
Management of Restoration Database, Sample Archiving, and Chemical Interpretation.

Justification:
We have already developed the procedures and expertise for these functions during the 3 years of NRDA efforts. This study would merge the extensive NRDA database with Restoration needs and would serve the needs of past NRDA PI's and new Restoration projects by quaranteeing a bridge for access, archiving, interpretation, and mapping of H.C. data. NRDA sample archiving/management would continue until disposition is figured out and implemented.

Description of Project:
We propose to continue management of restoration samples, including: archiving of sample materials, database entry , chemical interpretation and mapping services for PI's using the same procedures developed for damage assessment. Specifically we propose to:

1) Merge damage assessment, restoration and response data into 1 database patterned after the damage assessment database (DAD). Place on database server for easy access for remote users. Merge new incoming restoration data using standard DAD procedures.

2) Archive restoration samples and continue archiving NRDA unanalyzed samples at Auke Bay until NRDA sample disposition is figured out. Procedures would again be from NRDA.

3) Provide chemical analysis interpretation and data mapping services to PI's as done in NRDA ST8. This would support new Restoration needs but would use the entire database and would provide access to all of the old data.

Estimated Duration of Project:
This effort will continue as long as restoration studies and analysis of samples continue. We believe the issue of sample archiving for NRDA samples can not be completed until final reports are finished. Then NRDA samples can be moved to their final archival location.

Estimated Cost per Year:

Item	Cost
6 mm Database and Incoming Sample Management	35
2 mm Archival of Samples	8
2 mm Chemical Interpretation	12
2 mm Mapping of Analytical Data	10
Database Server Software and Support	10
Total	75

NAME, ADDRESS, TELEPHONE
Stanley Rice 907 789-6020
National Marine Fisheries Service, Alaska Fisheries Center,
11305 Glacier Highway, Juneau AK 99801

ID # 920615258-02

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

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

✓ Category

Tech Support

✓ Lead Agency

X10AA

✓ Cooperating Agency(ies)

DOA

(Y) N Passed initial screening criteria

type: endowment

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Alaska Fisheries Science Center
Investigations-Research
P. O. Box 1638
Kodiak, AK 99615

Document ID Number
920601058-
- [ ] A-92 WPWG
- [x] B-93 WPWG
- [ ] C-RPWG
- [ ] D-PAG
- [ ] E-MISC.

01 02 03 04

Not part of ID #

January 29, 1992

Coded as Selby Submission

Post-It™ brand fax transmittal memo 7671 | # of pages ▸ 2

To Dave Gibbons	From Jerome Selby
Co. Oil Trustee Council	Co. KIB
Dept.	Phone # 486-9300
Fax # 1-276-7178	Fax # 486-9374

The Honorable Jerome Selby
Mayor, Kodiak Island Borough
710 Mill Bay Road
Kodiak, AK 99615

Dear Mayor Selby;

During the 21 January meeting of the KIB Shoreline Committee, you requested that I send you a written sketch of my ideas. Since these comments are simply my observations and suggestions they do not reflect NMFS policy and have not been reviewed by those more directly involved with the Exxon Valdez spill.

With regard to programs, I noted that the spill had caught everyone flat-footed with regard to baseline data. In particular there were no standard collection sites in the Kodiak archipelago where data on oil content of sediments, faunal or floral species composition or other baseline data were routinely collected. As a result various agencies (NMFS, ADF&G, Alaska DEC, etc.) were scrambling to collect data as the oil was drifting toward these islands. I suggested that a committee approach be adopted to select key or critical sites that would provide a long term series of baseline observations. I also suggested that, since there was a large area within the Borough that could potentially be impacted by oil spills, that a revolving fund be set up as a means of paying for baseline sampling and analysis. This could be in the form of an endowment. Reasonable such a fund could apply to areas outside the Borough or to the State as a whole, but I believe that some local control is desirable.

01 02 grou

The University of Alaska's suggestion that a running seawater facility be set up to assess toxicity is a good one and would serve the Borough well in various capacities.

03

With respect to criteria for evaluating various proposals I suggested only one. I believe that the major criterion should be that any given program funded from the settlements should show strong potential to improve our ability to deal with oil related catastrophes in the future.

Upon further reflection, it also occurs to me that there is a large back-log of unanalysed samples and data that were collected during the assessment process. Due to the large number of samples collected and the necessity of producing an assessment in a timely fashion, a great deal of "triage" was involved in selecting samples of data to be analyzed. Perhaps a revolving fund-endorsement approach could be used here also. 04

Sincerely,

Dr. Robert S. Otto,
Facility Director

cc: Gary Stauffer F/AKC1
RACE Reading file

ID # 920601058-01
-02

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

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

✓ Category Recovery Monitoring - Endowment to pay for it.

~~Other - Science (endowment)~~

✓ Lead Agency

NOAA

Cooperating Agency(ies)

(Y) N Passed initial screening criteria

type: endowment

RANKING H M L Rank Within Categories

H M L Rank Overall

Project Number - if assigned

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Alaska Fisheries Science Center
Investigations-Research
P. O. Box 1638
Kodiak, AK 99615

Document ID Number
9206010587
- [ ] A-92 WPWG
- [x] B-93 WPWG
- [ ] C-RPWG
- [ ] D-PAG
- [ ] E-MISC.

Not one ID #

January 29, 1992

Coded as Selby Submission

Post-It™ brand fax transmittal memo 7671 | # of pages ▸ 2

To Dave Gruens	From Jerome Selby
Co. Oil Trustee Council	Co. KIB
Dept.	Phone # 486-9300
Fax # 1-276-7178	Fax # 486-9374

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Mayor, Kodiak Island Borough
710 Mill Bay Road
Kodiak, AK 99615

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Sincerely,

Dr. Robert S. Otto,
Facility Director

cc: Gary Stauffer F/AKC1
RACE Reading file

ID # 920601058-03

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

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

✓ Category ~~Other Science~~ Restor. Monitoring

✓ Lead Agency NOAA

_____ Cooperating Agency(ies)

_____

(Y) N Passed initial screening criteria

_____

type: ~~Restor. Monitoring~~ tech. support

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Alaska Fisheries Science Center
Investigations-Research
P. O. Box 1638
Kodiak, AK 99615

Document ID Number
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☐ A-92 WPWG
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01
02
04
03

Not part of ID #

January 29, 1992

↑ Coded as Selby Submission

Post-It™ brand fax transmittal memo 7671 | # of pages ▸ 2

To Dave Gravens	From Jerome Selby
Co. Oil Trustee Council	Co. KIB
Dept.	Phone # 486-9300
Fax # 1-276-7178	Fax # 486-9374

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Kodiak, AK 99615

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01 grc
02
yes
03

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Dr. Robert S. Otto,
Facility Director

cc: Gary Stauffer F/AKC1
RACE Reading file

ID # 920601058-03

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

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

✓ Category

~~other science~~ Restoration Monitoring

✓ Lead Agency

NOAA

____ Cooperating Agency(ies)

(Y) N Passed initial screening criteria

type: ~~Restor. monitoring~~ tech. support

RANKING H M L Rank Within Categories

H M L Rank Overall

____ Project Number - if assigned ____

920601050-
<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 - 920601052 ~~Hayes~~ 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.

_____ fold here _____

PLACE
STAMP
HERE

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

Attn: 1993 Work Plan

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

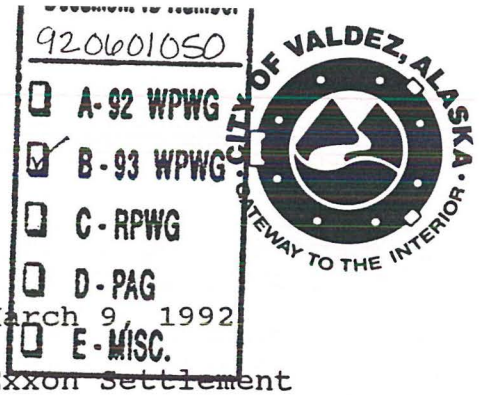
DG:blp

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



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
-01	Oil & Grease Separator/Small Boat Harbor	$ 50,000.00	$ 500.00
-02	Oil & Grease Separator/Fidalgo	150,000.00	5,000.00
-03	Oil & Grease Separator/Hazelet	150,000.00	5,000.00
-04	Valdez Landfill Upgrade	250,000.00	100,000.00
-05	Recycling	100,000.00	50,000.00
-06	Sewage treatment and collection plant upgrade	2,000,000.00	50,000.00
-07	Garbage scow facilities for fisherman's trash	250,000.00	200,000.00
-08	Remedial of existing landfills	2,000,000.00	
-09	Hazardous waste collection and disposal	200,000.00	150,000.00
-10	Landfill liner	1,000,000.00	200,000.00
-11	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
-12	Oil Spill Cooperative and Training Center	5,000,000.00	500,000.00
-13	Oversight of Oil Industry by City of Valdez		150,000.00
-14	Increased access to Prince W.S.	25,000,000.00	1,000,000.00
-15	Improve Marine Parks	1,000,000.00	100,000.00

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TELEPHONE (907) 835-4313 • TELECOPIER (907) 835-2992

	PROJECT COST	ANNUAL COSTS
16 Assist City handle waste oil	$ 250,000.00	$ 50,000.00
17 Training of Personnel to handle Environmental Incidents	200,000.00	50,000.00
18 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.

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

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Sincerely,

Doug Griffin
City Manager

DG:blp

Enclosure

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

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TELEPHONE (907) 835-4313 • TELEX 25-381 • TELECOPIER (907) 835-2992

MEMORANDUM

Document ID Number
920401050
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☑ B-93 WPWG
☐ C-RPWG
☐ D-PAG
☐ E-MISC.

CITY OF VALDEZ, ALASKA · GATEWAY TO THE INTERIOR ·

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TELEPHONE (907) 835-4313 • TELECOPIER (907) 835-2992

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c: Bill Walker, Esq.

See also 7100010SC

Document ID Number
920601052
☐ A-92 WPWG
☑ B-93 WPWG
☐ C-RPWG
☐ D-PAG
☐ E-MISC.

DAVID H. THORSNESS
JAMES M. POWELL
BRIAN J. BRUNDIN
MARCUS R. CLAPP*
JOE M. HUDDLESTON
SIGURD E. MURPHY
CARL J. D. BAUMAN
DENNIS M. BUMP*
MARY K. HUGHES
FRANK A. PFIFFNER
RALPH R. BEISTLINE*
R. CRAIG HESSER
ROBERT L. MANLEY
JAMES M. GORSKI
TIMOTHY R. BYRNES
JAMES M. SEEDORF
RONALD E. NOEL*
FREDERICK J. ODSEN
MICHAEL L. LESSMEIER**
STEVEN S. TERVOOREN
MATTHEW K. PETERSON
JOSEPH R. D. LOESCHER
KENNETH D. LOUGEE*
EARL M. SUTHERLAND
JOHN B. THORSNESS
THOMAS R. LUCAS
GREGORY W. LESSMEIER**

HUGHES THORSNESS
GANTZ POWELL & BRUNDIN
Est. 1939

ATTORNEYS AT LAW

509 WEST THIRD AVENUE
ANCHORAGE, ALASKA 99501-2273
TELEPHONE (907) 274-7522
TELECOPIER: (907) 263-8320

*590 UNIVERSITY AVENUE
SUITE 200
FAIRBANKS, ALASKA 99709-3052
TELEPHONE (907) 479-3161
TELECOPIER: (907) 474-2629

** ONE SEALASKA PLAZA
SUITE 303
JUNEAU, ALASKA 99801-1249
TELEPHONE (907) 586-5912
TELECOPIER: (907) 463-3020

JAMES N. BARKELEY
WILLIAM M. WALKER
PAUL H. CRAGAN*
DAVID S. CARTER
ANN S. BROWN*
TIMOTHY R. REDFORD
JOHN G. FRANK**
PAUL S. WILCOX
KENNETH M. GUTSCH
LYNN E. LEVENGOOD*
CLYDE E. SNIFFEN, JR.
VICKI L. BUSSARD
SHELDON E. WINTERS**
DAVID F. LEONARD*
LINDA J. JOHNSON
JOHN C. WENDLANDT
STEPHAN D. BRADY
PAUL K. WHARTON
CYNTHIA M. KLEPASKI*
GREGORY S. FISHER
RON L. SAYER
JOHN J. TIEMESSEN*
VALLI L. GOSS
JOSEPH S. SLUSSER*

OF COUNSEL
JOHN C. HUGHES
RICHARD O. GANTZ

Reply to: ANCHORAGE

Direct Dial:
(907) 263-8251

February 7, 1992

Mr. Dave Gibbons
Interim Executive Director
Resource Restoration Coordination Group
Exxon Valdez Oil Spill Settlement Trustee Council
645 G Street
Anchorage, AK 99501

VIA FAX
276-7178

Re: City of Valdez Restoration/Enhancement Projects
Our File No. 925-133

Dear Dave:

Follow my testimony before the Exxon Valdez Settlement Trustees Council last night, Trustee Council member Attorney General Charlie Coe requested whether or not the City of Valdez had a list of specific projects it was considering as restoration/enhancement projects. Attached please find a letter dated January 27, 1992 from Valdez City Manager, Doug Griffin to myself which lists eleven potential projects. Mr. Griffin has been working on the anticipated costs associated with each of those projects with his staff and will forward those to you in the next few days.

Thank you in advance for your consideration of these projects and should you have any questions whatsoever, please don't hesitate to contact myself or Valdez City Manager Doug Griffin at 835-4313.

Very truly yours,

HUGHES, THORSNESS, GANTZ,
POWELL & BRUNDIN

By: William M Walker
William M. Walker

WMW/rlh/1424:XKAH
Enc.
cc: Doug Griffin
Mayor John Harris
City Council Members

CITY OF VALDEZ, ALASKA
GATEWAY TO THE INTERIOR

January 27, 1992

Mr. William Walker
HUGHES, THORSNESS, GANTZ,
POWELL & BRUNDIN
509 West 3rd Avenue
Anchorage, Alaska 99501

Dear Bill:

I know you will be working on preparing information for the City Council regarding its input into considerations for use of Exxon settlement funds. The City has scheduled a work session at 6:30 p.m. prior to the February 3rd meeting to allow us to speak more informally with the Council about the direction they wish to pursue. There is also a hearing in Valdez on February 4th.

My thoughts are similar to yours regarding the need to explore "enhancement" of Prince William Sound, but I have other ideas which may also fit under the restoration aspects of the settlement.

Restoration and/or enhancements include, in no particular order:

1) Oil and grease separators to treat Valdez storm water (and improve storm water collection) before it goes into Port Valdez, thus reducing pollution of Prince William Sound waterways from this source.

2) Assistance to assure the most optimum solid waste disposal in Valdez (and other Prince William Sound communities) to reduce hazardous waste contamination of groundwater that also contributes to Port Valdez pollution. Improved landfills and solid waste collection systems may also reduce litter in Prince William Sound.

3) Funding for construction of a maritime wing in the Valdez Museum to include interpretation and education regarding the Exxon Valdez incident and oil spill prevention and response technology.

4) Funding to assist in the establishment of an oil spill cooperative and training facility for cold water oil spill response.

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TELEPHONE (907) 835-4313 • TELEX 25-381 • TELECOPIER (907) 835-2992

5) Assistance to the City of Valdez so that it may provide improved local government oversight of the oil and gas industry operating within its jurisdiction.

6) Funding to provide increased sport fishing and commercial fishing opportunities by increasing access to Prince William Sound and marketing abundant fish supplies.

7) Improving State marine parks located in Prince William Sound.

8) Improving transportation facilities to include roads, marine highway facilities, airports, and boat harbors will improve response to future spills, allow for easier collection and handling of hazardous materials from around Prince William Sound, and reduce accidents which may contribute to pollution of Prince William Sound waterways.

9) Funding to assist communities in handling waste oil from boaters and others.

10) Funding to allow local governments to train and equip firefighters, oil response personnel, and others responsible for responding to safety and environmental incidents.

11) Public health facilities to assure that personnel involved in the oil transportation business and those responsible for review and oversight of the oil industry are healthy and well cared for to reduce the potential for future accidents.

This is not a complete list by any means, but rather are items I could come up with off the top of my head. More detailed justification could be presented for each, and other items or variations of those presented could be enumerated.

I believe local governments that live and breathe (no pun intended) the oil industry every day need to have a say in incremental improvements that can cumulatively have a dramatic impact on improving the environment. Perhaps a portion of the Exxon settlement should be established in a sub-fund to be controlled by Prince William Sound municipalities and Native villages to address local steps that can improve the handling of wastes, transportation, and public health.

Many people will be skeptical of this approach, but I believe it has as much merit as purchasing trees and conducting studies. The idea of a healthy, restored, and enhanced Prince William Sound includes restored and enhanced communities located along the shores of the Sound. If environmental and health issues are not dealt

with in these communities, they will eventually migrate out into Prince William Sound.

I would appreciate your response to this line of reasoning, which is a departure from the discussions that have been proposed in Exxon settlement funding debates to date.

Sincerely,

Doug Griffin
City Manager

DG:blp

cc: Mayor John Harris
City Councilmembers
Senator Jalmar Kerttula
Senator Curt Menard
Representative Gene Kubina

DAVID H. THORSNESS
JAMES M. POWELL
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SIGURD E. MURPHY
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FRANK A. PFIFFNER
RALPH R. BEISTLINE*
R. CRAIG HESSER
ROBERT L. MANLEY
JAMES M. GORSKI
TIMOTHY R. BYRNES
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RONALD E. NOEL*
FREDERICK J. ODSEN
MICHAEL L. LESSMEIER**
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MATTHEW K. PETERSON
JOSEPH R. D. LOESCHER
KENNETH D. LOUGEE*
EARL M. SUTHERLAND
JOHN B. THORSNESS
THOMAS R. LUCAS
GREGORY W. LESSMEIER**

HUGHES THORSNESS
GANTZ POWELL & BRUNDIN
Est. 1939

ATTORNEYS AT LAW

509 WEST THIRD AVENUE
ANCHORAGE, ALASKA 99501-2273
TELEPHONE (907) 274-7522
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RON L. SAYER
JOHN J. TIEMESSEN*
VALLI L. GOSS
JOSEPH S. SLUSSER*

OF COUNSEL
JOHN C. HUGHES
RICHARD O. GANTZ

Reply to: ANCHORAGE

Direct Dial:
(907) 263-8251

February 7, 1992

Mr. Dave Gibbons
Interim Executive Director
Resource Restoration Coordination Group
Exxon Valdez Oil Spill Settlement Trustee Council
645 G Street
Anchorage, AK 99501

VIA FAX
276-7178

Re: City of Valdez Restoration/Enhancement Projects
Our File No. 925-133

Dear Dave:

Follow my testimony before the Exxon Valdez Settlement Trustees Council last night, Trustee Council member Attorney General Charlie Coe requested whether or not the City of Valdez had a list of specific projects it was considering as restoration/enhancement projects. Attached please find a letter dated January 27, 1992 from Valdez City Manager, Doug Griffin to myself which lists eleven potential projects. Mr. Griffin has been working on the anticipated costs associated with each of those projects with his staff and will forward those to you in the next few days.

Thank you in advance for your consideration of these projects and should you have any questions whatsoever, please don't hesitate to contact myself or Valdez City Manager Doug Griffin at 835-4313.

Very truly yours,

HUGHES, THORSNESS, GANTZ,
POWELL & BRUNDIN

By: William M. Walker
William M. Walker

WMW/rlh/1424:XKAH
Enc.
cc: Doug Griffin
Mayor John Harris
City Council Members

CITY OF VALDEZ, ALASKA
GATEWAY TO THE INTERIOR

January 27, 1992

Mr. William Walker
HUGHES, THORSNESS, GANTZ,
POWELL & BRUNDIN
509 West 3rd Avenue
Anchorage, Alaska 99501

Dear Bill:

I know you will be working on preparing information for the City Council regarding its input into considerations for use of Exxon settlement funds. The City has scheduled a work session at 6:30 p.m. prior to the February 3rd meeting to allow us to speak more informally with the Council about the direction they wish to pursue. There is also a hearing in Valdez on February 4th.

My thoughts are similar to yours regarding the need to explore "enhancement" of Prince William Sound, but I have other ideas which may also fit under the restoration aspects of the settlement.

Restoration and/or enhancements include, in no particular order:

1) Oil and grease separators to treat Valdez storm water (and improve storm water collection) before it goes into Port Valdez, thus reducing pollution of Prince William Sound waterways from this source.

2) Assistance to assure the most optimum solid waste disposal in Valdez (and other Prince William Sound communities) to reduce hazardous waste contamination of groundwater that also contributes to Port Valdez pollution. Improved landfills and solid waste collection systems may also reduce litter in Prince William Sound.

3) Funding for construction of a maritime wing in the Valdez Museum to include interpretation and education regarding the Exxon Valdez incident and oil spill prevention and response technology.

4) Funding to assist in the establishment of an oil spill cooperative and training facility for cold water oil spill response.

5) Assistance to the City of Valdez so that it may provide improved local government oversight of the oil and gas industry operating within its jurisdiction.

6) Funding to provide increased sport fishing and commercial fishing opportunities by increasing access to Prince William Sound and marketing abundant fish supplies.

7) Improving State marine parks located in Prince William Sound.

8) Improving transportation facilities to include roads, marine highway facilities, airports, and boat harbors will improve response to future spills, allow for easier collection and handling of hazardous materials from around Prince William Sound, and reduce accidents which may contribute to pollution of Prince William Sound waterways.

9) Funding to assist communities in handling waste oil from boaters and others.

10) Funding to allow local governments to train and equip firefighters, oil response personnel, and others responsible for responding to safety and environmental incidents.

11) Public health facilities to assure that personnel involved in the oil transportation business and those responsible for review and oversight of the oil industry are healthy and well cared for to reduce the potential for future accidents.

This is not a complete list by any means, but rather are items I could come up with off the top of my head. More detailed justification could be presented for each, and other items or variations of those presented could be enumerated.

I believe local governments that live and breathe (no pun intended) the oil industry every day need to have a say in incremental improvements that can cumulatively have a dramatic impact on improving the environment. Perhaps a portion of the Exxon settlement should be established in a sub-fund to be controlled by Prince William Sound municipalities and Native villages to address local steps that can improve the handling of wastes, transportation, and public health.

Many people will be skeptical of this approach, but I believe it has as much merit as purchasing trees and conducting studies. The idea of a healthy, restored, and enhanced Prince William Sound includes restored and enhanced communities located along the shores of the Sound. If environmental and health issues are not dealt

with in these communities, they will eventually migrate out into Prince William Sound.

I would appreciate your response to this line of reasoning, which is a departure from the discussions that have been proposed in Exxon settlement funding debates to date.

Sincerely,

Doug Griffin
City Manager

DG:blp

cc: Mayor John Harris
City Councilmembers
Senator Jalmar Kerttula
Senator Curt Menard
Representative Gene Kubina

ID # 920601050-15
Duplicate 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

type: recreation

RANKING H M L Rank Within Categories

H M L Rank Overall

Project Number - if assigned

920603093

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project:
Research and monitoring facility and Program

Justification: (Link to Injured Resource or Service)
Monitoring of hydrocarbons + other contaminates - Cook Inlet and Kodiak Island

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

Site monitoring stations in Kodiak, Shelikoff, Cook Inlet, Tuxedni and Seldovia Bay

Estimated Duration of Project: —

Estimated Cost per Year: $1,250,000/year, plus purchase of facility.

Other Comments:

Name, Address, Telephone:
Henry Kroll
PO Box 181
Seldovia, AK 99663
234-7496

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 _____

PLACE
STAMP
HERE

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

Attn: 1993 Work Plan

also comment into 92

Henry Kroll
P.O. Box 181
Seldovia, Alaska 99663

1/26/92

Dave Gibbons
Interm Administrative Director
645 G. Street
Anchorage, Alaska 99501

Dear Mr. Gibbons:

I have recently returned from a disastrous tanner crab fishing trip, the first ever in my forty year fishing career. I set forty tanner crab pots in Nuka Bay, rocky bay, and a few in other strategic places where we commercial fishermen have historically found crab.

The seven legal sized crab caught as a result of all this effort wouldn't feed two families. Mike Miller, owner of the eighty foot Independence, also fished these areas with similar results.

Their were a few under-sized crab in upper Nuka Bay but they were weak and didn't have any meat in them. They were starving to death.

We received reports that two boats from Seward tried to deliver some crab to Seward Fisheries but they were unacceptable because their was no meat in them.

Never before in my life have I had a fishing trip end in such utter failure. It's almost as if the outer coast between Seward and Homer has been sterilized. Has Hickle sold us out by settleing the state's oil claim to cheaply?

We fishermen are beginning to wonder if the massive oil spill that inundated this area in March and April two years ago has somehow depleted the spring plankton bloom that occurs each year between February and May, killing off the majority of the eggs, seeds, and larvae that perpetuate this vital source of food for all marine life.

The problem is we don't know for sure and we are not in a position to argue the point. <u>We have no data to back up such an assertion.</u>

We have no environmental monitoring or long term water sampling data to determine if the ever increasing amounts of hydrocarbons on the water's surface are having a detrimental affect on plankton growth and the survival of shellfish spat.

Why has fishery management refused to let us fish tanner crab on the west side of Cook Inlet ans Shelikoff Strait? Is it because these areas have been killed by the Exxon spill? Why did fish and game let the herring seiners take three thousand tons of herring from Kamashak Bay? Is it because the plankton was doomed and the herring would starve to death anyway?

As little as twelve years ago we had a three and a half

million pound king crab fishery and a four million pound tanner fishery in lower Cook Inlet. If this fishery existed today, the money calculated at today's price to fishermen living in the towns of Homer and Seldovia would be somewhere around $24,000,000.00. The processors profit on this product would be another $24,000,000.00. Most of this money would have been spent in these communities.

Kodiak has a similar situation only the monetary figures would be considerably higher; in the neighborhood of a hundred million dollars.

Currently in upper Cook Inlet we have twenty year-old, leaking, oil pipelines, mountains of oil-contaminated radioactive underwater drill tailings, oil wells that leak around the drill pipes. Occasionally there is a gas blow-out like the one that occurred back in 1987 where the natural gas erupted next to the drill pipe and shot nine hundred feet into the air for two weeks finally settled down to five hundred feet for another twenty days. Does natural gas have oil in it? How does it mix with sea water? We don't know.

I distinctly remember a rig fire where six people lost their lives and a considerable amount of oil was spilled in the winter with no clean-up due to pack ice. A few months later the Glacier Bay hit a rock in Cook Inlet coating fisherman's nets during the peak of the July salmon season.

For twenty years ballast water was dumped without treatment into Cook Inlet. Ever increasing amounts of tanker and shipping traffic, add ever increasing amounts of oil to the surface of the water in lower Cook Inlet.

Cook Inlet has a unique situation where the water table is turned over by thirty foot tides and glacier mud causes such turbidity that small amounts of oil are visually undetectable.

The environmental trade-off's of drilling and pumping oil in such a place seem at first glance to be acceptable because there is very little sea life in upper Cook Inlet however the oil dosn't stop their. It eventually floats to the surface five to twenty-five miles off from Anchor Point where the currents aren't swift enough to turn over the water-table.

Currents carry contaminated water from upper Cook Inlet down the West side into Kameshak Bay and Southwest into Shelikoff Strait where it eventually winds up on the beaches and bays affecting the ecosystems of the mainland and Kodiak Island.

It should be obvious even to the uninformed that even a small sheen of oil on the surface of the water is going to suffocate and poison all surface feeding microorganisms because oil severely depletes the water's ability to pick up life giving oxygen and carbon dioxide. If there is not enough carbon dioxide then plant or phytoplankton cannot grow in sufficient quantities to feed the rest of the microcosm. If there is not enough oxygen zooplankton will suffocate; hence the bottom of the food chain is killed.

When shrimp and crab spat hatch out of their eggs in March

they go immediately to the surface of the water to feed on plant plankton. If the plankton has absorbed traces of hydrocarbons and other complex molecules not normally found in the ocean, these complex molecules build up in their digestive tracts. They cannot be eliminated, eventually accumulating in quantities enough to kill. The spat die from several causes, starvation, poison, suffocation and cancer.

Shellfish spat hatch two times each year, at the beginning of the two plankton blooms. The biggest bloom starts at the end of February and ends in may. A smaller bloom that produces approximately two thirds of the amount of sea life begins in August and ends in October. If even small traces of oil are present during these critical times it disrupts the food chains affecting all of us who live by the sea!.

Has the state made a bad environmental trade-off in Cook Inlet? The amount of revenue going into the state coffers from Cook Inlet Oil development not counting the state oil carried by tankers from Valdez to refineries in Kenai is approximately sixty million dollars each year. If we still had a crab fishery the hundred million plus in revenues derived from fishing would be going directly into the private sector.

Think of the millions of people that would have benefited from eating all that seafood.

We are twenty-five years overdue for long term hydrocarbon monitoring stations in Kodiak, Shelikoff, Cook Inlet, Tuxedni Bay and Seldovia Bay. Think of the benefits that such long term statistics would be to your Exxon litigation or environmental monitoring in general. Even just one data base such as the amount of hydrocarbons in the water would allow us to ascertain the magnitude and approximate location of a spill enabling us to help direct cleac-up crews toward the center of a spill.

Studies are currently under way to determine if Alaska's salmon contain harmful levels of PCB's. We all need to know rather or not we should eat the food harvested from the sea. Chances are increasing that some time during our lives we will eat something that will kill us. It probably won't kill us quickly but if nothing is done many people will die slow and agonizing deaths. Humans on this planet will die out from ignorance and apathy more than any other cause. We will have to be ever more conscience of what we eat or we will cease to exist.

The cost of a monitoring program is small compared to what is at stake. The approximately cost of one monitoring station handling six water samples a week is $250,000.00 per year. The cost to process one sample is $200. A boat should be sent out at low tide approximately fifteen miles from Anchor Point for the lower Cook Inlet samples. The samples taken in Tuxedni Bay could be taken from the cannery dock at high tide. In Seldovia the samples should be taken in the middle of the entrance of the bay using a skiff at or near high tide to eliminate chances of local contamination from the bay. The samples would be taken in sterilized jars at weekly intervals on the surface and one

meter deep. The jars could be sent to the University of Alaska or any independent laboratory for spectral analysis of hydrocarbons and other contaminates. We will keep and correlate all data on our computers. Printouts in graph and other form will be made available to the public.

Dr. Jere Murray and myself would be available to take the samples in Seldovia bay and lower Cook Inlet. We can form the independent environmental monitoring corporation or use my New Wave Seafood Corporation. If we decide to go non-profit, I have a non-profit corporation set up for educational purposes.

Seldovia is an ideal location for a permanent educational, environmental research and monitoring facility. In the future we envision purchasing an existing facility where the samples can be processed and the records stored. A two to five million-dollar grant would enable us to set up and operate this facility permanently by investing the principal and using a portion of the interest to operate the facility. Picture a marine institute with ocean science classes teaching people of all ages, fifty P.H.D.'s doing independent research for various firms leasing lab facilities, plankton biomass sampling to keep tabs on the recovery of Cook Inlet and Kodiak Island waters. Picture new and more efficient aquaculture and mariculture food production.

My phone number is (907) 234-7496. Dr. Jere Murray's phone is (907) 234-7646.

What better purpose could a small amount of the money received from the state of Alaska's nine hundred million dollar Exxon settlement be used for other than an independent environmental monitoring program?

We urge you to help secure the funding for this program out of the state Exxon settlement. We are also seeking funding from congress and other sorces.

How would it look If the State of Alaska refused to fund this simple monitoring program out of the Exxon settlement and some other organization did so?

Sincerely,

Henry Kroll

Henry Kroll

P.S. Please help me by giving a copy to your local representative and endorcing my position on this.

CC Ted Stevens, Frank Murkowski, Larry Slone, Gail Phillips, Mike S. Navarre, Homer News, Alaska Commercial Fisherman,

Dear Mr. HERRFURTH, WHY KILL THIS VITAL FOOD PRODUCING AREA FOR THE SMALL AMOUNT OF OIL IT CONTAINS? DRILL IN ANWAR OR THE DESERT NOT HERE! CARL ROSIER IS WHOLEY RESPONSIBLE FOR THE ENVIRONMENTAL KILL THAT IS TAKING PLACE IN COOK INLET.

Feds may expand Cook Inlet lease sale area

by Hal Spence
Staff Writer

Oil drillers may be shuttling platforms around a much bigger Monopoly board if a proposal to expand a Cook Inlet lease sale area is OK'd by the Department of the Interior.

The U. S. Mineral Management Service, a division of the interior department, recently issued a request for comments on new alternatives to the proposed five-year comprehensive Outer Continental Shelf (OCS) Natural Gas and Oil Resource Management Program for 1992-1997. That is the same plan it sought comments on late last summer.

The alternative plan proposes to expand two areas in Cook Inlet collectively known as Oil and Gas Lease Sale 149. Currently, sale 149 covers 429,000 acres extending from just south of Kalgin Island to just below Anchor Point, plus another 738,000 acres northwest of Kodiak Island in the Shelikof Strait.

The oil industry apparently wants more space from which to choose.

According to the service, responses to calls for comments on the proposed five-year plan included "several industry commentors" who requested that the proposed Cook Inlet leasing area be enlarged, based on new geological and geophysical information.

The management service said it is considering the industry request and may enlarge Sale 149 to include approximately 761 blocks, consisting of 3.7 million acres. At the same time, it proposes keeping the original limit on the total number of leases in the area to no more than 250. (See map).

Asked what new information prompted the oil industry to request an expanded search area, John Schindler, chief of the service's Environmental Assessment Section in Anchorage, said he could not say for sure but believes it may have to do with a new method of assessing oil and gas potential from geological data.

"There's a lot of hearsay," he said, "but the rumor is that the two wells recently discovered near Kalgin Island in Cook Inlet were the result of applying a new method of looking at the seismic work."

Schindler said it is hard to predict whether the area will be expanded or not, but that public reaction is likely to have an effect on the decision.

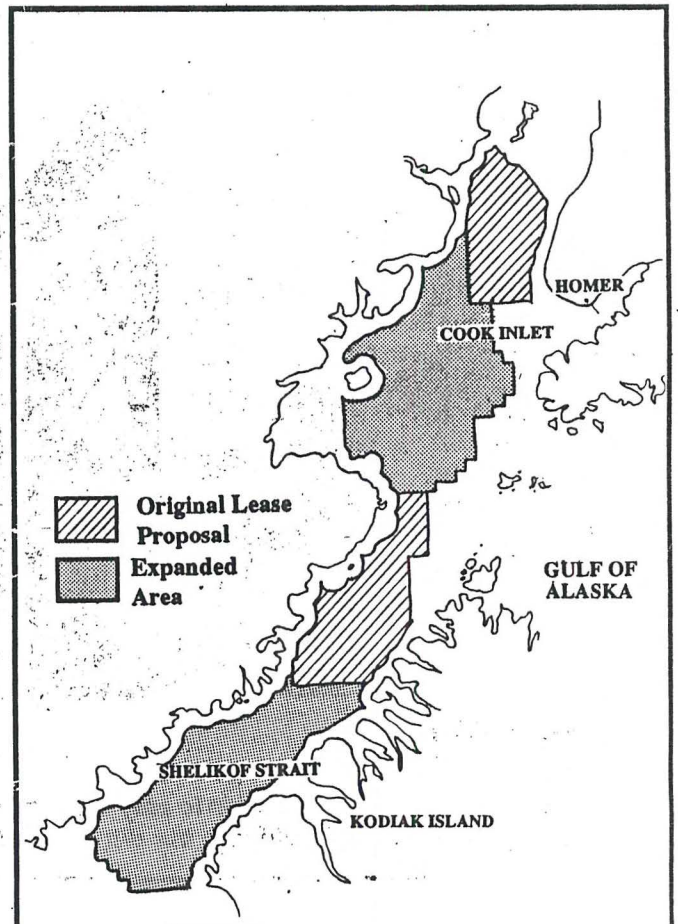
"If comment is heavily against it, I'm sure the secretary (Sec. of the Interior Manuel Luhan) won't do it," he said.

The management service said it is also considering a request by Cook Inlet area residents that Lease Sale 149 be renamed the Cook Inlet/Shelikof Strait lease sale to make it clear that Shelikof Strait is part of the planning area.

While it is considering expanding the Cook Inlet leasing region, the service said comments on the OCS comprehensive plan have led planners to consider reducing the size of proposed leasing areas elsewhere in Alaska. Five so-called "lower potential" planning areas — including Norton Basin, Navarin Basin, St. Matthew-Hall, Hope Basin and St. George Basin — would be reduced to two: Hope Basin and St. George Basin.

Comments are due by Jan. 31. They may be sent to Director, Minerals Management Service (MS-4230), 1849 C Street N.W., Washington, D.C. 20240. Envelopes or packages should be marked "Comments on Proposed five-year Comprehensive Program—Cook Inlet, Hope Basin, St. George Basin Planning Areas."

For further information contact: Paul Stang or Jan Arbegast, Branch of Program Development and Planning at 202-208-3072, or Robert Brock, Regional Supervisor, Leasing and Environment, Alaska OCS Region at 271-6045.



ID # 920603093

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

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

✓ Category

Restoration Monitoring

✓ Lead Agency

NOAA

✓ Cooperating Agency(ies)

None identified

(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 _____

1052603 1

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project: Study of petroleum hydrocarbon spectra at selected sites

Justification: (Link to Injured Resource or Service)

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

Estimated Duration of Project: _____

Estimated Cost per Year: _____

Other Comments:

Name, Address, Telephone:

Albert A. Dekin
EVOS archaeological
Damage Assessment Project
Dept of Anthro.
Binghamton, NY

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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PLACE
STAMP
HERE

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

Attn: 1993 Work Plan

Binghamton

State University of New York at Binghamton
P.O. Box 6000
Binghamton, New York 13902-6000

Exxon Valdez Oil Spill Archaeological
Damage Assessment Project
Department of Anthropology
Telephone (607) 777-6300
FAX (607) 777-2723

12 May 1992

Dr. David R. Gibbons
Interim Adminstrative Director
EXXON VALDEZ Oil Spill Restoration Team
645 G Street
Anchorage, Alaska 99501

Dear Dave,

We have received your solicitation of ideas on restoration projects for the 1993 work plan. I am writing to you directly because some of what I am about to disclose has not yet been reviewed by our sponsor and is not yet subject to public disclosure. However, since your involvement in our work has made you aware of the results of our research, it seems reasonable for me to address this matter to you and you can use it as you see fit.

I was surprised at the number and diversity of petroleum hydrocarbon spectra found in the 10 sites tested for archaeological injury. A more thorough study of campsites, landing zones, fuel depots and other pre and post spill land use areas might reveal a surprising amount of refined petroleum contamination, albeit in trace amounts. This itself would be an interesting piece of information, indicating that the extent of trace contamination is much larger than previously suspected. I would think that a systematic sampling of these areas using techniques similar to those we used for evaluating injury to archaeological sites would be most interesting.

If you think this an interesting problem, then I will be glad to flesh it out a bit or file the "Format for ideas for Restoration Projects form". Please let me know if you want anything further from me at this point.

Thanks for your help.

Sincerely,

Albert A. Dekin, Jr.
Associate Dean

ID # 920526031

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

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

✓ Category

~~Damage Assessment~~ Management Action

✓ Lead Agency

~~ADNR~~ XCOAA

_____ Cooperating Agency(ies)

(Y) N Passed initial screening criteria

type: archaeology

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

rine Science
F CENTER

Phone: (907) 224-5261
Fax: (907) 224-3392

UNIVERSITY OF ALASKA FAIRBANKS

School of Fisheries and Ocean Sciences
Box 730, Seward, Alaska 99664

May 27, 1992

To: Exxon Valdez Trustee Council
645 G St.
Anchorage, Ak
99501

A new marine mammal and sea bird facility Alaska SeaLife Center (ASLC) is being planned for Seward, Alaska. Its main objective is to provide a permanent and adequate place where injured or oiled marine mammals and sea birds can be cared for until they are fit for release. The ASLC will also have research facilities for scientists interested in the general biology of marine mammals and sea birds. There will be a strong public education program at ASLC, with the main theme to be conservation of marine resources. Issues such as declining numbers of sea lions, seals and marine birds, effects of oil pollution and interactions between fisheries and sea life will be the type of material explored. Interpretive graphics will explain the role of food webs and the fragility of habitats.

The new facility is a cooperative effort involving a private non profit group called Seward Associations for Advancement of Marine Science (SAAMS), the City of Seward, and the University of Alaska. The City of Seward has already allocated shore front property for the project and the firm Cambridge Seven, of Boston, has done the preliminary design. Alaska badly needs a marine mammal rescue center and I hope that construction of this facility can be considered for funding with oil spill restoration funds. SAAMS will submit a detailed proposal for the project in the near future.

Sincerely,

A. J. Paul

Dr. A. J. Paul
Associate Professor of Marine Science

ID # 920527042

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

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

✓ Category

Tech Support

_____ Lead Agency

XLOAA

_____ Cooperating Agency(ies)

_____

Y (N) Passed initial screening criteria

unknown

type: education

RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Document ID Number
920612241
☐ A-92 WPWG
☑ B-93 WPWG
☐ C-RPWG
☐ D-PAG
☐ E-MISC.

Title of Project: ALASKA SEA LIFE CENTER

Justification: (Link to Injured Resource or Service)

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

A WORLD CLASS facility for the rehabilitation and research of marine animals, including a public viewing & education component. Facility to be located in Seward, Alaska.

The facility would research the effects of the Spill & the oil industry on Alaska's marine life - mammals & Birds - In addition will serve as a rehab. center for marine life injured or stranded as a result of future occurrences.

Estimated Duration of Project: ?

Estimated Cost per Year: ? (Annual Op. Costs after 1st year will be provided from ~~resources~~ revenues generated by facility)

Other Comments:

Total Construction (Plus 1st Year ops Budget) is $45 Million

Name, Address, Telephone:

LINDA MURPHY
BOX 843
SEWARD, AK 99664
224-7482

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.

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

Proposal for Construction and Operation of the Alaska SeaLife Center

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.

THE PROGRAM

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

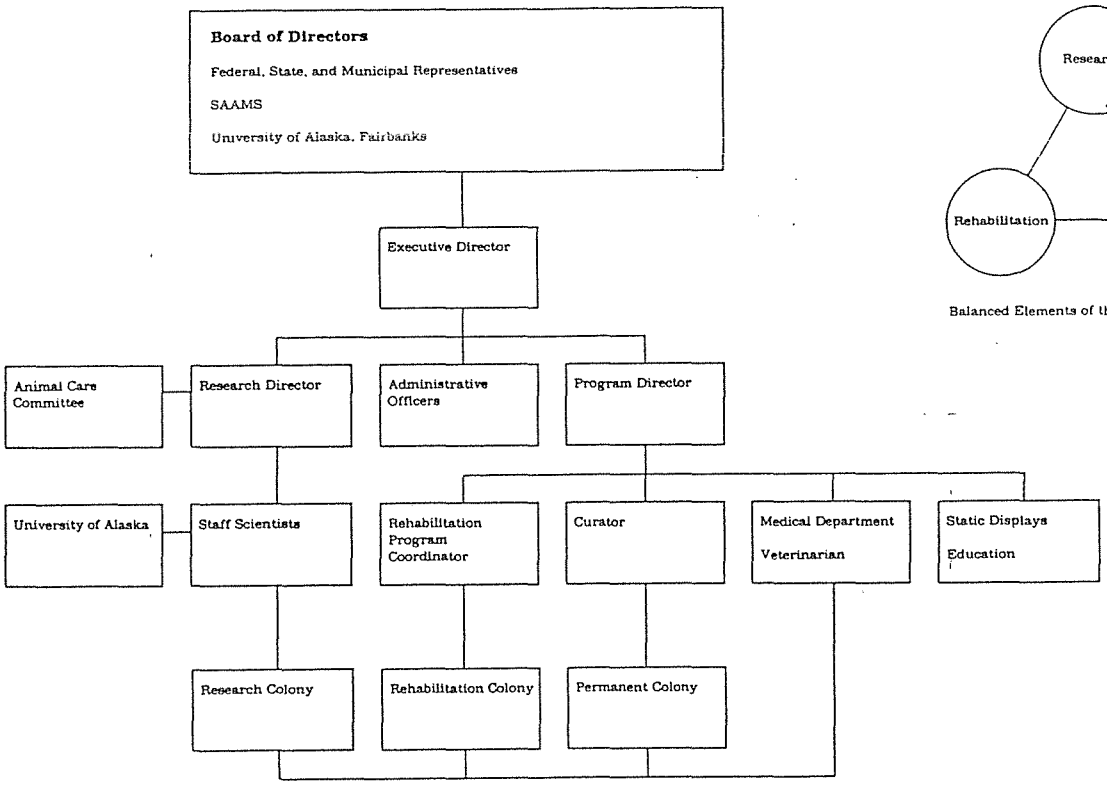
Institutional Plan

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.

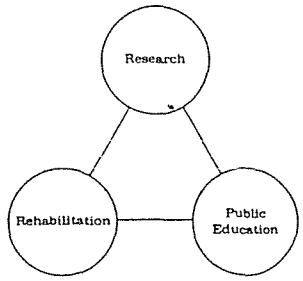
The proposed administrative structure for the ASLC reflects the balance among the Center's three missions: rehabilitation, research, and educational displays. Setting the course of the Center is a board of directors consisting of representatives from SAAMS, the University of Alaska, and three levels 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

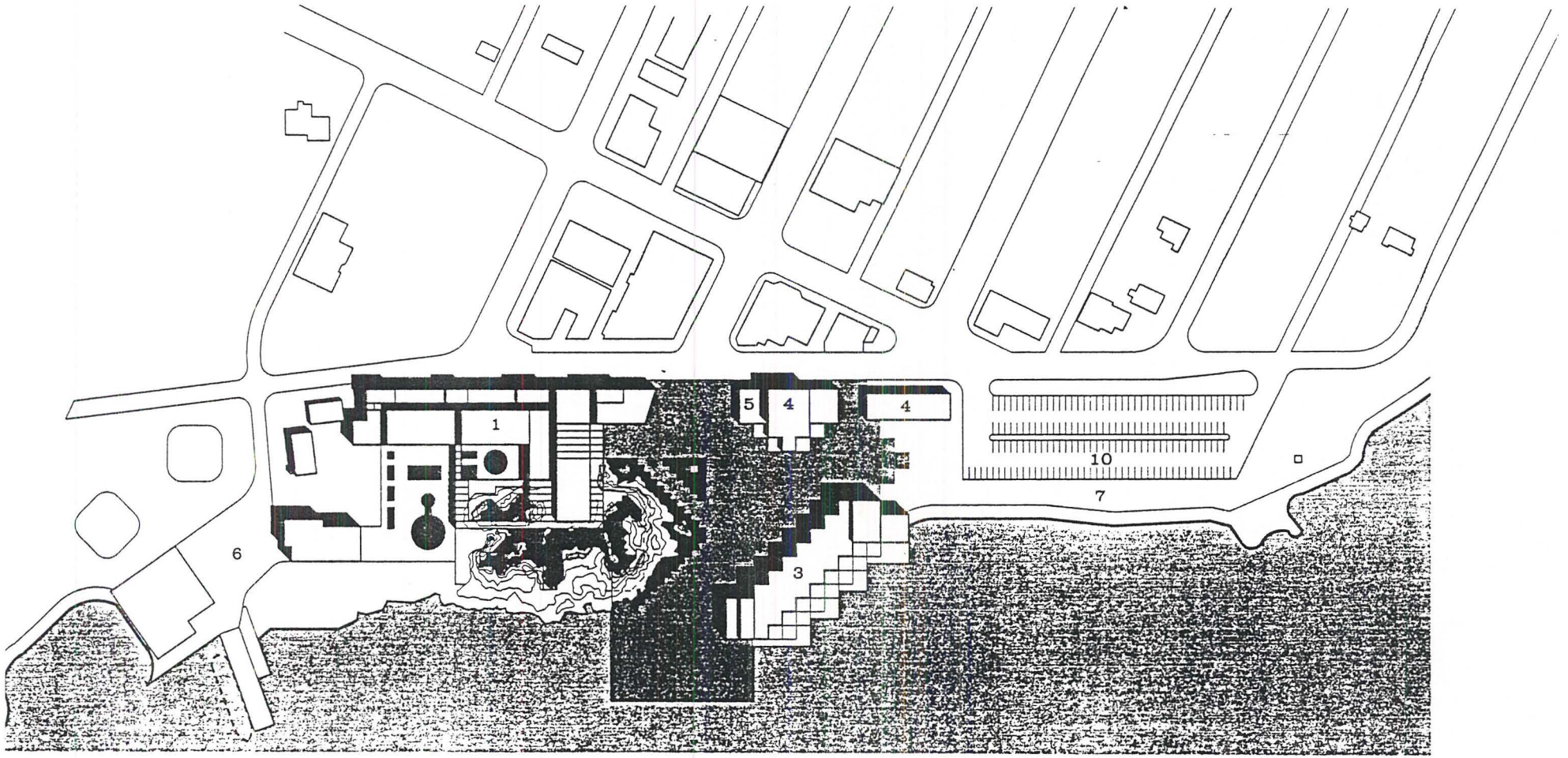
BUDGET LINE ITEM	TOTAL COST IN 1996 DOLLAR
Salaries (FTE=11)	667,000
Benefits (at 50% of salary)	333,500
PERSONNEL SUBTOTAL	1,000,500
Telephone	39,253
Supplies	175,066
Postage	22,947
Professional Fees	20,000
Outside Services	20,000
Equipment	150,000
Travel	27,617
Professional Development	7,885
Dues/Subscriptions	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.



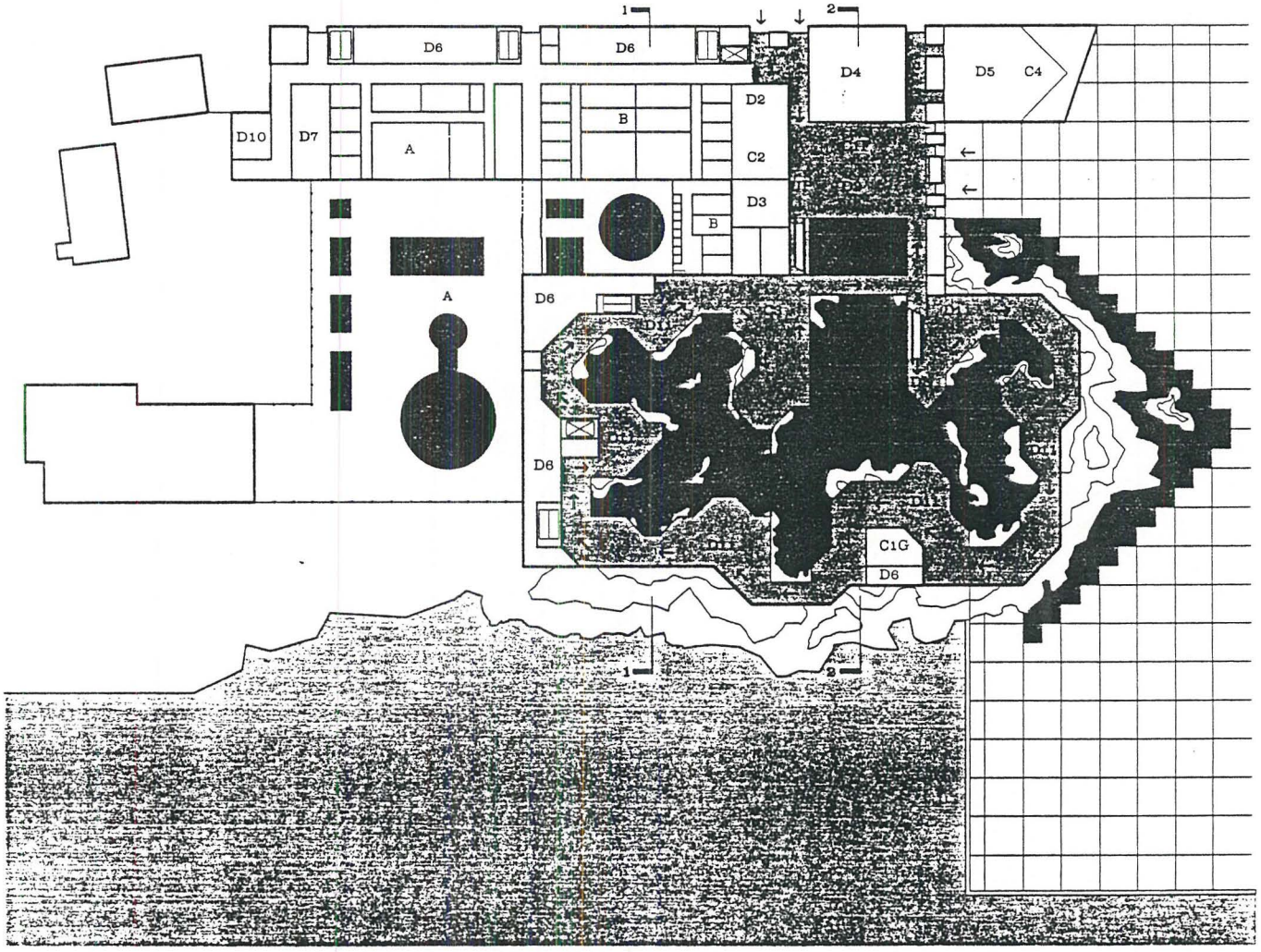
1 New Sea Life Center
2 City Plaza
3 Conference Center/Hotel/ Restaurant
4 Retail
5 Visitor Center
6 Existing I.M.S. Complex
7 Existing Public Esplanade Park
8 Marine Center Entry
9 Water Feature
10 Public Parking

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



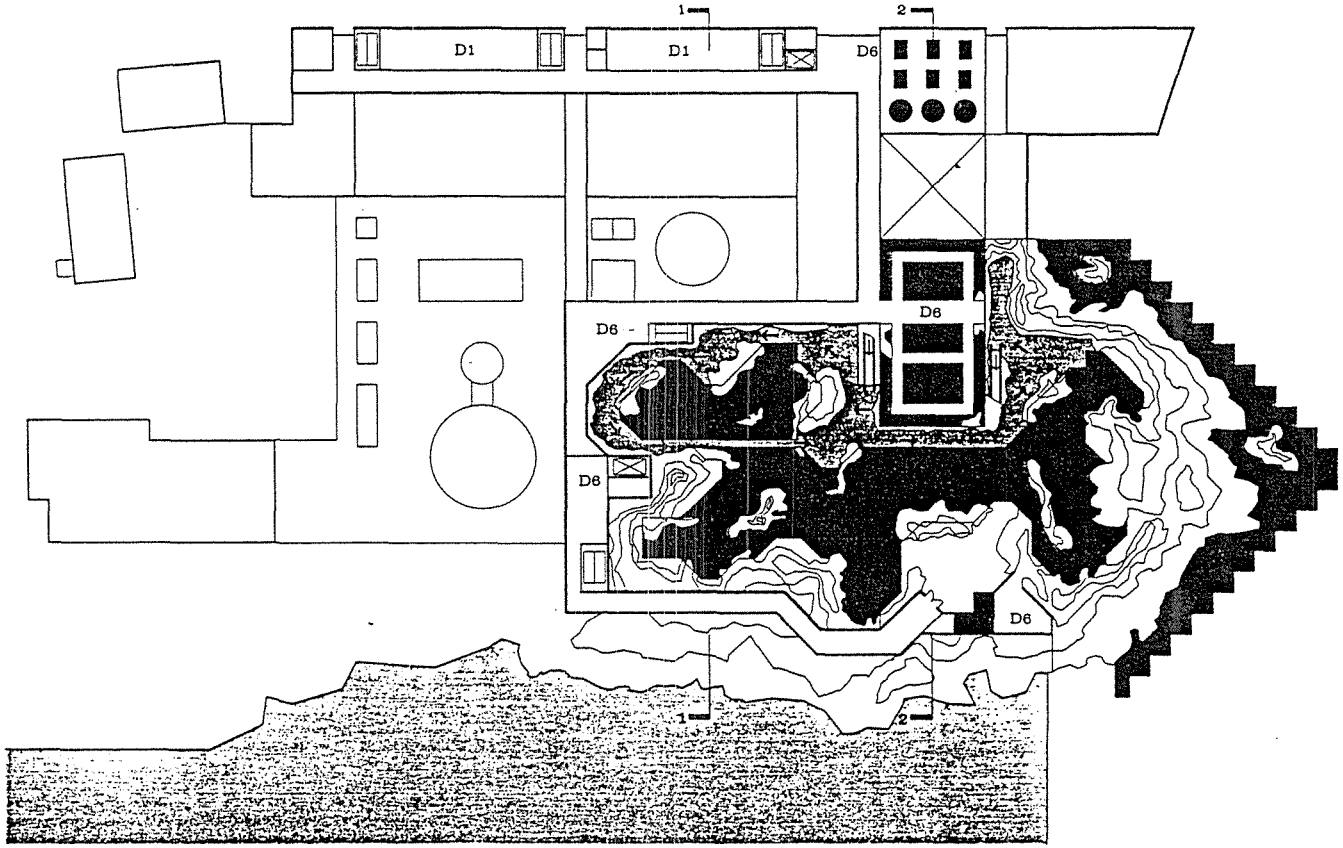
Scale: 1"=50'

Upper 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'

Lower Level

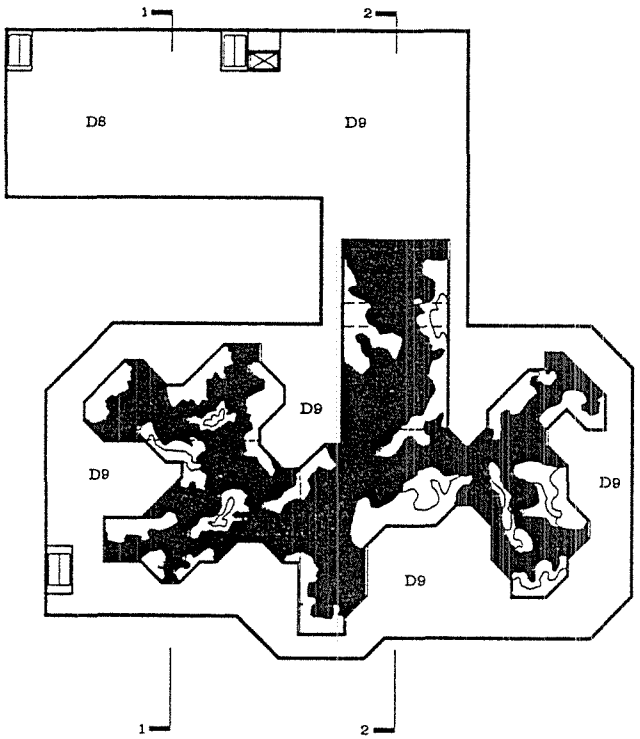
Key

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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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
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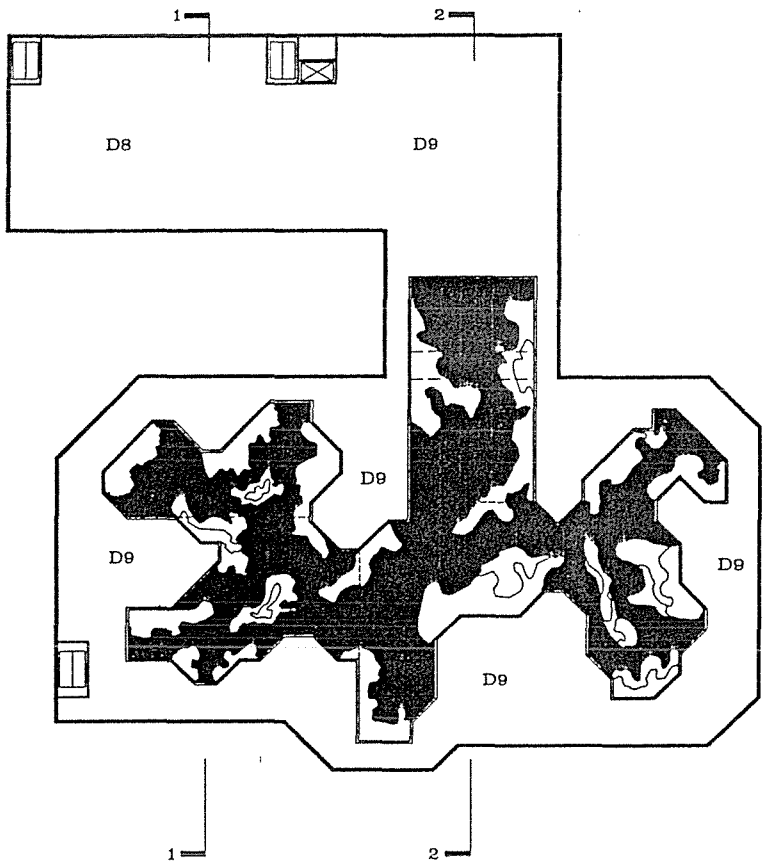

Scale: 1"=50'

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
- 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
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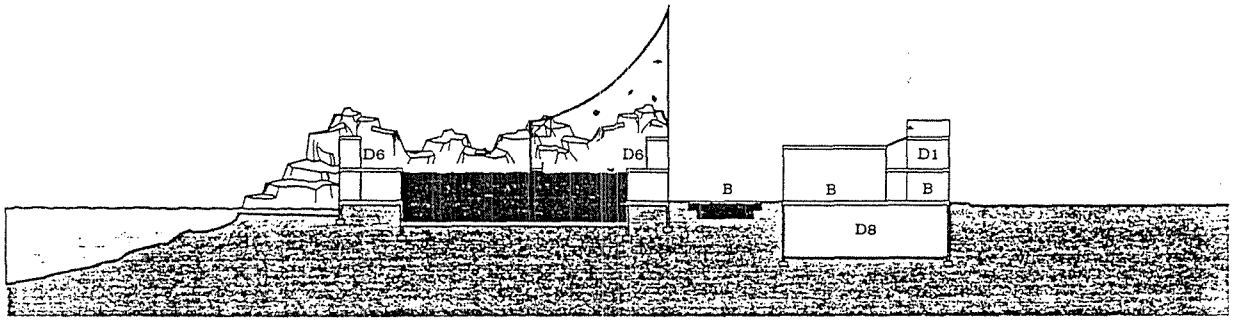
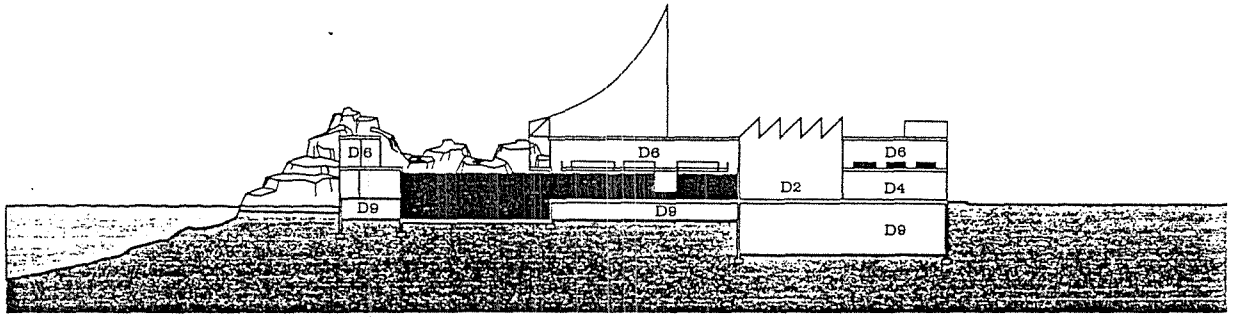


Section 1



Section 2

Scale: 1"=50'

Conceptual Building Program

Program Space Description	Exterior Area sf	Interior Area sf
A. Research (Interior)		
1. Wet Laboratories		1,500
2. Biochemistry Laboratory		700
3. Computer and Electronics Laboratory		400
4. 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
4. Pathology Area		500
5. 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

Program Space Description		Exterior Area sf	Interior Area sf
Education			
a.	Workshops/Classrooms (2 @ 400 sf)		800
b.	Education Director		100
c.	Education Staff (2 stations)		150
d.	Library		200
e.	Volunteer Coordinator		100
f.	Volunteers		200
g.	Meeting Room		150
ubtotal			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
ubtotal			3,500
Auditorium			
a.	Hall (250-300 seats)		3,000
b.	Preparation Room		500
c.	Projection Room		200
d.	Storage		300
ubtotal			4,000
Curatorial			
a.	Water Quality Lab		400
b.	Necropsy		400
c.	Main Pathology Lab		400
d.	Freezer		800
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
Subtotal			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 Instruc-tions.

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	8a	(B) Other	
	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-

f **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-	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.	76		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.	77		X
78a	Did your organization have unrelated business gross income of $1,000 or more during the year covered by this return?	78a		X
b	If "Yes," have you filed a tax return on **Form 990-T,** Exempt Organization Business Income Tax Return, for this year?	78b	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.	78c		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.	79		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.)	80a		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?	81b		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?	82a	X	
b	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)?	83a		X
b	If "Yes," did you comply as described in the instructions? (See General Instruction L.)	83b	N/A	
84a	Did you solicit any contributions or gifts that were not tax deductible?	84a		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.)	84b	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).)	85a	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.)	86c	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?	90	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			

Part VII Analysis of Income-Producing Activities

Enter gross amounts unless otherwise indicated.	Unrelated business income		Excluded by section 512, 513, or 514		(e) Related or exempt function income (See instructions.)
	(a) Business code	(b) Amount	(c) Exclusion code	(d) Amount	
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 ▶ Timothy A. Olson 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
92-0132479

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 P.O. Box 389 Seward, 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 Foundation), 501(e), 501(f), 501(k), or Section 4947(a)(1) Charitable 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 Foundation Status** (See instructions for definitions.)

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).

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

9 ☐ 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
16	Membership fees received	-0-	Was			-0-
17	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)

Part IV **Support Schedule** (continued) **(Complete only if you checked box 10, 11, 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?		
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?		
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? If "Yes," please describe; if "No," please explain. (If you need more space, attach a separate statement.)		
32	Do you maintain the following:		
32a	Records indicating the racial composition of the student body, faculty, and administrative staff?		
32b	Records documenting that scholarships and other financial assistance are awarded on a racially nondiscriminatory basis?		
32c	Copies of all catalogues, brochures, announcements, and other written communications to the public dealing with student admissions, programs, and scholarships?		
32d	Copies of all material used by you or on your behalf to solicit contributions? 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:		
33a	Students' rights or privileges?		
33b	Admissions policies?		
33c	Employment of faculty or administrative staff?		
33d	Scholarships or other financial assistance? (See instructions.)		
33e	Educational policies?		
33f	Use of facilities?		
33g	Athletic programs?		
33h	Other extracurricular activities? 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?		
34b	Has your right to such aid ever been revoked or suspended? If you answered "Yes" to either 34a or b, please explain using an attached separate statement.		
35	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.)		

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 Transfers To and Transactions and Relationships 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.

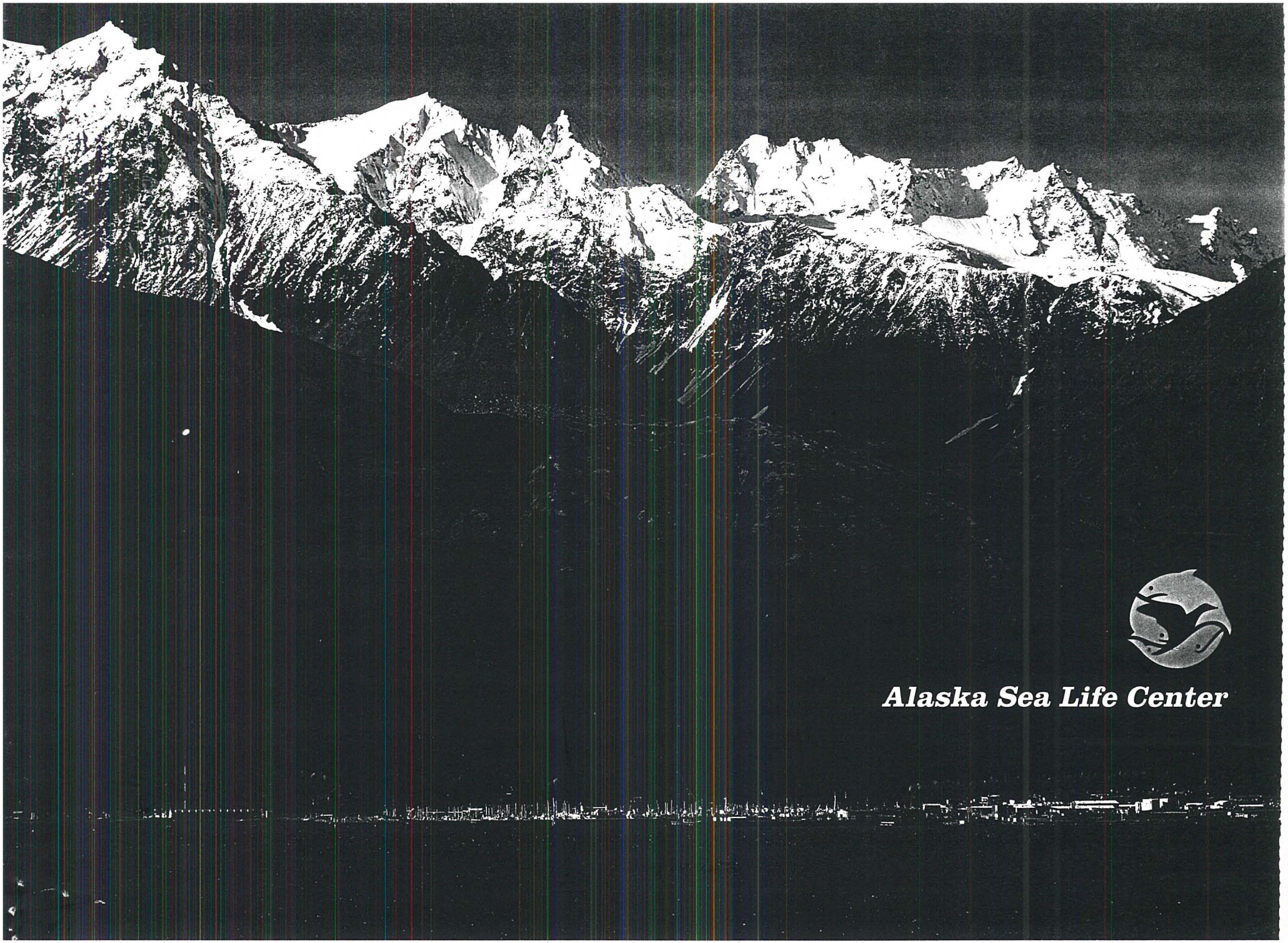
(a) Line no.	(b) Amount involved	(c) Name of noncharitable exempt organization	(d) Description of transfers, transactions, and sharing arrangements
		N/A	

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

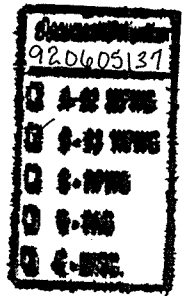
b If "Yes," complete the following schedule.

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

★ U.S.GPO:1991-0-285-137


Alaska Sea Life Center

Contents



ID #_____

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

ID stamped/Input completed
Name
Affiliation
Costs

✓ Category

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✓ Lead Agency

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_____ Cooperating Agency(ies)

_____

Y N Passed initial screening criteria

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RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

see 980514013
920527042

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project: SAAMS I

Seward Association for the Advancement of Science Sealife Center

Justification: (Link to Injured Resource or Service) Rehab for injured mammals & Research to justify why sealions are going extinct.

Description of Project: (e.g. goal(s), objectives, location, rationale, and technical approach)
Sealife Center for Research Education & Rehabilitation of the injured after a major oil spill like occurred in P. W. S.
Further study on why Mammals, birds & sea life are extinct & More and more being added to the list

Estimated Duration of Project: 5 years to build the center

Estimated Cost per Year: 8 million total project $40 million

Other Comments: Please Read the attached

$100,000 in private donations raised to date

Name, Address, Telephone:

Mike & Arlene Wiley
SEWARD WATERFRONT LODGING
550 Railway (On-The-Bay) P.O. Box 618
SEWARD, ALASKA 99664
(907) 224-5563

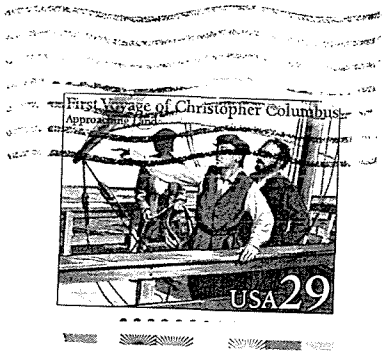
Oil spill restoration is a public process. Your ideas and suggestions will not be proprietary, and you will not be given any exclusive right or privilege to them.

fold here

Wiley
P.O.B. 618
Seward
AK 99664

MAY 0 6 REC'D

ANCHORAGE AK PM 5 MAY 1992



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

Attn: 1993 Work Plan

BIG PLANS FOR SEA LIFE CENTER

Seward's dream, not folly

SEWARD'S MOVERS and shakers have a dream — a dream that would make Southcentral Alaska an even more exciting tourist destination.

Tom Smith, executive director of the Institute of Marine Science, and Willard Dunham, chairman of the Seward Association for the Advancement of Marine Science, told the state chamber of commerce last week of plans for a $40-million Alaska SeaLife Center.

A small group of dedicated people have been working on this idea for several years — long before the 1989 Exxon Valdez oil spill cast an international spotlight on Alaska's marine life.

The year-round center — a collaboration of the University of Alaska's Institute of Marine Sciences and the city of Seward — would be self-supporting and non-profit. It would include marine research, rehabilitation of stranded marine animals, and educational exhibits of live marine animals.

PRELIMINARY plans call for aquariums, open-air rookeries, hotel, restaurant and gift shops in addition to the research facilities. They envision Steller sea lions, otters and birds in underwater and outdoor habitats.

It sounds grand.

So far, more than $100,000 has been raised by volunteers to do preliminary studies and publish an enticing brochure. The next step — find the big money.

The steering committee will be turning to major corporations and foundations looking for grants this year. If all goes as hoped, the doors will open by fall of 1996. Mr. Dunham said they "don't want state dollars" because they don't want to be subject to the vagaries of Legislative appropriations. That's smart.

However, he added that oil spill settlement money might be a good source of funds. We agree. What better way to spend some of the settlement money than to invest in a center that would attract scientists and tourists from around the world. And create jobs to boot.

Now that's an investment in the future.

ID # 9205140009
see 9205140013
7042
S137

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

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

✓ Category

_____

_____ Lead Agency

_____

_____ Cooperating Agency(ies)

_____

Y N Passed initial screening criteria

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RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

Document ID Number
92051401 3
☐ A-92 WPWG
☒ B-93 WPWG
☐ C-RPWG
☐ D-PAG
☒ E-MISC.

FORMAT FOR PUBLIC IDEAS FOR RESTORATION PROJECTS

SC-< 920514009
920527042

Title of Project: SAAMS II SAMS Seward Association for the Advancement of Science Sealife Center

Justification: (Link to Injured Resource or Service) Better understanding of impacts to marine life

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

Seward Marine Center
Create a research + educational facility in Seward. Related to marine mammals + sea life.

Estimated Duration of Project: 5 years

Estimated Cost per Year: 8 million total project $40 million

Other Comments:
$100,000 in private donations raised to date

Name, Address, Telephone:

GORDON WICKSTROM
BOX 1795
SEWARD AK 99664
907-224-5276

Because 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.

Dear Concerned Citizen:

The Exxon Valdez Trustee Council is soliciting ideas from the public on restoration projects that may be undertaken in 1993 and beyond. If you have suggestions for work that you believe should be considered in designing next years' work plan, please provide them to us on the form provided or on a separate page according to the format indicated. Your ideas will be considered along with other ideas received. Submit as many suggestions as you like. The Trustee Council will consider these suggestions to assist in drafting the 1993 and future work plans. Suggestions must be received by **June 15, 1992.**

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 over them. Proprietary information should not be divulged unless you want it made public.

fold here

GORDON WICKSTROM
BOX 1295
SEWARD AK 99664

MAY 08 REC'D

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

Attn: 1993 Work Plan

ID # 9205140 13

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

ID stamped/Input completed
Name
Affiliation
Costs

✓ Category

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✓ Lead Agency

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_____ Cooperating Agency(ies)

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Y N Passed initial screening criteria

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RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

9205270 42

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project: SAAMS

Justification: (Link to Injured Resource or Service)

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

Endorsing Seward AK Sealife Center

Estimated Duration of Project: _____

Estimated Cost per Year: _____

Other Comments:

Name, Address, Telephone:

Dr. A.J. Paul
U of A Fbx
School of Fisheries + Ocean Sciences
Seward

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 _____

PLACE
STAMP
HERE

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

Attn: 1993 Work Plan

Institute of Marine Science
SEWARD MARINE CENTER

Phone: (907) 224-5261
Fax: (907) 224-3392

UNIVERSITY OF ALASKA FAIRBANKS

School of Fisheries and Ocean Sciences
Box 730, Seward, Alaska 99664

May 27, 1992

To: Exxon Valdez Trustee Council
645 G St.
Anchorage, Ak
99501

A new marine mammal and sea bird facility Alaska SeaLife Center (ASLC) is being planned for Seward, Alaska. Its main objective is to provide a permanent and adequate place where injured or oiled marine mammals and sea birds can be cared for until they are fit for release. The ASLC will also have research facilities for scientists interested in the general biology of marine mammals and sea birds. There will be a strong public education program at ASLC, with the main theme to be conservation of marine resources. Issues such as declining numbers of sea lions, seals and marine birds, effects of oil pollution and interactions between fisheries and sea life will be the type of material explored. Interpretive graphics will explain the role of food webs and the fragility of habitats.

The new facility is a cooperative effort involving a private non profit group called Seward Associations for Advancement of Marine Science (SAAMS), the City of Seward, and the University of Alaska. The City of Seward has already allocated shore front property for the project and the firm Cambridge Seven, of Boston, has done the preliminary design. Alaska badly needs a marine mammal rescue center and I hope that construction of this facility can be considered for funding with oil spill restoration funds. SAAMS will submit a detailed proposal for the project in the near future.

Sincerely,

A. J. Paul

Dr. A. J. Paul
Associate Professor of Marine Science

LU # 92052/042

SC 92051400 9
SC 92051401 3

EXXON VALDEZ **OIL SPILL TRUSTEE COUNCIL**

FORMAT FOR IDEAS FOR RESTORATION PROJECTS

Title of Project: SAAMS III

Seward Association for the Advancement of Marine Sciences Sealife Center

Justification: (Link to Injured Resource or Service)

Continued research into the effects of the EVOS

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

Endorses the construction of the Seward Association for the Advancement of Marine Sciences Sealife Center

Estimated Duration of Project: 5 years

Estimated Cost per Year: $8 million 40 million total

Other Comments:

Name, Address, Telephone:

A.J. Paul, Ph.D.
Institute of Marine Science - Seward
University of Alaska - Fairbanks
P.O. Box 730
Seward AK 99664-0730

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 _____

PLACE
STAMP
HERE

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

Attn: 1993 Work Plan

ID # 920527042

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

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

✓ Category

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✓ Lead Agency

_____

_____ Cooperating Agency(ies)

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Y N Passed initial screening criteria

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RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

Document ID Number
920615276
- [ ] 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: SAAMS IX
Alaska Sea Life Center at Seward

Justification: (Link to Injured Resource or Service)

Would be an ongoing project to rehabilitate injured animals, study them at the research part of the facility and to educate Alaskans and visitors about sea life.

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

This would be the only aquarium/science center/rehabilitation center in one facility. Most aquariums are only public viewing, most rehabilitation centers only rehabilitate, most scientific facilities only do experiments, etc., in this facility all could be done at the same place. For research the scientists would be brought to the animals in their natural climate, etc., instead of bringing the animals to the researchers, usually Outside of Alaska, this would be much more beneficial to the the animals. This would also apply to rehabilitation. The public viewing aspect would allow visitors to Kenai Fjords National Park (which Seward is the entrance to), to see animals up close either before or after the have visited the Park itself. Children from all over southcentral Alaska can see animals up close. The existing University of Alaska Marine Science Center at Seward already has both scientific projects going on under the auspices of the National Science Foundation this would provide additional room for more scientists to come to Alaska and have more federal dollars spent here. Once built and in operation the Sea Life Center would be an on-going project that would bring dollars in rather than inhibit economic development. It would be largely self-supporting through admission to the publi viewing facility and through the science grants. It would be a tremendous asset to the tourist industry for al l of Alaska--i.e. the boost given tourism in California by the Monterey Aquairuam, etc.

Estimated Duration of Project: On-going, life of project could be lifetime. Construction and set-up would probably take about four years to completion.

Estimated Cost per Year: Maintenance costs could be upwards of $3 million a year but again the estimated 350,000-400,000 visitors (Nat'l park already gets 200,000) and grants for research would bear most of costs.

Other Comments:

I think the project has the potential to benefit all of Alaska. The City has donated about $2million worht of land to the project (waterfront), More than $125,000 in cash has been raised locally. The firm of Cambridge 7, leading desisngers of aquariums has already been hired and have done preliminary planning, etc.

Name, Address, Telephone:

Beverly Dunham
Box 27
Seward, Alaska 99664
224-5623

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.

Beverly Dunham

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

FORMAT FOR PUBLIC IDEAS FOR RESTORATION PROJECTS

Document ID Number
920622325
- ☐ A-92 WPWG
- ☑ B-93 WPWG
- ☐ C-RFWG
- ☐ D-PAG
- ☐ E-MISC.

Title of Project: Seward Marine Mammal Center

Justification: (Link to Injured Resource or Service)

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

As business people of Seward, we believe the SAMS project proposed for Seward would be a very viable use for oil spill funds. This research center will bring international recognition to Alaska and provide an important role in research of wildlife and fish.

The Town of Seward was strongly affected by the Oil Spill - Merchants had felt an extreme crunch because of this - This would certainly be putting money into an area to help Alaska with the stress of the spill

We feel this project should be unconditionally funded.

Estimated Duration of Project: _____

Estimated Cost per Year: _____

Other Comments: Seward Merchants Association has a membership of 43 business people and property owners in Seward

Name, Address, Telephone:

Ina A. Darling President
Downtown Merchants Assn
Seward, Alaska
99664

Because 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.

Dear Concerned Citizen:

The Exxon Valdez Trustee Council is soliciting ideas from the public on restoration projects that may be undertaken in 1993 and beyond. If you have suggestions for work that you believe should be considered in designing next years' work plan, please provide them to us on the form provided or on a separate page according to the format indicated. Your ideas will be considered along with other ideas received. Submit as many suggestions as you like. The Trustee Council will consider these suggestions to assist in drafting the 1993 and future work plans. Suggestions must be received by **June 15, 1992.**

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 over them. Proprietary information should not be divulged unless you want it made public.

fold here

JUN 22 REC'D

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

Attn: 1993 Work Plan

ID # 920622325

COVER WORKSHEET FOR 1993 IDEA SUBMISSIONS

✓ Checked for Completeness

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

✓ Category

_____

_____ Lead Agency

_____

_____ Cooperating Agency(ies)

_____

(Y) N Passed initial screening criteria

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RANKING H M L Rank Within Categories

H M L Rank Overall

_____ Project Number - if assigned _____

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

Seward Assn. for the Advancement of Marine Science

POB 1329 Phone 907 224 3080
Seward, Alaska

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