HB

269

HOUSE COMMITTEE REPORT

(11)
Date Referred: April 2, 1993 FURTHER REFERRALS:

Date of Committee Action: 4/21/93

The FINANCE Committee considered: HB 269

HOUSE BILL NO. 269 APPRO: EXXON VALDEZ RESTORATION PROJECTS

"An Act making special appropriations for restoration projects relating to the Exxon Valdez oil spill and for oil spill response projects; and providing for an effective date."

RECOMMENDATIONS: [✓] the same title
be replaced with CS HB 269 (Fin) [ ] a new title

[ ] have attached amendments(s)
[ ] do pass
[ ] do not pass
[✓] no recommendations
[ ] individual recommendations
[ ] additional referral to the _____ Committee

ADOPTS: _____ letter of Intent

ATTACHES NEW FISCAL NOTE(s): (Dept) APPROVES PREVIOUS: (Dept/Date)

[ ] fiscal impact _____ [ ] fiscal note(s) _____

[ ] zero fiscal note _____ [ ] zero fiscal note(s) _____

SIGNING DO PASS	DP	OTHER RECOMMENDATIONS	DNP	NR	AM
Eileen P. MacLean MACLEAN	✓	Ronald C. Larson LARSON			
Terry Martin MARTIN	✓	Mark Stanley Hanley		X	
		Sean Parnell PARNELL		X	
		Bert Grussendorf		X	
		Loren Hoffman HOFFMAN			X
		Mike Navarre NAVARRE		✓	
		Jay Brown BROWN			✓
		Gene Therriault THERRIAULT			X
		Richard Foster FOSTER		X	

Ronald C. Larson E P MacLean
CHAIRMAN'S SIGNATURE

Back-up

DIVISION OF LEGAL SERVICES

LEGISLATIVE AFFAIRS AGENCY
STATE OF ALASKA

(907) 465-3867 or 465-2450
FAX (907) 465-2029
Mail Stop 3101

130 Seward Street, Suite 409
Juneau, Alaska 99801-2105

MEMORANDUM April 21, 1993

SUBJECT: CSHB 269(FIN): Lapse date for section 5

TO: Representative Eileen MacLean, Co-chair
Representative Ron Larson, Co-chair
House Finance Committee

FROM: George Utermohle GU
Legislative Counsel

The House Finance Committee has passed out CSHB 269(FIN), an Act making appropriations related to the Exxon Valdez oil spill.

Section 5 of the bill was amended in committee to authorize use of the appropriation for shellfish nursery research, as well as construction of a shellfish hatchery and technical center. Because the shellfish nursery research is an operational activity and not a capital project, the capital poject lapse date specified for this appropriation by sec. 14 of the bill should be amended to reflect this expansion of the purpose of the appropriation.

Ideally, the operational and capital components of the appropriation should be separated into distinct appropriations. Crafting a workable lapse provision for a mixed operational and capital appropriation is difficult.

If I can provide assistance in addressing this issue, please contact me.

GU:mi:gc
93-074.mai

Alaska Environmental Lobby, Inc.
P.O. Box 22151 Juneau, Alaska 99802 907-463-3366

SUMMARY

HB 269 EXXON CRIMINAL SETTLEMENT

The Alaska Environmental Lobby opposes HB 269. HB 269 violates the intent of the Exxon criminal settlement which is that the money received is to be used "exclusively for restoration projects."

HB 269 makes only a token nod to that intent:

- Most of the funds allocated by HB 269 will be spent on tourist facilities and fish hatcheries -- which are not restoration projects.
- Nature is the best agent of restoration. The best and the most effective way that the areas impacted by the spill can be restored to their pre-spill health, is to protect critical and productive habitat areas from further destruction.
- There is widespread public support for habitat acquisition.
- The public has been ignored: few of the many people, communities and organizations affected by the spill were consulted during the drafting of this legislation.

The Alaska Environmental Lobby requests that HB 269 be redrafted to reflect the concerns and the interests of the public.

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The Exxon Valdez Oil Spill was a crime against nature. The criminal settlement was to be in restitution for that crime by, in some small way, repairing the catastrophic damage done to the animals, plants, land and sea in the oil impact area.

The best and the most effective way in which we can return Prince William Sound and the other areas impacted by the spill, to their pre-spill health, is to protect them from further threats and damage. Nature is the best agent of restoration. If given a chance, the natural workings of the ecosystem will replenish the fish, bird and wildlife populations. It will clean the beaches and flush the waters. There is nothing that humans can do at this point that can be more effective than to let nature take her course.

In order for nature to be able take her course, critical and productive habitat areas must be protected from further destruction. The more habitat lost, the harder it will be for wildlife populations to recover. It is for these reasons that environmentalists and many other people and organizations across the state have overwhelmingly endorsed the acquisition of habitat as the best use of the criminal settlement money.

But most of the funds allocated by HB 269 will be spent on tourist facilities and fish hatcheries. Building tourist facilities will not restore the environment. If anything, tourists will only add to the pressure now on fish and wildlife populations. Hatcheries are not the best way to restore wild stocks. More cost effective methods exist such as fish rehabilitation, in-stream incubation boxes and the stocking of streams.

The purchase of the Kachemak State Park inholdings is one of the few projects that truly fulfill the intent of the settlement and which the environmental community enthusiastically supports. Similar purchases should be made in Prince William Sound and Kodiak.

In addition to the bill's content, the Alaska Environmental Lobby objects to the dismissal of the public process. Few, if any, of the many people, communities and organizations affected by the spill and which have an interest in the disposition of the Exxon criminal settlement funds were consulted during the drafting of this legislation. Opportunities for the people of Alaska to review and comment on the bill have been extremely limited by the single committee referral and by its rapid scheduling.

Restoration of the damage caused by the oil spill is a high priority for the people living in the oiled communities and elsewhere in the state. Public testimony before the Oil Spill Trustee Council, as well as at hearings on HB 411 last year and HB 10 and SB 98 this year

from representatives of commercial fishing, sport fishing, Native, tourist and environmental organizations, in addition to countless individuals have demonstrated the overwhelming support for the use of the settlement funds to buy and protect critical wildlife habitat.

The Alaska Environmental Lobby requests that HB 269 be redrafted to reflect the concerns and the interests of the public.

4/7/93

PRINCE WILLIAM SOUND AQUACULTURE CORPORATION

April 12, 1993

Chairman and Committee Members
State of Alaska
House Finance Committee
State Capitol, Room 519
Juneau, AK 99801

RE: HB 269

Greetings:

On behalf of the Prince William Sound Aquaculture Corporation (PWSAC), I would request that this letter of support for HB 269 be included as a matter of record at this teleconference today, Monday, April 12, 1993.

We support the passage of the appropriation of $2 million for the Main Bay Hatchery in Prince William Sound. The operation of this facility was transferred to PWSAC with the intent that funding would be provided to achieve the completion of this facility. This facility is an authority in the sockeye salmon enhancement and the first for major sockeye salmon enhancement development within the state. Completion of the May Bay Hatchery facility will benefit all the communities of Prince William Sound which are involved with the state's fisheries by further diversifying the Sound's economy by expanding its product base.

We respectfully request your positive consideration and passage of the funding for this project.

Sincerely,

Robert L. Van Brocklin
Chairman of the Board

Corporate Office • Post Office Box 1110 • Cordova, Alaska 99574-1110
phone: 907/424-7511 • fax: 907/424-7514

COMMONWEALTH NORTH

CWN BOARD RESOLUTION ON SB 183/HB 269

FUNDING FOR PROJECTS RELATING TO THE EXXON VALDEZ OIL SPILL

WHEREAS, the State of Alaska received $50 million in restitution in a settlement of a criminal case involving the Exxon Valdez oil spill for restoration projects; and

WHEREAS, the State of Alaska received additional monies in reimbursements for certain expenditures made by the state in responding to the oil spill; and

WHEREAS, these monies were to be used for projects restoring, replacing and enhancing affected resources; acquisition of equivalent resources and services; research for the prevention, cleanup and amelioration of oil spills and other similar purposes; and

WHEREAS, SB 183 and HB 269 introduced in the Eighteenth Legislature by Governor Hickel utilizes restitution and reimbursement monies to fund projects which appear to meet the intended purposes in an effective and balanced manner; and

WHEREAS, the Board of Commonwealth North has examined in detail the proposed Sea Life Center in Seward which is proposed for funding in the legislation; and

WHEREAS, the Sea Life Center would specifically meet research, rehabilitation and enhancement purposes of the criminal restitution monies in the spill areas; and

WHEREAS, the Sea Life Center would additionally result in a financially viable recreational and educational attraction which would contribute significantly to the long-term economic health of the entire region;

BE IT RESOLVED, that the Board of Commonwealth North supports the goals and expenditure of Exxon Valdez spill monies contained in SB 183 and HB 269.

BE IT FURTHER RESOLVED, that the Board of Commonwealth North strongly supports the expenditure of restitution monies from the Exxon Valdez Oil Spill Restoration Fund for the Sea Life Center proposed in Seward.

935 West Third Avenue • Anchorage, Alaska 99501 • 907-276-1414 • FAX 907-276-6350

Alaska State Legislature

Please enter into the record my testimony to the House Finance committee name

committee on HB269 bill/subject, dated 4-2-93.

We oppose this bill and the appropriations it makes in the spending of the restitution monies. Most of the major appropriations are not related to restoration and Kodiak is entirely left out (where are any habitat acquisitions or help for our fisheries - both resources damaged by the Exxon Valdez?

Instead we ask you support HB10 - this bill more accurately and successfully identifies relevant projects in the affected communities and works toward the goal of restoration.

NO ON HB269! It's a tourism bill, not a restoration bill.

Signed: Kelly Schactler

Testifier

Area K Seiners Assoc.

Representing (Optional)

Po Box 2399 Kodiak

Address

486-4686

Phone No.

Alaska State Legislature

Please enter into the record my testimony to the House - Finance committee name

committee on HB 209 Exxon Valdez Oil Spill Restoration bill/subject, dated April 12, 1993.

My Name is Mary Forbes. I'm speaking on behalf of the Kodiak Audobon ~~Despite o~~ Society.

Despite our strong support ~~of~~ for allocating money from the criminal settlement for aquisition of Katchemak Bay State Park inholdings, ~~east~~ land along the Kenai River Watershed ~~We cannot support~~ and the Kodiak Fish tech center, we cannot support this bill. Last years HB 411, which the legislature passed, was the result of hard work and consensus building by people in the oil spill affected areas. That same effort has gone into HB 10 and SB 98. Those are the bills this ~~Legislature~~ should be considering, but they are being ignored. The Governor has opportunistically taken advantage of the situation and introduced a bill reflecting how he thinks the money should be spent. His project oriented bill contains only a few token restoration type projects. The criminal settlement is a result of breaking Federal Environment Statutes and the settlement money is ~~they~~ designed for Environmental Restoration We fail to see how building cabins & docks, supporting Anchorage sport fishermen with the Ft. Richardson Hatchery or allocating 15 million General Fund dollars to design a road from one seaward thing. to the Port of Whittier qualify as restoration Projects.
We would like to see serious consideration given do HB 10 & SB 98 or at least a compromise version of HB 10, HB 209, SB 98 and SB 183. Thank you

Signed: Mary Forbes
Testifier

Kodiak Audobon Society Conservation Chair.
Representing (Optional)

418 Mill Bay Rd Kodiak
Address

486 - 2685
Phone No.

Alaska State Legislature

Please enter into the record my testimony to the House Finance
committee name

committee on HB 269 , dated 4/12/93 .
bill/subject

Please consider every PART of the HB269 which effects Research & Rehab for the implementation of the Sealife Center. Important FOR The preservation of many species of fish and economic considerations for the entire state of Alaska.

Signed: Arlene D. Wilson
Testifier

Kenai Pen. Tourism & Marketing Council
Representing (Optional)

(H) P.O.B. 618 - Seward, AK.
Address

224-5563 .
Phone No.

Alaska State Legislature

Please enter into the record my testimony to the House Finance
committee name

committee on HB 269 , dated 4-12-93 .
bill/subject

Must pass bill HB 369
for the betterment of
all Alaskans

Signed: Arneda L Bunce
Testifier

Representing (Optional)

Address
PO Box 2094 Seward Ak 99664

Phone No. 224-8921

EXXON VALDEZ OIL SPILL PROJECT DESCRIPTION

Project Number: SB 183 (Sec.10), HB 269 (Sec.10), ssHB 10 (Sec.16)

Project Source: Kodiak Island Borough & University of Alaska Fairbanks

Project Title: **Expansion of Fisheries Science and Technology Center in Kodiak**

Project Category: Technical Support/Services

Lead Agency: University of Alaska Fairbanks

Cooperating Agencies: University of Alaska Fairbanks,
School of Fisheries and Ocean Sciences
Fishery Industrial Technology Center
Alaska Department of Fish and Game
National Oceanic and Atmospheric Administration
National Parks Service
U.S. Fish and Wildlife Service
National Weather Service

Project Cost: Approximately $20 million total, $7.5 million for State/University portion

INTRODUCTION

During the *Exxon Valdez* oil spill many fisheries were closed due to the presence of oil in the water and on the beaches. Major lethal effects on fish were documented for pink and sockeye salmon and herring, chronic and sub-lethal effects have also been measure. The planning and design funds for the next phase of the multi-agency fisheries science and technology center (FSTC) would enable the user agencies to (1) initiate research projects on the efficacy of restoration practices, (2) the enhancement of fishery resources in the effected areas, such as salmon, crab, sea urchins, and molluscan shellfish, (3) the enhanced utilization of equivalent fishery resources to those in spill area, such as arrowtooth flounder, and (4) to initiate long term research programs to better understand and ameliorate the effects of oil spills on the fisheries of the western Gulf of Alaska. Seven federal and two State agencies, the University of Alaska Fairbanks, School of Fisheries and Ocean Sciences, Kodiak Island Borough, and the City of Kodiak have all participated in the planning for the multi-agency facility.

The first phase of the University of Alaska Fairbanks, School of Fisheries and Ocean Sciences (SFOS), Fishery Industrial Technology Center (FITC) has been completed. It is the first building of the proposed multi-agency fisheries science and technology center (FSTC). The FITC Owen Building is being used by the University of Alaska Fairbanks and National Marine Fisheries Service-Utilization Research Division personnel. Co-location of these two groups has resulted in efficient use of facilities and encouraged pooling of expertise to pursue efficient use fishery resources to produce diverse, high quality products, and eliminate waste.

Currently the other agencies interested in co-locating are isolated from each other, the public and the fishing community, and occupy out dated and inadequate facilities. The importance of the fisheries in the western Gulf of Alaska to the State and nation are expanding, and the oil spill emphasized the need for more specific information on these fisheries. Many of the fisheries activities in Kodiak are expanding to meet these needs. The multi-agency fishery technology and research facilities will be necessary to meet the agencies needs and the public's need for better access to information and training in a timely manner.

The City of Kodiak has donated the land for fisheries research facilities on Near island. The City of Kodiak is committed to using its revenue bonding power to fund construction of portions of these facilities to the extent that lease monies are committed by user groups and agencies, and other funding sources are not available. As one of the users of the expanded facilities the National Marine Fisheries Service has been authorized by congress to lease space on Near Island at an annual lease not to exceed $1,000,000 per year and has appropriated $100,000 for planning the federal needs in the facility.

WHAT

The $100,000 in this project will be used to match the federal planning money to initiate planning and design of expanded multi-agency fisheries science and technology center on Near Island, Kodiak, Alaska. This proposed expansion of FITC follows the Board of Regents Programmatic Master Plan for FITC (1985), the recommendations of the SFOS Advisory Council and the FITC Policy Council (1992) and a preliminary feasibility investigation by Kodiak Island Borough. The University of Alaska Fairbanks, SFOS, in conjunction with NOAA and ADFG, will lead the development. The next phase of this facility which is most critical for restoration, enhancement, enhanced utilization of fishery resources, and better understanding and ameliorating the effects of oil spills in the western Gulf of Alaska will include a gravity fed seawater system, wet and dry marine laboratories, public education facilities and associated systems. The laboratories must be built on a scale which will accommodate behavioral studies on adult fish of commercial species.

The seawater system and associated facilities will be designed to enhance research on fish behavior, physiology and perception, marine biology, and aquatic toxicology of normal and stressed fisheries. Stressed conditions will include a variety of human activities and anthropogenic stresses, including fish harvesting and exposure to spilled crude oil. The FSTC will provide a variety of analytical testing and monitoring capabilities within Kodiak Island Borough. These capabilities were severely lacking during the oil spill when all samples had to be sent off-island for analysis.

The combined use of state and federal lease monies with funds from the civil EVOS settlement to finish construction of the FSTC will help provide the State of Alaska with state-of-the-art capabilities to undertake critical studies on the restoration, enhancement, and enhanced utilization of fishery resources in the western Gulf of Alaska. These facilities will also provide Alaska's fishing industry with research and technical assistance during the rehabilitation of Alaska's vertebrate and invertebrate fisheries resources. The new facilities will be located on the two tracts around the existing FITC facilities. These facilities will accommodate

NOAA/NMFS and other fisheries research and management groups in addition to the FITC. Land for development of these facilities is being held in trust by the City of Kodiak. Development of these facilities would provide the University of Alaska, State, and Federal agencies resources for evaluating toxicological, physiological, and behavioral effects related to the presence of hydrocarbons. A major support facility for FSTC is a running seawater system with associated mechanical support and filter beds. Additional facilities include food safety, physiology and toxicology laboratories.

The FSTC will house the biotechnology, fisheries science, fish harvesting technology, food safety, and toxicology programs of FITC/SFOS in addition to significantly expanding the public education activities of all parts of the center. Alaska Department of Fish and Game research efforts will probably focus on shellfish enhancement and rehabilitation. In addition to management data acquisition National Marine Fisheries Service activities are expected to include marine mammal studies and the observer program in addition to the Resource Assessment and Conservation and Utilization Research Divisions.

WHY

The FSTC will improve the quality, timeliness, and cost effectiveness of fisheries information, research findings, technology transfer and educational materials in the following areas:

I. Technology development and transfer
   - A. Restoration and Enhancement
   - B. Fish Harvesting Technology
   - C. Seafood Processing Technology
   - D. Oil Spill Mitigation and Response

II. Resource Management
   - A. Fisheries Management
   - B. Marine Mammal Protection
   - C. Off-Shore Oil and Mineral Management
   - D. Management of Public Lands in Kodiak area

III. Fundamental and Applied Research
   - A. Ocean Sciences
   - B. Marine Biology
   - C. Marine Mammals
   - D. Aquatic Toxicology
   - E. Fisheries Science
   - F. Food Science

IV. Instructional Programs
   - A. Fisheries Science
   - B. Food Science & Nutrition
   - C. Marine Biology

D. Oceanography

V. Public Education
A. General Public
B. Public Schools
C. Industry

Specific examples of EVOS Settlement related activities at the FSTC include:

I. Damaged Resource: Pink and Sockeye Salmon

A. Developing more profitable secondary products will increase the profitability of the salmon harvest even in the face of more restrictive management.

B. Developing improved aquaculture feeds and lake fertilizers from fishery by-products will improve the quality and decrease costs of the restoration and enhancement projects using hatchery fish.

C. Developing alternate fisheries such as arrowtooth flounder or giant grenadier will provide options for continued commercial fisheries even if other fisheries are limited to assist restoration.

D. Developing a flatfish pot fishery is particularly appropriate for salmon seiners and tenders, many of whom now pot fish for cod.

II. Damaged Resource: Pacific Herring

A. Developing alternate fisheries such as arrowtooth flounder or giant grenadier will provide options for continued commercial fisheries even if other fisheries are limited to assist restoration.

B. Developing a flatfish pot fishery is particularly appropriate for herring seiners and tenders, many of whom now pot fish for cod.

III. Damaged Resource: Other finfish, especially pollock, cod and flatfish

A. Developing selective fishing gear such as square mesh cod ends, patterned nets, or exclusion panels will assist management in targeting specific species and year classes of fish.

B. Developing alternate fisheries such as arrowtooth flounder or giant grenadier will provide options for continued commercial fisheries even if other fisheries are limited to assist restoration.

C. Better understanding of early life stage distributions and physiology,

including development of a juvenile index, will improve the ability to predict abundance of commercial flatfish several years before the year classes appear in the commercial fishery.

D. Developing an arrowtooth flounder fishery will help reduce the predation from over a million tons of this major predator on species needing restoration and enhancement, and on the food sources for species needing restoration and enhancement.

IV. Damaged Resource: Marine Mammals

A. Developing selective fishing gear such as square mesh cod ends, patterned nets, or exclusion panels will assist management in targeting specific species and year classes of fish. The use of management restrictions to limit the taking of small fish may be necessary to ensure the food sources for harbor seals and Stellar sealions.

B. Developing an arrowtooth flounder fishery will help reduce the predation from over a million tons of this major predator the food sources for marine mammal species needing restoration and enhancement.

C. Developing public education materials on marine mammals and the effects of human activities and pollution on them by the Marine Mammal Specialist will mitigate some of the human factors limiting marine mammal restoration.

D. Developing an effective research platform for UAF and NMML personnel to enhance the understanding of declining marine mammal populations in the EVOS spill area and the western Gulf of Alaska is critical to understanding the status of these species and the impacts of various fisheries on the marine mammals.

V. Damaged Resource: Coastal Habitat / Shellfish Resources

A. Mariculture enhancement projects, such as sea urchin grow out, or clam depuration studies, on species minimally impacted by the oil spill will help develop alternate resources for commercial and subsistence use. Thus sparing the harvest pressure on damaged species.

B. Improving toxicological testing will help assure the safety and quality of shellfish.

VI. Damaged Service: Commercial Fishing

A. Developing more profitable secondary products will increase the profitability of the salmon harvest even in the face of more restrictive

management.

B. Developing improved aquaculture feeds and lake fertilizers from fishery by-products will improve the quality and decrease costs of the restoration and enhancement projects using hatchery fish.

C. Developing alternate fisheries such as arrowtooth flounder or giant grenadier will provide options for continued commercial fisheries even if other fisheries are limited to assist restoration.

D. Developing a flatfish pot fishery is particularly appropriate for salmon seiners and tenders, many of whom now pot fish for cod.

E. Better understanding of early life stage distributions and physiology, including development of a juvenile index, will improve the ability to predict abundance of commercial flatfish several years before the year classes appear in the commercial fishery.

F. Improving toxicological testing will help assure the safety and quality of all commercial seafood products.

G. The FSTC will provide commercial users with one stop shopping for fisheries information from weather, management regulations and forecasts to gear technology and handling recommendations.

VII. Damaged Service: Subsistence

A. Improving toxicological testing will help assure the safety and quality of all subsistence foods.

B. Improving the nutritional data available on both commercial and subsistence foods will facilitate evaluation of the dietary impacts from changes in traditional diets.

C. Developing a strong food science and nutrition program and public education programs focusing on foods and toxicological testing will help enhance the level of understanding and trust among subsistence users of analyses of subsistence foods. The FSTC is a local center run by local people. This often makes a big difference.

VIII. Damaged Service: Recreation

A. The FSTC will provide recreational users with one stop shopping for fisheries information from weather, management regulations and forecasts to information on the physiology, behavior and nutritional attributes of specific species.

B. Better understanding of early life stage distributions and physiology, including development of a juvenile index, will improve the ability to predict abundance of sports caught flatfish several years before the year classes appear in the fishery.

C. Developing improved aquaculture feeds and lake fertilizers from fishery by-products will improve the quality and decrease costs of the restoration and enhancement projects using hatchery fish.

D. Developing a wide cross-section of public education programs will enhance the quality of the recreational experience for all users visiting the Kodiak area.

IX. Damaged Service: Public trust in the mitigation, response and damage assessment process

A. Developing analytical facilities to accurately detect levels of hydrocarbons in environmental samples in a timely manner.

B. Developing a core response capability to access food safety and toxicology issues locally in a timely manner.

C. Developing a core of scientists and baseline data to assure a more complete response to future oil spills.

D. Developing a public education and outreach program with the community and public schools to enhance the food safety and aquatic toxicology information reaching the citizens of the EVOS spill area.

E. The development of a high quality fisheries science and technology center in Kodiak will provide the community and the fishing industry with a much greater feeling of local control over the destiny of this fishing community.

The expanded fisheries research center will provide the technical capabilities to address both food safety and aquatic toxicology issues within the community of Kodiak, at the cross roads of spilled oil coming out of either Cook Inlet or Prince William Sound.

ENVIRONMENTAL COMPLIANCE

Project compliance with the National Environmental Policy Act (NEPA) will be assessed during the planning and design phase. Until project specifications are finalized, specific NEPA requirements cannot be determined. The seawater system will require a Corps of Engineers' permit and compliance with the Alaska Coastal Management Plan will be required. The required State and Federal permits will be identified and incorporated into the planning process.

WHEN

The initial "requirements study" has just started using a congressional appropriation to NOAA. Further engineering and design using this appropriation after approval of a financial plan and feasibility study by the Governor and UA Board of Regents. The total project cost for the UAF-Fishery Industrial Technology Center portion of the facility will require 7.5 million dollars above and beyond the funds previously identified. If these funds were available for phased construction during FY95 and FY96, the facilities will be operational by the end of 1996. Careful phasing of the project could make key aspects of the facility operational sooner.

Name, Address, Telephone of UAF contacts:

Dr. John S. French, Director
Fishery Industrial Technology Center
900 Trident Way
Kodiak, AK 99615

Voice: 486-1505, FAX: 486-1540

or

Mr. James Allan
UAF Planning and Project Services
University of Alaska Fairbanks
Fairbanks, AK 99775

Voice: 474-5026, FAX: 474-7554

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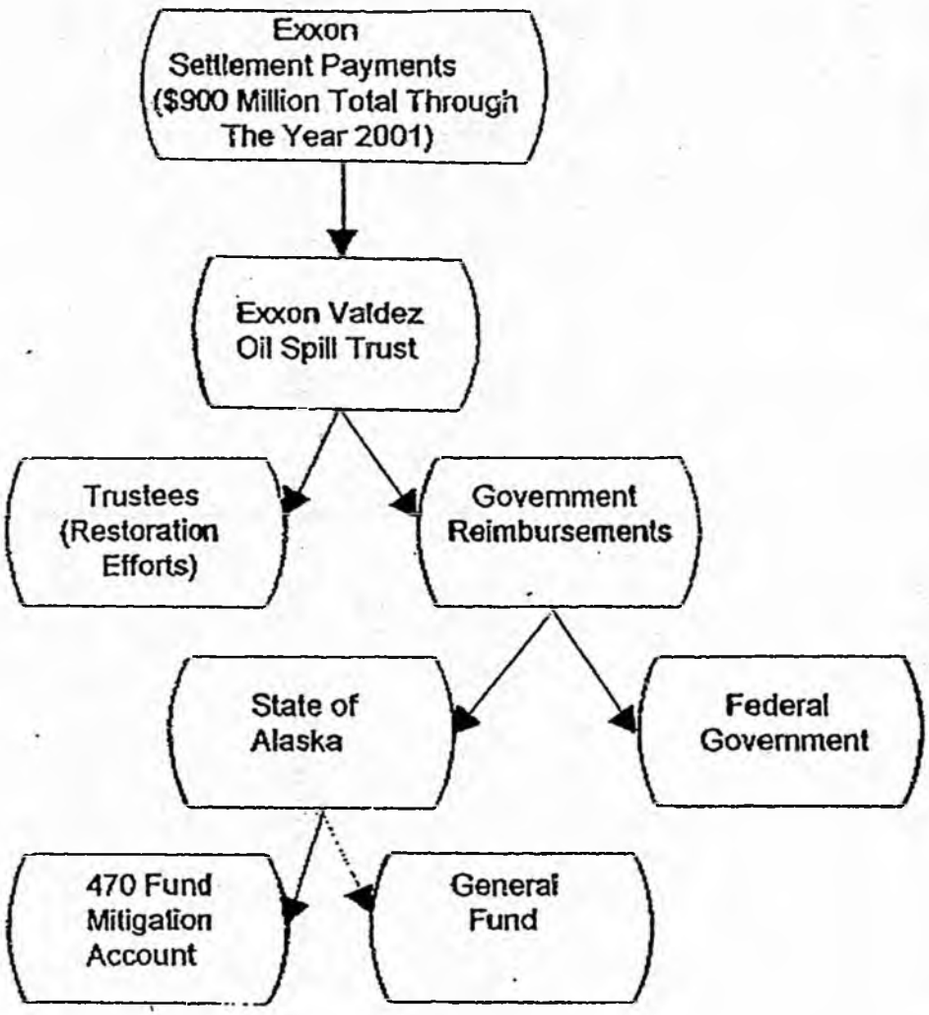
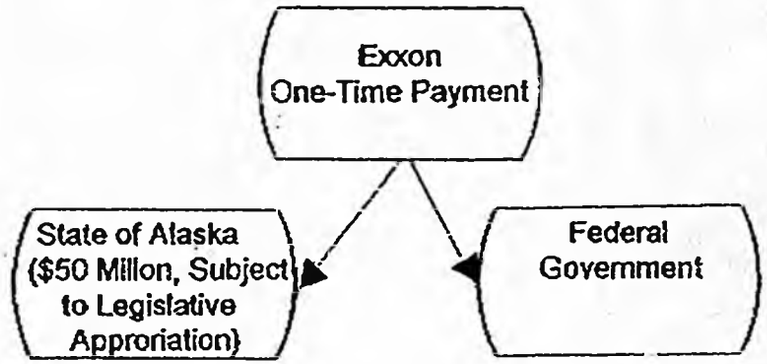
4/7/93

Civil Settlement



Criminal Settlement



HB 269

WALTER J. HICKEL
GOVERNOR

P. O. Box 110001
Juneau, Alaska 99811-0001
(907) 465-3500

STATE OF ALASKA
OFFICE OF THE GOVERNOR
JUNEAU

April 2, 1993

The Honorable Ramona L. Barnes
Speaker of the House
Alaska State Legislature
State Capitol
Juneau, AK 99801-1182

Dear Speaker Barnes:

Under the authority of art. III, sec. 18, of the Alaska Constitution, I am transmitting a bill that provides for special appropriations for restoration projects relating to the Exxon Valdez oil spill and for oil spill response projects.

The state and federal governments each received $50,000,000 in restitution as a result of the plea agreement and judgment entered in the criminal case filed by the United States against the Exxon defendants arising out of the Exxon Valdez oil spill. United States v. Exxon Shipping Company and Exxon Corporation, A90-015 CR. The restitution money paid to the state was placed in a separate fund, established by the Department of Revenue, named the "Exxon Valdez Oil Spill Restoration Fund." Under the terms of that final judgment, the restitution money is required to be used exclusively for "restoration projects, within the State of Alaska, relating to the Exxon Valdez oil spill." Under the judgment, "restoration" is defined as including "restoration, replacement, and enhancement of affected resources; acquisition of equivalent resources and services; and long-term environmental monitoring and research programs directed to the prevention, containment, cleanup, and amelioration of oil spills." This restitution money is in addition to the $900,000,000 civil settlement entered into between the state, the United States, and Exxon in October 1991, which established a joint trust fund for restoration and provided for certain reimbursements.

Sections 2 - 12 of the bill would appropriate a total of $50,000,000 plus interest earned on the criminal case restitution payment since it was received by the state.

Section 2 appropriates $12,500,000 to the Department of Administration for payment as a grant to the City of Seward for the development of the Alaska Sea Life Center. This center would serve as a recreation and marine mammal rehabilitation center and as a center for education and research related to the natural resources injured by the Exxon Valdez oil spill and to the prevention and amelioration of marine oil spills.

Section 3 appropriates $7,000,000 to the Department of Natural Resources (DNR) to purchase certain holdings inside the Kachemak Bay State Park. A total of $22,000,000 is needed for the purchase under the agreement entered into in March 1993 between the state, the Seldovia Native Association, Cook Inlet Region, Inc., and the Timber Trading Company. The appropriation in sec. 3 of the bill is one of three sources of funds required to finance the purchase. The state and federal trustees have committed to contribute $7,500,000 from the joint trust fund established by the Exxon Civil Settlement. Another $7,500,000 is due as a result of the settlement of the oil spill litigation between the state and federal governments and the Alyeska defendants in November 1992. This latter amount is not addressed in this bill.

Section 4 appropriates $500,000 to DNR to construct a Kachemak Bay State Park visitors center.

Section 5 appropriates $3,250,000 from the restitution payment to the Department of Fish and Game to develop a shellfish hatchery and technical center. This project will assist in the restoration of shellfish resources and subsistence services affected by the oil spill and will provide technical support to the efforts of many individuals and firms that have been attempting to develop a mariculture industry in the area impacted by the oil spill.

Section 6 appropriates $4,000,000 to the Department of Fish and Game to construct a water delivery system connecting the Anchorage Municipal Water Utility with the Fort Richardson hatchery. The integration of these facilities will enhance sport fishing services lost or diminished as a result of the Exxon Valdez oil spill.

Section 7 appropriates $4,750,000, plus interest accrued on the restitution payment, to DNR to construct or acquire recreational amenities such as cabins, trails, mooring buoys, and floating docks.

Section 8 appropriates $3,000,000 to the Department of Fish and Game to undertake restoration and enhancement projects within the Kenai River watershed to help protect commercial and sport fish species injured by the Exxon Valdez oil spill.

Section 9 appropriates $2,000,000 to the Department of Commerce and Economic Development for payment as a grant to the Prince William Sound Aquaculture Corporation to upgrade the Main Bay hatchery. Recent damage assessment information suggests that the injury to commercial salmon species in Prince William Sound may be more extensive than originally thought. This project will help to restore or replace commercial and sport fishing resources lost as a result of the Exxon Valdez oil spill.

Section 10 appropriates $3,000,000 to the University of Alaska, Fairbanks, Fishery Industrial Technology Center for design and construction of an addition to the existing research facility that would facilitate long-term environmental monitoring and restoration work in the area affected by the oil spill.

Section 11 appropriates $5,000,000 to the Department of Community and Regional Affairs for payment as grants to unincorporated rural communities to assist in restoration, replacement, and enhancement of subsistence resources or services injured or lost as a result of the Exxon Valdez oil spill. This appropriation will allow the state trustees and the local villages and communities to work together to develop local projects designed to deal with specific dislocations and injuries caused by the spill.

Section 12 appropriates $5,000,000 to the Department of Environmental Conservation to enter into contracts for research programs directed to the prevention, containment, cleanup, or amelioration of oil spills in the state.

The Exxon Civil Settlement also requires reimbursement of certain state damage assessment, response, and litigation costs incurred as a result of the Exxon Valdez oil spill. Section 13 of the bill appropriates, to the Department of Transportation and Public Facilities, $20,000,000 of the estimated reimbursements due to be paid to the state on September 1, 1993. Of the $20,000,000 appropriation, $15,000,000 is for the construction of a road to Whittier and $5,000,000 is for the design and construction of an

oil spill response assistance ferry. The goal of these projects is to increase the ability to respond to oil spills in Prince William Sound by providing road access to Whittier, a logical staging area in the event of a future spill in Prince William Sound, and by providing a specially fitted vessel for use by the state in response actions. Although there are no legal restrictions on the use of the reimbursements made under the Exxon Civil Settlement, it is the view of this Administration, after consultation with the legislative leadership, that it would be appropriate to invest that money in oil spill preparedness and in enhancing access to Prince William Sound for recreational users of all types.

The purpose of this bill is to fund projects and programs that will assist in the restoration of resources or services lost or injured as a result of the Exxon Valdez oil spill, to support long-term environmental monitoring of such resources, and to enhance access to the recreational resources that remain abundant in the area impacted by the spill. The bill also will support projects and programs that will promote oil spill preparedness and response capability.

I believe that the projects and programs in secs. 2 - 12 of the bill are consistent with the purposes set out in the federal court's restitution order in the Exxon criminal case and that the passage of this bill would be a prudent use of the restitution money. Although the money is the subject of a special restoration charge from the court, that purpose, quite frankly, mirrors the objectives of this Administration and, I believe, of most Alaskans. We have just observed the fourth anniversary of an environmental calamity that has affected all of our lives. I believe that it is time for specific, properly focused restoration work to commence. I urge you to pass this bill this session.

Sincerely,

Walter J. Hickel
Governor

SEWARD ASSOCIATION
FOR THE ADVANCEMENT
OF MARINE SCIENCE (SAAMS)
P. O. Box 1329
Seward, Alaska 99664

April 16, 1993

The Honorable Walter J. Hickel
Governor of Alaska
P. O. Box 110001
Juneau, Alaska 99811

Dear Governor Hickel:

It is a pleasure today for our SAAMS board to present to you a petition of support for the Alaska Sea Life Center signed by 504 residents of the Anchorage, Eagle River, Mat-Su area.

These signatures were obtained by the Seward Chamber of Commerce information booth staff at the Great Alaska Sportsman Show held in Anchorage last weekend. The last day of the show, Easter Sunday, the two people operating the booth set up an ALASKA SEA LIFE EXHIBIT and put out the attached petition for people to sign if they thought it was a good project and usage of the Exxon settlement monies.

In just a few short hours on the closing day of the show these 504 people left their names, addresses and, in some cases, their phone numbers to express to you and the Legislature how much interest they have in seeing a facility of this scope built.

Nothing we have done before in our process could have established more emphasis on how great an attraction this facility will be to and for our State and its people! If this many would take the time and effort to sign this statement to you in these short hours, how many will travel to visit it?

Thank you again for your continued support. The passage of the Exxon settlement bills, SB 183 and HB 269, will enable us to move forward on this project this year.

Sincerely,

Willard E. Dunham, Chairman

To Governor Hickel & the Alaska Legislature

We support the Sealife Artice Marine & Mammal Research Center "SAMMS" project for the State of Alaska

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A. Mooney	17631 Kahiltna Dr.	Eagle River 9957
Joyce McEwan	7800 Ascot	Anch 99502
Sherri McLain	34-383A Cala Ct	EAFB, AK 99506
Clay Gallagher	340 H ST EAFB, AK	99506
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Jim Podvin	4132 Hampton	Anch AK 99504
2 Mary Podvin	4132 Hampton	Anch AK 99504
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6 Audrey Polynini	6705 Eileen Cir., Anch. AK.	99507
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18 Genevieve Becker	PO Box 777 Girdwood, AK	99587

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20	[illegible]	
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22	[illegible]	1200 W Dimond Anch.
23	[illegible]	30-344C CHERRY DR. EAFB AK
24	KERRY L JOHNSON	POB 141855 Anch. AK 99514
25	Nancy Fyfe	PO Box 355 Anch AK 99514
26	[illegible]	
27	Richard McElroy	903 W 30th B-4 Anch. AK. 99503
28	Ron Gonka	903 W 30th B-1 Anch. AK. 99503
29	LARRY COUNTS	21-444G CITRUS EAFB AK 99506
30	[illegible]	[illegible]
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32	Tana Heussner	3807 W 30th Ave Anch AK 99502
33	LINDA DUBIE	4020 LAKERidge Ct Anch 99502
34	MIKE DUBIE	4020 LAKERidge CT ANCH 99502
35	Susi Wood	4110 Horizon Ave Anch., AK 99517
36	Randy Swincy	13131 Alpine Dr. Anch. AK. 99516
37	Jackie Flora	11631 Box 52510 Was.lla, AK 99654
38	Sharla C. Miller	
39	Tan Anderson	1528 3rd St. D Eureka, CA 95501
40	Jeff Givalias	5018 E 43 Ave Anch AK 99508
41	Cathy Condos	P.O. Box 232056 Anch AK 9952

42 Janelle Oly 9308 Hall Circle 696-1567
43 GREG HOLK 3700 STELLER DR ANCHORAGE 337-3049
44 Cliff [illegible] 4411 [illegible] Ave AK 346-148
45 BILL KLUGE 9640 CONIFER ST. ANCH. AK 99516 346-1067
46 Laura Sebastian 9640 Conifer Anch AK 99516 3461067
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50 Doug Feicht 18614 S. Kamaska Lp Eagle River AK 99577 696-1966
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[illegible] O'Connell	416B Beluga Ave Ft Richardson
Ken L. [illegible]	368 Kenai Apt @ Ft. Rich
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[illegible] S [illegible] Jr.	7125 SHOOPESIN Cir ANCH 9950
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SAMMS

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Jim Bates Sr	"
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"SAMMS" Project

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"SAMMS" Project

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To: Governor Hickle and the Alaska Legislature

We support the Sealife Artic Marine & Mammel Scientific Center - "SAMMS" project for the State of Alaska.

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(2)

We support SAMMS

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Frank Katsiva " "

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[illegible] Gleason	4411 [illegible] Anch AK 99507	346[illegible]

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[illegible signature]	4131 E 24th " " 99507
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Glenn Hobson	3509 Dorbrandt 99516
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Marilyn Foster	2130 Loussac Dr Anch 99517
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[illegible signature]	[illegible] CITADEL LN 99504
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Dustin Tobstrup	6601 Askeland Anch. 99507
Lorie Chamberlin	6601 Askeland Anch AK 99507
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POSITION ON BUILDING AND SITING OF A SHELLFISH HATCHERY AND MARICULTURE TECHNICAL RESEARCH FACILITY

April 12, 1993

The Alaska Shellfish Development Corporation is a consortium composed of private shellfish grower's and native villages and associations in Prince William Sound and Lower Cook Inlet. The consortium receives technical advice from state resource agencies and members of the scientific community.

A main focus of the consortium is the establishment of a shellfish hatchery and technical development center. These components are critical to the success of the mariculture industry in Alaska.

The technical center is necessary for the development of cost effective techniques for culturing and growing a variety of commercially viable shellfish species and aquatic plants. The role of the shellfish hatchery is to develop culture technology for the production of commercial quantities of seedstock of several species of shellfish and aquatic plants. These components are fundamental to every successful mariculture operation in the world. They currently do not exist in Alaska.

We are appreciative of efforts to include these facilities in HB 269. We also endorse the requirement that a feasibility study be conducted prior to construction. We are concerned however, that the location requirement in the bill is too restrictive. Because these facilities are of crucial importance, site selection must be based on sound scientific and economic parameters. We recommend that the siting language be expanded to include the entire Kenai Peninsula. We recommended that Section 5 be amended to read:

Sect 5. The sum of $3,250,000 is appropriate from the Exxon Valdez Oil Spill Restoration Fund, described in sec. 1(1) of this Act, to the Department of Fish and Game to aid in the restoration of subsistence resources or services, lost or diminished as a result of the Exxon Valdez oil spill, through the development of a shellfish hatchery and technical center to be located on the Kenai Peninsula, at whichever site is considered by the Department of Fish and Game to be most appropriate. The appropriation made by this section may be used for feasibility studies, design and engineering work, and construction f the facility, on the condition that no money may be expended for design and engineering work or construction until the Department of Fish and Game has completed a feasibility study, including a financial and operating plan.

Oyster Spat Nursery System
Feasibility Project

Project Summary

A bivalve nursery project is proposed to evaluate the potential to provide a secure spat source, accelerated growth, and shorten the growing time for pacific oyster (*Crassostrea gigas*) cultured at aquatic farms in Alaska. The primary goal of the proposed nursery study is to grow oyster spat from 4-6 mm size to 30 mm in shell length to be available to shellfish farmers by June of the first summer growing season. Oyster spat, available at the target size and date, will provide a more secure source for oyster spat, reduce equipment cost to oyster farmers by as much as 30-40%, and will accelerated the farm production schedule. Upon completion, a prototype design of a shellfish nursery will be published and made available to shellfish farmers.

Introduction

The United States oyster culture industry is in a state of crisis. Sanitation problems have surfaced in recent years that have raised the level of consumer concern for the safety of shellfish (Leonard and Slaughter 1990; Anderson and Anderson 1991). In December 1987 contaminated blue mussels cultivated at Prince Edward Island caused the illness of 235 people and resulted in 2 deaths (Seafood Business 1988). Oysters harvested from the Gulf states have caused serious illness and death to those who have eaten the product raw (Seafood Trend Newsletter 1991). The shellfish sanitation issue is so serious that the Federal Food and Drug Administration (FDA) is proposing warning labels be placed on shellfish explaining the risk of eating the product raw (Seafood Leader 1991). California is also proposing the ban on shipment of Gulf state oysters into the state. The west coast also has major problems with water pollution. It is estimated that industrial pollution

significantly affects 43% of west coast estuarian water (Leonard, D.L. and Slaughter, E.A. 1990). In the northwestern United States, as much as 30% of the Puget Sound oyster growing waters are banded from harvest because of pollution (Egan 1991). But in all this gloom, the Alaskan shellfish farming industry stands to benefit because of the availability of clean water and strict sanitary standards for cultured shellfish (Alaskan Grown Oyster: Some Specific on Quality, Marine Advisory Program 1992).

The Alaska economy is changing. Oil revenue, which has been the main source of income to the state, is beginning to decrease and is expected to decline 50% by the year 2000 (Institute of Social and Economic Research October 1989; Richardson 1992). In addition coastal communities are struggling to stay economically viable with declines in income from tradition fisheries and timber harvest (Fried N. 1992; Boucher et.al. 1992; Gay 1992; Richardson 1991)) Alaska native communities are also looking towards economic expansion to maintain their rural lifestyle and provide employment for village residents (Painter, R and Kaill M 1991).

One area providing economic opportunity for the changing Alaska economy, especially to small coastal communities, is shellfish aquaculture. Historically, shellfish farming was the first aquatic farming activity to occur in Alaska, starting in the early 1900's with farming of oysters (Yancey 1966). Oyster farming continued for a short period, then disappeared. Reemerging late in the 1970's oyster farming was pursued by a few farmers in southeastern Alaska. These small farms provided a small quantity of half shell oysters for raw oyster consumption, but the industry was not able to expand because of difficulties in permitting, and lack of capital for expansion.

In 1988 aquaculture legislation was passed by the Alaska legislature that lead of development of a more systematic permitting process. In 1990 the aquaculture law was

modified to allow only shellfish and seaweeds to be grown on aquatic farms in Alaska. The changes in permit processing allowed more entry into shellfish farming and as a result 56 farmers are permitted to operate (Alaska Department of Fish and Game 1991). Even with increased growth in the aquaculture field, several issues are still constraining the success of shellfish aquaculture. One of these constraining factors is availability of high quality oyster spat for the shellfish farms.

Shellfish aquaculture starts with acquisition and growth of spat which are small shellfish of the appropriate species. For oysters, spat range from 4-6 mm to 30 mm in shell length with the larger size preferred by the farmer. In Alaska, however, oyster spat are available only from shellfish hatcheries located outside the state and imported spat size is restricted to 20 mm or less in length. These small spat must then be rearing in stacking trays, transfered to 1/2" lantern nets, then to 1" lantern nets for final growout year until they reach market size. Use of two or three types of culture gear is expensive, but cost of an operation can be reduced by supplying larger spat to the farmer. Specifically, if 30 mm spat can be delivered to the farm, two type of gear (about 30% of the equipment cost of the farm) no longer becomes necessary.

An additional problem faced by shellfish farmers is the time of year spat are available. In Alaska, growth of shellfish often accelerates in the spring and fall with increase in diatom plankton abundance. For most farms at least three growing seasons are needed to enable oysters to grow to market size. In most instances a spring, fall, and another spring growout will make oysters available for market in the summer of their second year.

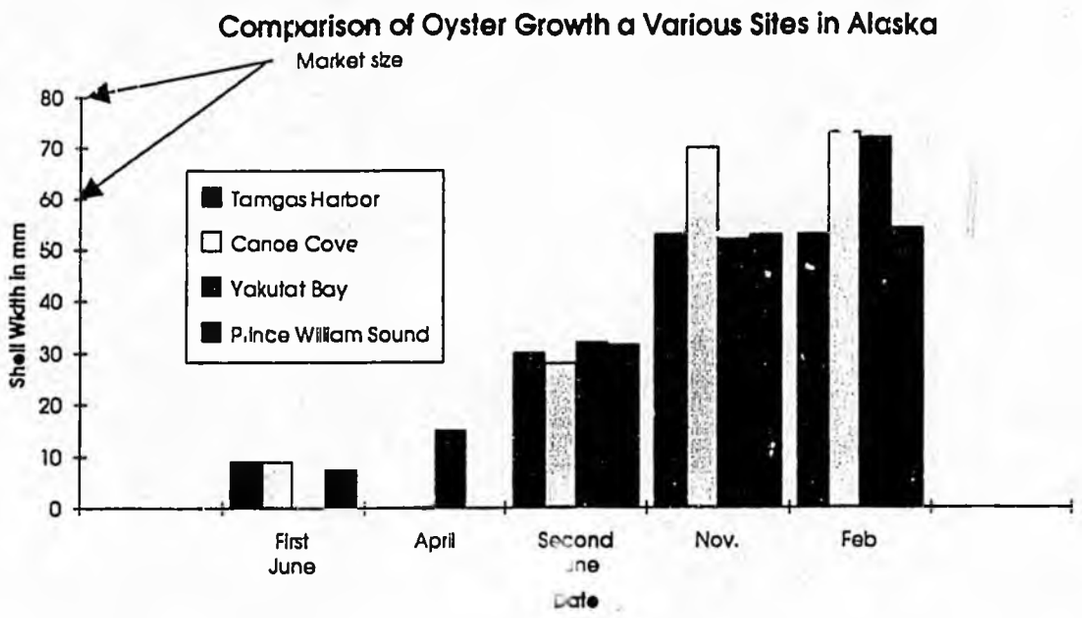

Figure 1. Expected average growth of oysters.

Having oysters available for marketing during the summer availability has an additional advantage for Alaska grown oyster because oysters growing at a warmer, more southern latitude become sexually mature in the summer of their second year and the gametes are milky in texture. These milky oysters are not marketable. Alaskan oysters oysters grown in cold water do not become sexually mature and thus are available for marketing during the summer.

Thus, the time spat are initially placed in the water is critical to the time oysters are available to market. The fear of many Alaska shellfish farmers is that a season of growth can be misses if spat are not available at the required time. An example of this problem happened this summer (1992) when Kyper Mariculture in Humbolt Bay, California delayed their shipment of spat to Alaska until August which resulted in a missed spring growth period. Another problem happens to farmers as a result of trying to get the largest spat possible. To get large spat an oyster grower may wait as long as possible to

ship the spat into the state and in the process runs the risk of waiting too long. During the waiting period the oyster spat may grow to over the 20 mm size limit, and the spat cannot be allowed into the state.

Insecure sources of oyster spat have repercussions that go beyond the culturing aspects of the aquatic farm. Financial institutions certainly will require that a secure spat source be available, and efforts for farmers to form working associations such as cooperatives are impaired because of the lack of reliability of the members to obtain spat. In summary the spat availability problem is serious and needs to be addressed if shellfish aquaculture is to be successful in the state of Alaska.

A possible answer to the spat availability problem is to import small spat during the fall or early spring, culture them in an upwelling nursery system to 30 mm in size. then delivery these larger spat to the farms for growout to market size. An upwelling nursery station is one where small oyster spat are placed in plastic tote bin culture chambers with a plastic small mesh screen bottom. (Figure 2). The culture chambers are attached vertically to a floating raft and surface saltwater pumped vertically through the chambers. The pumping of sea water through the chambers concentrates the plankton, thus making more food available for the shellfish.

These systems have been found to be extremely effective in increasing growth of small shellfish (Bellington 1991), but have not be utilized for colder water conditions in Alaska. In addition flow rates and stocking densities have not been established for oysters grown in colder waters. In the literature there is ample documentation that indicates Pacific oysters can grow well in cool waters providing that adequate feed is available (Mann 1979). It is expected that if an supplemental diatom plankton are

available to oyster spat, they can grow well and fulfill the needs of shellfish farmers for larger oyster spat at the optimum time.

The purpose of this proposal is to request funding to support a feasibility project to test use of a foating upwelling nursery system for accelerated growth of Pacific Oyster spat.

Materials and Methods

A prototype upwelling nursery system will be constructed (Figure 2).

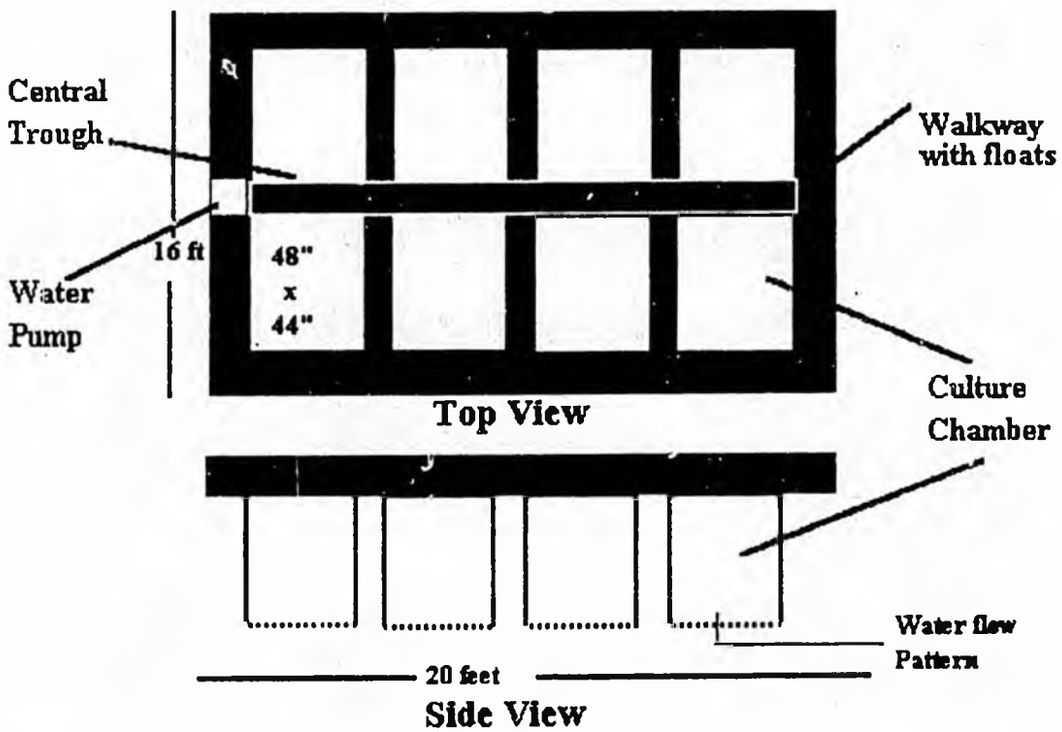

Figure 2. Diagram of prototype upwelling oyster nursery system.

Such a system is available through Sound Sea Farms. Each chamber will be stocked with 4-6 mm spat. Two stocking times will be tested September and April. These two times were selected because spat of the required size are available, and since we do not know if a single spring growth period will result in the spat reaching the target 30 mm size by June 1, a fall stocking is necessary to determine if the small spat need the additional

growing time during the fall. To reach this size one stocking is planned for the fall to take advantage of the fall bloom period. The optimum water flow rate to be used in the nursery system must be determined. To arrive at the optimum flow rate need for the culture chambers, three water flow rates will be tested: low - 100 gpm, medium - 150 gpm, and high - 200 gpm (Table 1).

Table 1. Experimental Design of treatments for oyster spat in the prototype spat nursery.

September stocking	April stocking
Low Flow	Low Flow-
Medium Flow	Medium Flow
High Flow	High Flow

On a weekly basis, a 100 spat will be removed from each chamber and checked for mortality, from the 100 spat 15 will be randomly selected and measured for the shell height, width, and length. Spat will be returned to the culture chambers once data are taken. At the end of each 5 week period, condition of the spat will be measured using volumetric and dry weight/ash weight ratio which is an indication of tissue growth. General oceanographic information will also be collected during the project which includes temperature recorded by a continuous temperature recording device, weekly measurements of salinity, plankton identification, and secchi disk readings as an index of plankton abundance.

Analysis of variance F test will be performed to test the significance of flow rate, and stocking time on growth and condition of spat. Upon completion of the project a manual describing construction and operation of the nursery system will be published by the University of Alaska Marine Advisory Program for general distribution.

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Location of the Project

The project will be located on the oyster farm site of Mark Bradley, Kachemak Bay, Alaska.

Time line for project

December 1992 - Amend Mark Bradley aquatic farm permit to allow upwelling unit

June -1993 - Construction of prototype nursery upwelling unit

September - 1993 First stocking

April 1994 Second stocking

June - Completion of data collection

August - 1994 Completion of manual for general distribution

Budget for the project

Oyster upwelling nursery system	$16,000.00
Includes	
Materials to build 20' x 16' raft	
Culture containers	
2 hp water pump	
Shipping	
Assembly	
Testing	
Oyster spat 50,000 @ $11.00/1,000	$550.00
Oceanographic Equipment	
Recording Thermometer	$650.00
Secchi disk	$35.00
Water sampling bottle	$55.00
Salinity refractometer	$285.00
Water sampling bottles	$28.50
Measuring calipers	$35.00
Brushes and equipment to maintain raft	$50.00
TOTAL	$17,138.50

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ALASKA DEPARTMENT OF FISH AND GAME
F.R.E.D. DIVISION

RECENT GROWTH OF THE AQUATIC FARM INDUSTRY IN ALASKA

1988 Seven farms operating under permit to ADF&G (Shellfish Farm Act of 1987)

Aquatic farm legislation (SB 514) became law creating a permit/lease system

1989 Fifteen farms operating under permit to ADF&G (Shellfish Farm Act of 1987)

First aquatic farm site opening held under provisions of the 1988 legislation. For sites in SE Alaska -- 54 applications received. 26 permits issued.

1990 Second aquatic farm site opening held -- for sites in SC Alaska. 36 applications received. 22 permits issued.

Kachemak Bay State Park farming legalized for existing farms. 9 permits issued, 1 withdrawn.

1991 Third aquatic farm site opening held -- statewide. 42 applications received. 16 new + 2 major amendments proposed for final approvals (May, 1992)

1992 72 farms permitted statewide. Significant increase in marketing.

Fourth aquatic farm site opening -- 22 applications received

AQUATIC FARM SALES

1990 $77,255 (primarily oysters) -- from 5 farms

End of year inventory -- $1,330,380 (available 1992 .. 1994)

1991 $99,848 (primarily oysters, some blue mussels) -- from 13 farms

End of year inventory -- $2,794,105 (available 1992 .. 1995)

1992 Production increasing significantly as new farm's oysters and blue mussels reach marketable size -- 19 farms marketing product to date

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MARICULTURE TECHNICAL CENTER / SHELLFISH HATCHERY UPDATE

On March 18th a meeting was held at the Chamber Office of the City of Seward to discuss recent developments with funding of a shellfish hatchery and the Mariculture Technical Center.

A review was presented outlining the history of the projects and a brief outline of what has happened this past year. An overriding concern was the confusion of the goals of the two projects and the potential funding sources. An attempt was made to clarify these issues, and develop a framework for promoting both facilities as an integral part of the expansion of Alaska's aquatic farm industry.

BACKGROUND

In the fall of 1991 the Alaska Department of Fish and Game's (ADFG) Fisheries Rehabilitation Enhancement and Development (FRED) Division developed the concept of a Mariculture Technical Center (MTC). This research facility was envisioned as a crucial component of ADFG's commitment to the aquatic farm industry. The facility would provide the opportunity for public and private research to assist the aquatic farm industry in developing new species for culture, oyster broodstock selection and conducting research for further enhance the industry. FRED sought funding from both the general fund and from the Exxon Valdez Civil Settlement through the Trustees. That funding did not occur.

At the same time, the Chugach Regional Resource Commission (CRRC) began seeking funding for development of a hatchery to provide oyster seed for its nine farms under development in Prince William Sound and for other growers throughout the state CRRC is promoting the project on behalf of the Mount Marathon Native Association (MMNA) of Seward which would own and operate the hatchery.

The hatchery would provide stability and control over its oyster seed requirements eliminating the uncertainty of out of state seed sources.

CRRC sought funding through HB411 which attempted to distribute the Exxon Valdez oil spill $50 million criminal settlement. The bill passed the legislature but was ultimately vetoed by the governor.

In many circles these two projects were confused as one in the same, in conflict or redundant. Despite efforts by the industry and its supporters this confusion was never cleared up.

In 1992, CRRC financed and acquired with cooperation of Mt. Marathon Native Association the permits necessary to operate a pilot upwelling study to evaluate the use of the Institute of Marine Science facility in Seward for culturing juvenile oysters. Small oysters were placed in nets in the upweller. Growth, temperature and plankton samples were collected throughout the summer and fall. Results were promising. This pilot study should provide important information to assist in the design of a hatchery/nursery complex. The nursery component of the hatchery will be the primary determinant of its production capabilities and potential.

PRESENT STATUS

Mariculculture Technical Center-Funding for the MTC is currently being sought from the state through a bill appropriating 1.8 million, submitted by Representative Johnny Ellis (D) of Anchorage. When successfully funded the state will hope to receive $1.0 million match from the Economic Development Administration. Funding for the MTC is also being sought through HB10/SB98 which allocates the $50 million criminal settlement money.

The scope of projects and operating funding for the MTC was discussed. FRED Division has committed to reallocate funds to operate the facility. Its modular design would allow for numerous projects of various durations to be conducted simultaneously. It is envisioned that both public and private research will occur. Some priority projects such as oyster broodstock selection, clam broodstock development, aquatic plant seed sources and king crab enhancement were discussed.

Potential project funding sources includes Alaska Science and Technology Foundation (ASTF), Alaska Fisheries Development Foundation (AFDF), Western Regional Aquaculture Consortium (WRAC), United States Department of Agriculture (USDA) and the Forest Service. The general consensus was there are numerous important projects and funding sources available.

SHELLFISH HATCHERY

Mount Marathon Native Association has identified the shellfish hatchery/nursery as one of its major priorities and has begun seeking funding as part of a comprehensive economic development plan. This plan identifies economic stability, creation of jobs and ties to the marine environment as major priorities. MMNA staff has submitted an application with the American Native Administration (ANA) for a two year pilot project with operational funding to work out production scenarios. In addition the US Forest Service through its economic recovery program is scheduled to award $2800 for some preliminary work.

CRRC is assisting in seeking funding for the hatchery through the EDD. One of the major concerns brought out at the meeting was the amount EDD was willing to fund (match) and if the EDD/EDA would be able to assist both the MTC and the hatchery. Another concern was which entity would be the applicant for EDA/BIA funding MMNA, CRRC or the City of Seward. EDD was unable to participate in the meeting. It was agreed that EDD would be approached for funding with both facilities presented as a package.

CRRC is also considering seeking funding through a Community Development Block Grant (CDBG) under Housing and Urban Development (HUD). Other potential sources include Bureau of Indian Affairs (BIA) and Native Americans Fish and Wildlife Service.

ALASKA SHELLFISH DEVELOPMENT CORPORATION (ASDC)

The participants in the meeting were unanimous in their agreement that the funding of a shellfish hatchery and MTC were imperative and their ultimate success will be interdependent. The group unanimously endorsed that a concerted campaign was necessary and that an organization was needed to unify this effort. With this in mind and ad-hoc group was formed as ASDC and a set of goals developed:

1) Form a consortium of interested parties to promote both the hatchery and the MTC and amass a public education campaign describing the interdependence of both. The Alaska Shellfish Development Corporation was formed for this purpose.

2) Provide a network and forum for promoting these projects and insure that redundancies and conflicts for funding sources would not occur and provide a central communication point. It was agreed this group would be open to all interested parties.

The following entities volunteered to act as supporters and advisors:

City of Seward
Alaskan Shellfish Growers Association
Mount Marathon Native Association
Chugach Regional Resource Commission
Alaska Department of Fish and Game
University of Alaska School of Fisheries and Ocean Sciences

Jeanne Galvano and Jeff Hetrick agreed to coordinate activities for the next meeting. CRRC has volunteered clerical and administrative time and funding for the mailings.

The next meeting is scheduled for **Thursday April 8th at 11:00 a.m. via teleconference.** We hope to link the CRRC office in Anchorage with the Mt. Marathon Office in Seward. Contact number for questions Mt. Marathon 224-3118 or CRRC 562-6647.

Meeting Participants:

Esther Ronne	Mt. Marathon Native Assoc. Board Member
Brian Stanley	Mt. Marathon Native Assoc Board Member
Ken Blatchford	Mt. Marathon Native Assoc. Board Member
Tyler Jones	City Manager, Seward
A.J. Paul	UAF School of Fisheries and Ocean Science
Jeff Hetrick	Alaska Aquafarms
Tasha Chmielewski	Chugach Regional Resource Commission
Michelle Zerbetz	Grant Writer (CRRC)
Jim Cochran	Mariculture Coordinator FRED Division
Jeanne Galvans	MMNA Staff
Marianna Keil	MMNA Staff

ALASKAN SHELLFISH GROWERS ASSOCIATION

GENERIC MARKETING/COOPERATIVE FEASIBILITY PROJECT

TO: ASGA BOARD OF DIRECTORS

FROM: MARICULTURE TECHNICAL CENTER SITING COMMITTEE

DATE: DECEMBER 3, 1991

RE: SITE EVALUATION REPORT

The Alaskan Shellfish Growers Association (ASGA) appointed a committee to evaluate designated sites for the Alaska Department of Fish and Game's proposed Mariculture Technical Center. The committee consisted of two board members from each of ASGA's regional chapters: (Southeast) Rodger Painter and Marvin George; and (Southcentral) James Hemming and Mark Bradley.

This is a report of the committee following a November 27, 1991, teleconference including all four members.

Sites Evaluated

The committee decided to focus its evaluation on five sites initially identified by the Alaska Department of Fish and Game as candidates: Juneau, Kodiak, Seldovia, Seward and Sitka. Petersburg was the sixth site on the list, but it was dropped from the committee's evaluation because of the lack of adequate water quality data.

Two other candidates sites (Yakutat and Unalaska) identified by ASGA members during the November 24, 1991, ADFG workshop in Anchorage also were dropped from consideration because of the lack of water quality data. All three sites (Petersburg, Yakutat and Unalaska) had other shortcomings, such as distance from proposed sites to deep marine waters (Petersburg), remoteness (Unalaska), and lack of support infrastructure (Yakutat).

Information Sources

The primary source of technical information was a report prepared by: James Cochran, ADFG mariculture coordinator; Ray RaLonde, Marine Advisory Program aquaculture specialist; and Dr. Michael Stekoll (PhD) University of Alaska School of Fisheries and Ocean Sciences. This report made the following rankings of six sites: Seward and Juneau (highest potential); Kodiak and Yakutat (potential unknown); and Sitka and Seldovia (unacceptable problems).

The committee also considered comments by experts and ASGA members during the Nov. 24 workshop concerning the pros and cons of candidate sites.

Rating System

The committee developed a ten-point rating system to score sites according to the following criteria:

Biological Attributes
surface water quality
turbidity
temperature
salinity
productivity

Available Infrastructure
buildings
deep water intake
staff housing
local allweather airport
road system to interior
value of existing infrastructure
is land available for purchase
power and fuel
parts and supplies
proximity to deep marine intake site

Community Support

Technical Support

Diversity of Use Potential

Number of Seafarms in Nearby Areas

Conclusions

The committee determined that three of the five sites evaluated would be acceptable from a biological perspective: Seward, Juneau and Kodiak. While little hard data was available, the committee felt that Kodiak probably would fare very well during a more lengthy data gathering process.

When the other criteria was applied, the committee ranked the sites in this order:

1. Seward. This is a very good site from a biological perspective and it would enjoy good technical support because of the proximity to the University facilities. Existing infrastructure and support services is good. The university site is large enough to provide for private sector expansion. The site is accessible because of the road system. There is easy access to nursery areas in Kachemak Bay and Prince William Sound. The only major drawbacks are a freshwater lens on Resurrection Bay and the potential for long-term surface water quality degradation from uplands residential and industrial development.

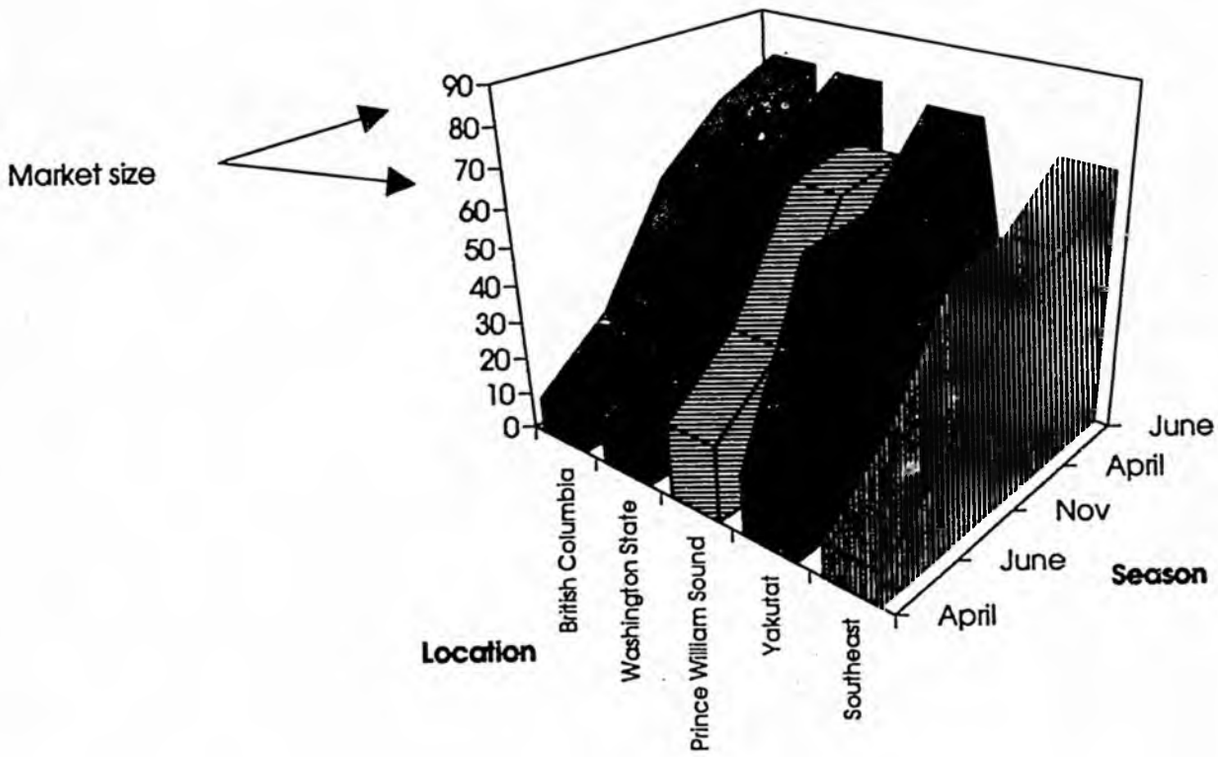
2. Juneau. Rates well biologically and offers strong technical support from the university, ADFG and National Marine Fisheries Service. This site also has surface water quality problems and proximity to alternative nursery areas is limited. Excellent existing infrastructure and support services, but the building site is small. Limited accessibility is a concern.

3. Kodiak. Undoubtedly a good site biologically, including good surface water quality. While Kodiak offers good technical support and support services, the proposed site lacks existing infrastructure. A major concern about Kodiak was its limited accessibility.

4. Seldovia. The high productivity in the area was a major drawback biologically. The distance from a deep water intake site is a problem. While the Kasitsna Bay site has existing infrastructure, local support services and technical support are lacking. Limited accessibility was a concern.

5. Sitka. Major biological drawbacks were high productivity and potential for low salinities. Surface water quality also is a problem. Distance for intake line to deep water was a concern.

Growth of Pacific Oysters in Alaska and the Northwest



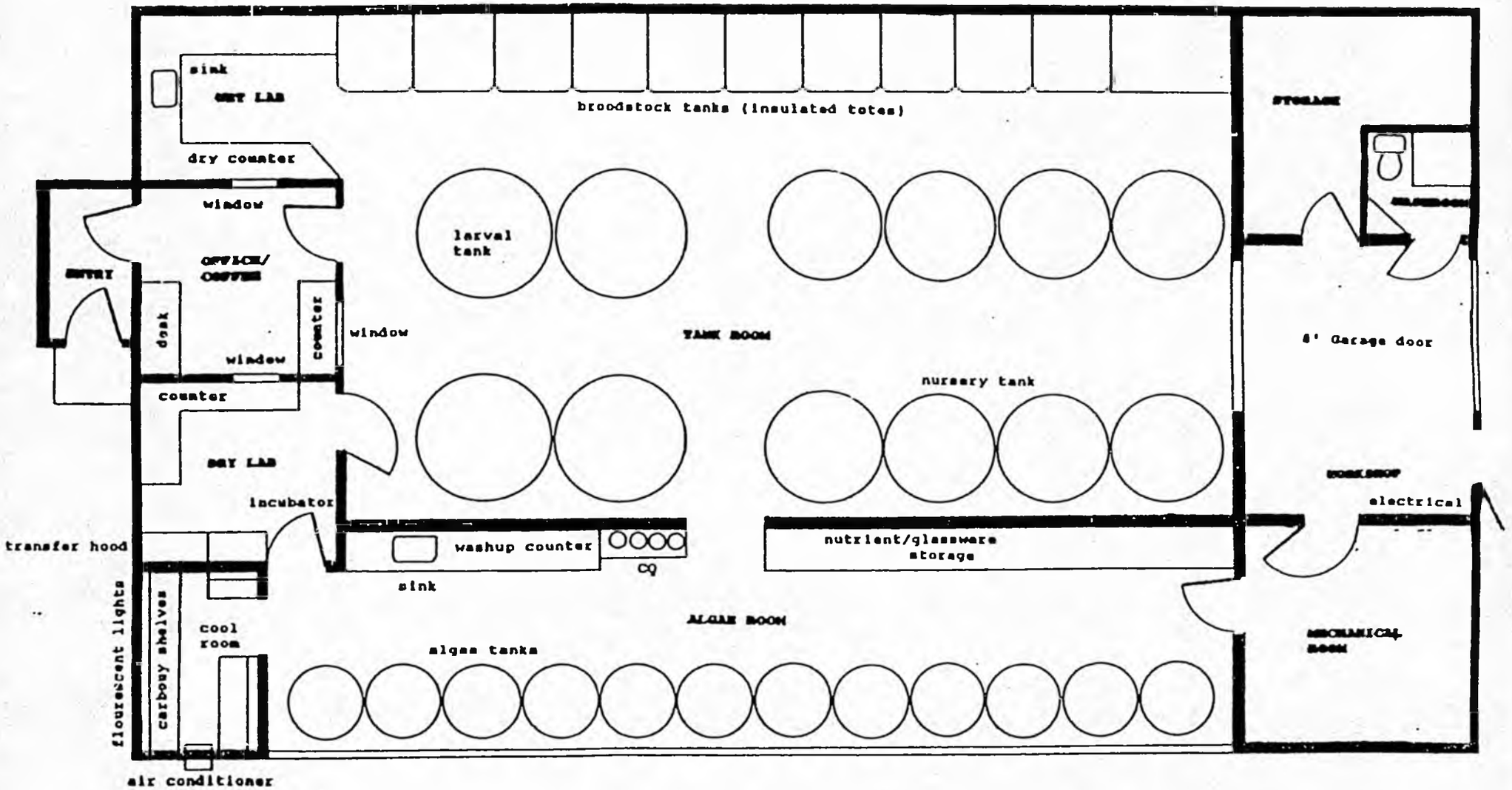


FIGURE 1. FLOOR PLAN OF HATCHERY

Permitted Aquatic Farms as of 3-31-93

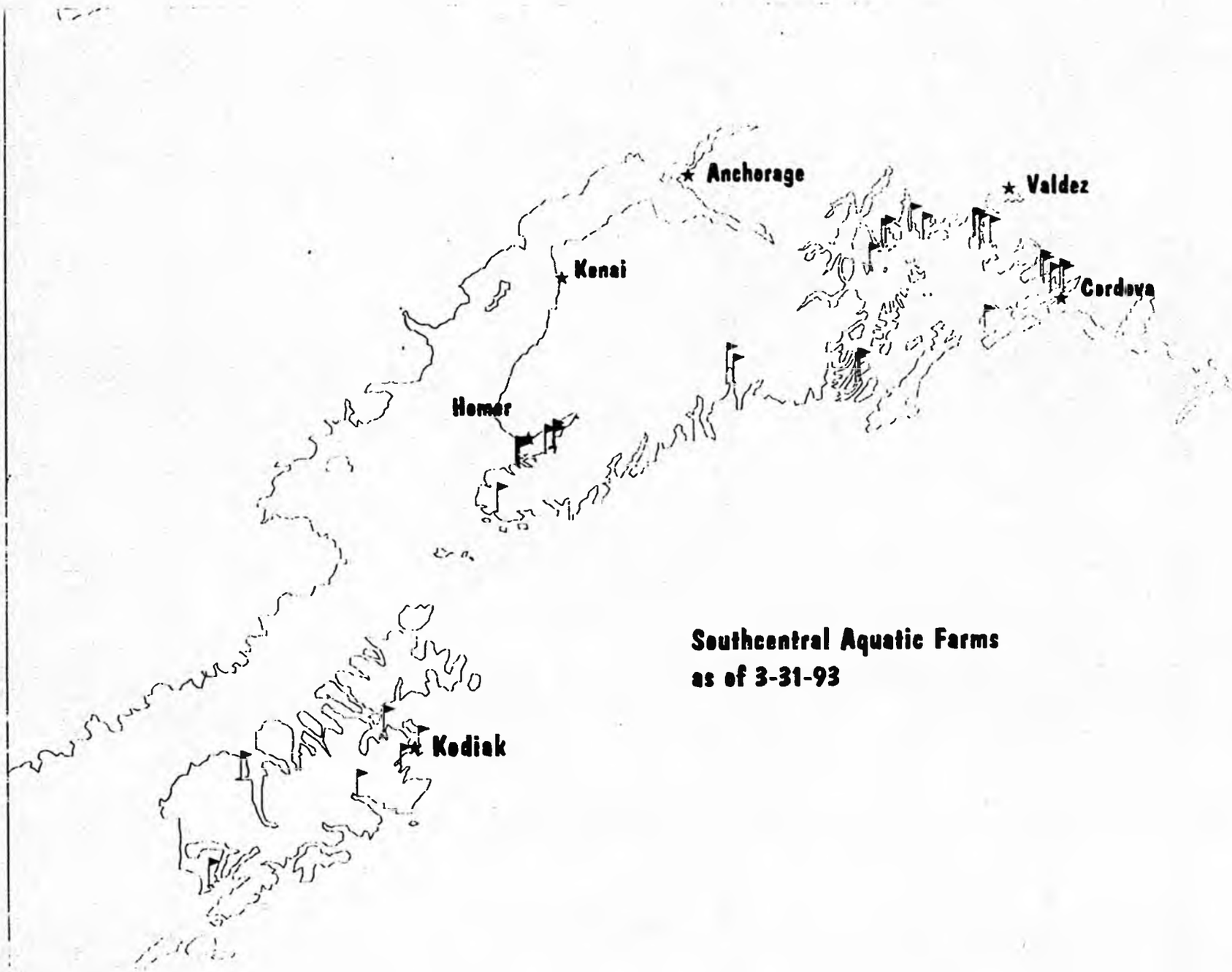
Southeast -- 22 farms

Prince William Sound -- 18 farms

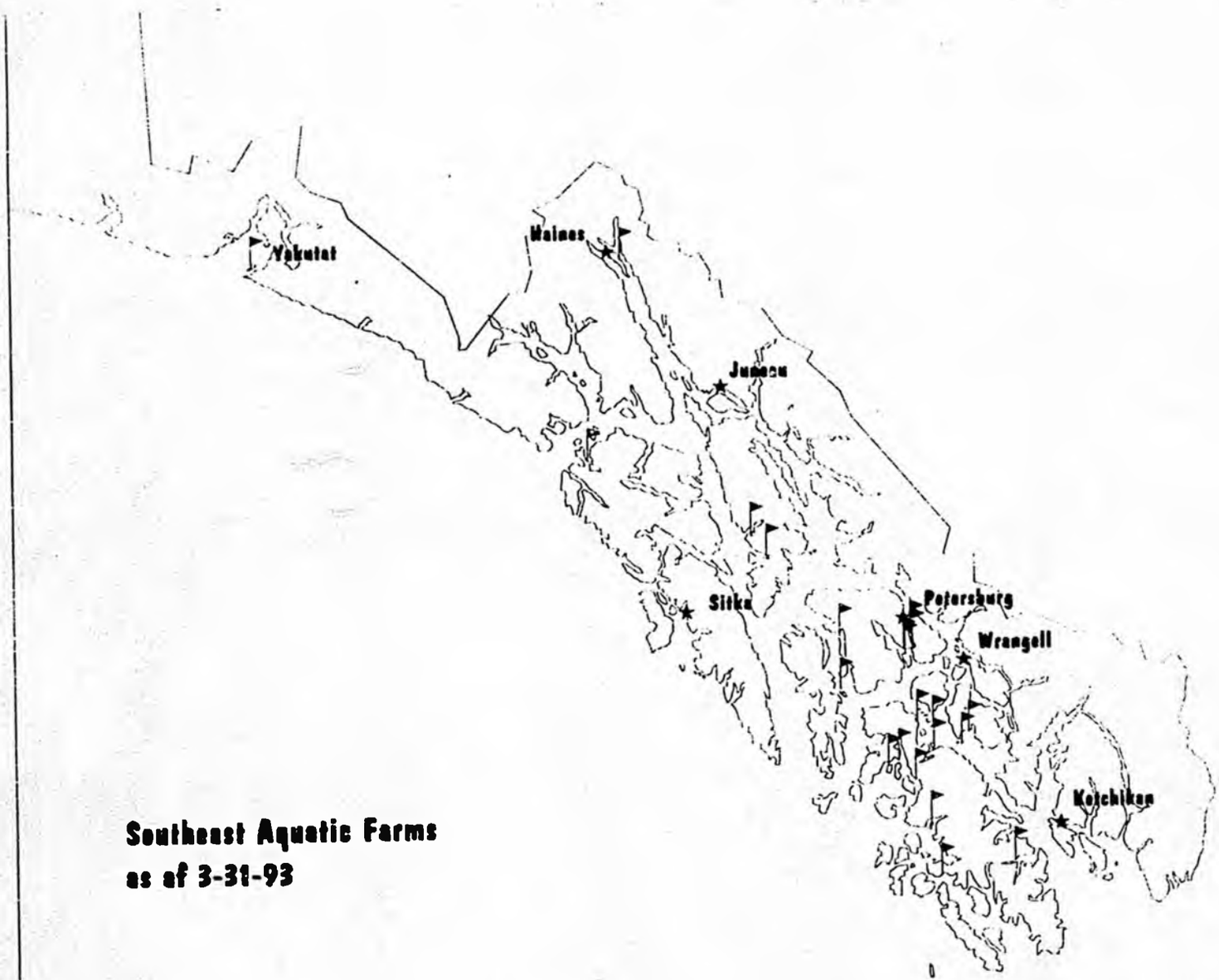
Kachemak/Resurrection Bays -- 23 farms

Kodiak -- 6 farms

James O. Cochran
Mariculture Coordinator
Commercial Fisheries Management and
Development Division
Alaska Department of Fish and Game



Southcentral Aquatic Farms
as of 3-31-93



Southeast Aquatic Farms
as of 3-31-93

Seward Marine Center
Saltwater System
Description

Pumps:

Four Fybroc 1503 non-toxic saltwater pumps (rated at 200 gpm, 10 psi each), are installed to support the sea water system. These are extremely reliable pumps. Three have been used for over 6 years with virtually no failures. A spare pump is also on hand.

Saltwater Deliver System:

(a) The east most intake line is 8 inch diameter FRP Bondstrand pipe. It feeds directly through the sea wall to a pit then to two Fybroc pumps. The pipe inlet is at 270 feet of water depth and 800 feet from the sea wall. Either of the two pumps can draw from this pipe.

(b) The west most intake lines deliver water over the dock wall. They are both, 6 inch diameter, DRISCOLL plastic pipe. One is in 195 feet of water and 900 feet long while the second is in 40 feet of water. The shallower pipe is primarily an emergency back up, but is also used to fill the aquaculture pond if mammals are held there, or if surface water is required. These pipes also feed into two Fybroc pumps, either of which can be used to pump saltwater from either line.

General Comments:

Bondstrand is the better, but more expensive pipe. The DRISCOLL brand pipe is subject to thermal expansion and contraction that has caused some problems. BONDSTRAND pipe is strong and flexible.

Distribution System:

PVC pipe is used to distribute the saltwater from the pumps to the labs. Two wet labs, a set of outdoor tanks, and an aquaculture pond are supported by the saltwater delivery system. The water requirements of IMS can be support easily by a single pump since the saltwater requirements of IMS are about 100 gpm. The intake lines were install by IMS staff with little difficulty. The water is unfiltered, but a silt problem does happen 2 or 3 days a year. The siltation problem has never been severe enough to disrupt IMS activities. Salinity of the saltwater is 32-34 o/oo and has a temperature of 4-7 ^{o} C year around. The effluent is monitored and chlorinated.

If you have any question contact Tom Smith or Leonard Weimar at 224-5261.

ALASKA SeaLife CENTER

UNIQUE FEATURES OF THE ALASKA SeaLife CENTER

- This will be the first facility of its kind that was designed from its beginning to blend marine mammal and seabird rehabilitation, research and public education into a cohesive and self supporting program.
- The income from the public education portion of the SeaLife Center will support the research and rehabilitation sections so the core program will not be dependent on state or federal funds or foundation grants.
- The research and rehabilitation facility will be open to researchers from any accredited institution or agency.
- There are no other facilities north of Santa Cruz California designed to hold live marine mammals for study.
- There are 22 sea mammal and sea bird rookeries close to the Seward site which makes combined laboratory and field studies feasible.

Research

The SeaLife Center will have research facilities for scientists from any accredited agency interested in the general biology of marine mammals and sea birds. Staff researchers will interact with colleagues from a number of organizations throughout the world. 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. The first laboratory based projects by the SeaLife Center's research team will focus on nutritional needs, diseases, parasitism and causes of mortality in sea lion and murres both of which are common near Seward. Laboratory studies will cooperate with field studies on population fluctuation and causes of mortality. As the sea lion and murres studies progress, they will be expanded to include harbor seal and kittiwake biology.

Support for the Research portion of the SeaLife Center will be from overhead charges to scientist using the facility, Tank and laboratory use fees, and animal maintenance fees are examples of these type charges. Grants will also be obtained from various state, federal and private sources to study specific scientific problems. Except for the use fees, these funds will be strictly applied to their specific study area.

Rehabilitation

The main objective of the rehabilitation effort 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. Currently there are about 100 marine mammals delivered to Anchorage's Alpine Veterinary clinic annually for rehabilitation. An additional 300 to 600 injured marine mammals are reported each year but not brought in for rehabilitation because there isn't a facility in which to hold them. Animals that can not be rehabilitated for release will be placed in public education portion of SeaLife Center where they can be well cared for. Several foundations exist that would provide funding support to a proper rehabilitation facility.

Education

The live animal exhibits of sea lions, sea otters, seals, alcids and other marine birds, fishes and invertebrates will create a distinctive attraction to encourage a large number of visitors to the Center annually. The Center will use this opportunity to convey its message of environmental stewardship through dramatic encounters with animals in habitat settings. Interpretive and interactive displays will reinforce this message.

The Center will also foster an interest in science by conducting specialized tours for school children. Videos, lectures and "hands on" type classes, geared to specific age groups, will promote a "science is fun and interesting" philosophy. There are over 60,000 secondary and grade school student within a three hour drive of the Center.

Seward Association for the Advancement of Marine Science (SAAMS)

PO Box 1329, Seward, Alaska 99664 Telephone (907) 224-3080 Fax (907) 224-3292

ALASKA *SeaLife* CENTER

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ALASKA *SeaLife* CENTER

Executive Summary

The Alaska SeaLife Center will be a financially self supporting facility dedicated to marine science research, rehabilitation and public education. The public education portion of the Center's mission will provide the funds to support the core research and rehabilitation programs. To meet this self supporting goal, 300,000 visitors per year are required. The initial feasibility into this project indicates that an annual attendance in excess of 400,000 can be reasonably expected.

The Center will operate year round under a Director who will be responsible to a Board of Directors. The Center will be a not for profit corporation that returns all excess revenues back into the operation. The City of Seward has donated 10.5 acres of waterfront property for use of the Center. A nonprofit organization called the Seward Association for the Advancement of Marine Science (SAAMS) is the facilitator of this project. Once the project is complete, SAAMS only input to the operations is via a single seat on the Board of Directors.

SAAMS has hired an internationally recognized aquarium design firm, Cambridge Seven Associates, to head this project. This firm has built several successful such attractions throughout the world. Based on the initial design, construction costs for the Center is $46.3 million. Operating costs for an attendance of 450,000 per year is $4.6 million per annum. If funding plans materialize, the Center could open in May 1996.

Alaska's abundant marine resources demand such a Center. Rapidly declining populations of certain marine mammals and seabirds have resulted in several being placed on the threatened species list. Should these become endangered species, a severe impact on our fishing and tourist industries will result. Despite this threat, there is no facility where these animals can be held in their natural environment for long term studies that will help explain why these populations are declining. In fact no facility exists to even hold them north of Santa Cruz, California. Additionally, Alaska lacks any facility to hold and treat large marine mammals that are injured, stranded or stressed by some other means. Approximately 300 to 600 such animals are reported each year. Because of a lack of holding facilities, these animals remain untreated and invariably die. The Alaska SeaLife Center will correct these shortcomings. It offers a unique opportunity for the State to become a leader in marine research and rehabilitation.

ALASKA *SeaLife* Center

I. INTRODUCTION

A. Statement of Purpose: The Alaska SeaLife Center will be a financially self supporting facility. It will provide a balanced union between marine research, marine mammal and sea-bird rehabilitation, and educational exhibits of live Alaskan marine animals. It will be dedicated to understanding and preserving the Alaska marine ecosystem, and to conveying to the public, through dramatic encounters of animals in their natural habitat and educational programs, its responsibility for environmental stewardship.

B. Scope of the Plan: The Alaska SeaLife Center will be a world class research, rehabilitation and public education facility. It will resolve several short falls that currently exist in the protection and understanding of Alaska's rich marine environment. Specifically the Center will address;

Research

The Center will have research facilities for scientists from any accredited agency interested in the general biology of marine mammals and sea birds. Currently there are no other facilities in the north Pacific region built to do research on large marine mammals. Funds from the Center public education program will support a permanent staff including a marine veterinary, marine mammal and sea bird specialists and a marine ecologist. These staff researchers will interact with colleagues from a number of organizations throughout the world. 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. The first laboratory based projects by the Center research team will focus on nutritional needs, diseases, parasitism and causes of mortality in sea lion and murres both of which are common near Seward. Laboratory studies will cooperate with field studies on population fluctuation and causes of mortality. As the sea lion and murres studies progress they will be expanded to include harbor seal and kittiwake biology.

Rehabilitation

The main objective of the rehabilitation effort 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. Currently there are about 100 marine mammals delivered to the Alpine Veterinary clinic annual for rehabilitation. An additional 300 to 600 injured marine mammals are reported each year but not brought in for rehabilitation because there isn't a facility in which to hold them. Animals that can not be rehabilitated for release will be placed in public education portion of Center where they can be well cared for. Several foundations exist that would provide funding to support a proper rehabilitation facility.

Education. The live animal exhibits of sea lions, sea otters, seals, alcids and other marine birds, fishes and invertebrates will create a distinctive attraction to encourage a large number of visitors to the Center annually. The animals in these exhibits will be those from the rehabilitation program that would not survive if released. The Center will use this opportunity to convey its message of environmental stewardship through dramatic encounters with animals in habitat settings. Interpretive and interactive displays will reinforce this message.

The Center will also foster an interest in science by conducting specialized tours for school children. Videos, lectures and "hands on" type classes, geared to specific age groups will promote a "science is fun and interesting" philosophy. There are over 60,000 secondary and grade school students within a three hour drive of the Center.

ALASKA *SeaLife* CENTER

II. INITIAL FEASIBILITY

A. Opportunity: The State of Alaska with its enormous sea coast and rich marine resources is highly dependent on its marine environment for its economic well being. Its fishery industry and, to a large extent, its tourist industry rely on this environment for their livelihood. Despite its dependency on this resource, research and understanding of this environment is sorely lacking. Today several marine mammal and seabird populations are drastically declining and are now on the threatened species list. Despite this alarming trend, there is no facility in the Pacific Northwest where these species can be held for long term studies. In fact no facility exists where these animals can be held in their natural environment. As a result research into the reason for the population decline is lacking. Should this trend continue and these species become endangered, both the fishing and tourist industry will be greatly curtailed by subsequent protective legislation.

The continuing growth of the tourist industry in Alaska is a direct result of the Alaskan rich scenic and wildlife environment. This interest presents a unique opportunity to construct a marine center that is dedicated to marine research, rehabilitation and public education. The establishment of a world class center that will attract a large annual visitor population can become self sustaining. The public portion of the facility can recover the full operating costs of the center, thereby eliminating the need for state, federal or other sources for operating funds. The public interest in these type centers is growing. Those currently in existence are attracting visitors at over 50% of their initial estimate. All are profit making ventures.

Seward is the ideal location for such an attraction. It is located within easy driving distance of Anchorage, the State's major population and transportation center. It is connected to Anchorage by road and rail both of which offer a dramatic scenic route. Seward already has a research facility that is operated by the University of Alaska Fairbanks oceanographic research arm, the Institute of Marine Science. This Institute is one of the top ten oceanographic institutes in the United States. Therefore, a resident pool of scientist already exist who would use the SeaLife Center's capabilities. Seward is within a four hour boat ride of 22 sea mammal and seabird rookeries that would allow both field and laboratory studies to easily coexist. Seward lies on the habitat boundary for north Pacific and sub-Arctic mammals, therefore both can exist at this locale. Seward's fjord type bay also allows the high quality sea water needed by a sea life center to be easily obtained. The current research center located in Seward draws its sea water form over 270 feet in depth. This provides clean, unpolluted and year round cold water that can support not only north Pacific and sub-Arctic sea life but also some Arctic sea life and fauna. This is an extremely rare capability. Additionally, Seward the major port of call for tourist ships visiting the south central Alaska area.

All these factors contribute to a unique opportunity that will allow a successful, self supporting marine attraction to be operated that will produce sufficient revenue to support the core programs of marine research, rehabilitation and public education.

B. Methodology

The Seward Association for the Advancement of Marine Sciences (SAAMS) was formed to act as the project facilitator. This non-profit corporation, licensed under State of Alaska law, consists of prominent Alaska citizens who have an interest in furthering the scientific study and understanding of the marine environment. SAAMS outlined its plan to the Seward city council and received not only its support for this project but also a donation of 10.5 acres of water front property for the Center's location.

ALASKA *SeaLife* CENTER

In conducting the initial feasibility study for the SeaLife Center, Cambridge Seven Associates was contracted by SAAMS to develop an overall plan, architectural concept, project identity, and estimated construction and operating costs. This firm is one of the foremost designers and consultants for this type facility. They have constructed the New England Aquarium in Boston, the National Aquarium in Baltimore, the Osaka Aquarium in Japan and the Tennessee Aquarium in Chattanooga. They have built several others in Europe. Their experience and insight into the operations and cost of this type facility was a critically needed expertise. Other aquariums were contacted and visited to identify their problems, revenue sources and success. These included the Tennessee Aquarium, the Seattle Aquarium, the Osaka Aquarium, the Baltimore Aquarium and the Monterey Aquarium.

Various tourist marketing firms were interviewed to determine if such an attraction in Seward could become a tourist destination. Various business bureaus, national parks, city chamber of commerce were polled to determine their visitor counts. The Department of Education in Kenai, Anchorage and Matsu districts were polled to determine the kindergarten through grade 12 enrollment and interest in such a Center as an educational tool. These sources provided information concerning the potential visitor population that the Center would draw upon.

From these sources, the following information was obtained;

158,700 people visited the Kenai Fjords National Park in 1992. Visitors to this park have been growing at over 23% per annum over the past three years.

Over 1.5 million visitors passed through Anchorage in 1992. Portage Glacier National Park received over 500,000 visitors in 1992. The City of Seward's Chamber of Commerce received 210,000 visitors in 1992.

Cruise ship passengers visiting Seward will reach 196,000 in 1996. 72 percent of the Anchorage area residents visit the Kenai Peninsula once a year and 53 percent of them visit the Peninsula four or five times each year.

Based on predictions from the tourist industry and tourist marketing researchers, the Center can expect to draw over 400,000 visitors annually.

Over 60,000 kindergarten through high school students live within three hours drive from Seward.

Operating aquariums report that the profits from their retail store pays 30% of their operating costs.

All aquariums surveyed are operating at a profit.

All aquariums surveyed underestimated attendance by approximately 50% in their original feasibility study.

ALASKA *SeaLife* CENTER

C. *ASSUMPTIONS*

The formal economic, geotechnical and demographic study is currently being done and will be completed by 1 August 1993. Its purpose is to validate the initial findings and assumptions outlined above. This study will determine the Center's resident area population, the current and projected tourist population and the Center's penetration into this market. An operation analysis will then be performed to determine the economic feasibility of the Center.

Until the formal feasibility is completed the following assumptions remain invalidated;

-The Center will operate year round and will attract the following visitor profile.

Anchorage Visitor Population Attracted (20%)	300,000
Resident School Population Attracted (20%)	12,000
Cruise Ship Visitors Attracted (40%)	78,400
Resident Population Attracted (20%)	76,000
TOTAL ANNUAL VISITORS	466,000

-The Center's retail store will generate at least 20% of the revenue needed to operate.
-The public revenue sector of the Center must support all facility operating cost. Funds received form the research and rehabilitation programs will not be relied upon to meet annual operating costs.
-Ticket prices should not exceed $10.00 per person.

D. *ECONOMIC FEASIBILITY*

Cambridge Seven Associates has developed operating costs from similar sized aquariums. These costs were adjusted for the Alaska market and projected to support an attendance of 300,000 and 450,000 per annum. See section III for details. The figures below tests the Center's economic feasibility based on the assumptions outlined above.

	Annual Attendance	
	300,000	450,000
Total Operating Costs	$3,981,985	$4,635,040
Less Retail Store Revenue (20%)	<796,397>	<927,008>
Gate Receipts Required	$3,185,588	$3,708,035
Ticket Price Required Per Person	**$10.62**	**$8.25**

To maintain a ticket price of $10.00 per person an annual gate attendance of at least 318,559 is required. This assumes no funds are received to support the research and rehabilitation programs associated with the SeaLife Center. If the assumptions are correct, the Alaska SeaLife Center is economically feasible. The formal feasibility currently being performed will validate these assumptions. A conservative approach was taken in conducting this initial feasibility study.

E. Market Analysis

Discussions with the cruise line industry indicates that it would welcome an attraction such as the Alaska SeaLife Center as part of their tour offering to Seward visitors. It would ensure passengers would see many of animals that they anticipate seeing in Alaska regardless of the weather. The shore based tour industry indicates that Seward is the ideal one day tour from Anchorage and a destination like the SeaLife Center would be a very salable package. They also state that the Seward, Kenai Peninsula and Prince William Sound area provides an excellent several day tour package because it offers several transportation alternatives that eliminates backtracking over the same route when returning to Anchorage.

The Alaska Railroad also sees the Center providing an attractive tour package for their rail system. The tourist industry felt a 400,000 plus annual attendance at the Center was very reasonable.

F. Competitive Analysis

While there is no attraction similar to the Alaska SeaLife Center in Alaska or British Columbia, Canada, there are competitors for the tourist market. The Imaginarium and zoo in Anchorage are the most similar facilities now operating near Seward. The former is very small and lacks salt water holding capacity. The zoo stresses land mammals. The major tourist competitor to the Center is believed to be Denali National Park. This attraction is a major tourist draw that provides scenic beauty and land animals in their natural habitat. The SeaLife Center will attract those tourist interested in sea life and will be the major such attraction in the State. While Denali Park and the Center will partially be competitors, each stresses a different ecology. Additionally, the Kenai Peninsula now draws sufficient visitors annually to support the Center. Other then its excellent fishing and camping attraction, the Peninsula lacks a definite destination point for tourists. The Center will fill this void and become a focal point for both current Peninsula visitors and draw additional visitors. Appropriately packaged tours will increase tourism throughout the area.

Experience at established aquariums shows they easily attract the visitation population needed to be self supporting. Each has underestimated its annual attendance by an approximate 50% average. See appendix B for a recent article from Science Technology that discusses the success of these facilities. All indications show that these facilities attract a large crowd and have a high rate of repeat visitors. The current Alaska visitor population can support such a Center if the facility has good access to Anchorage, the State's major population and tourist arrival center. Seward's road and rail connection, and its close proximity to Anchorage meets this criteria.

ALASKA *SeaLife* CENTER

III. FINANCIAL and IMPLEMENTATION PLAN

A. ***Project Phases and Costs:***

Planned Phases	Cost/Phase (Total Cost)
Phase I: Project Identity, Master Plan and Economic Evaluation	**$205,000** *($205,000)*
-Graphics Identity Package (Completed) -Poster Development and Printing (Completed) -Project Description Booklet (Completed) -Master Plan & Economic Evaluation Study (*In Progress*)	
Phase II: Preconstruction & Fund Raising	**$2,072,000** *($2,277,000)*
-Programming & Schematic Design ($600K) -Design Development (Building & Exhibits-$1,345.5K) -Fund Raising Phase I- Staff(1.5), Membership Drive($76.5K) -Miscellaneous Expenses - Legal/Acct. Fees, Advertising, Postage,etc. ($50.0K)	
Phase III: Site Development and Fund Raising	**$10,207,000** *($12,484,000)*
-Design Development (continued)- ($1,840.5K) -Site Preparation Construction- ($3,469.5K) -Fund Raising Phase II- Staff(2.5), Grant Writing, etc.($92.0K) -Aquarium Acrylic Panels & Rookery Concrete Work Startup($4,700.5K) -Miscellaneous Expenses- Travel, Legal Fees, Advertising, Postage, etc. ($104.5K)	
Phase IV: Construction	**$33,800,500** *($46,284,500)*
-Architectural and Structural ($19,300.5K) -Life Support System ($4,000K) -Exhibit Preparation ($5,000K) -MEP, FP, Security ($2,850K) -Start Up Costs ($2,650K)	
TOTAL PROJECT COSTS	**$46,284,500**
Less Funds Already Expended	<$205,000>
Total Funds Required	**$46,079,500**

See Appendix C for a detailed Project Schedule, Plan and Cash Flow

Alaska *SeaLife* Center

B. Estimated Operating Costs

Item	Annual Attendance 300,000	450,000
Personnel	$1,193,350	$1,193,350
Utilities	896,075	918,950
Professional Services(Legal, Acc't, Ins.,Advert.)	823,925	1,084,300
Supplies, Printing, Postage, Publication, etc.	413,900	711,850
Equipment	60,000	60,000
Specimen Maintenance	508,500	508,500
Travel	37,000	64,300
Discretionary Funds	49,235	93,790
Total Operating Costs per Year	**$3,981,985**	**$4,635,040**

C. Funding Status as of 1 March 1993: To date fund raising has been limited to the local area and several small grant applications. SAAMS volunteers have performed all work tasks without the aid of any full or part time tasks. Upon completion of the formal feasibility study in August 1993 a part time secretary and full time project coordinator will be hired. This staffs prime function will be to initiate a membership campaign for the Center, promote a formal advertising campaign, initiate the fund raising campaign, formally organize the Alaska SeaLife Center as a legal entity and administer the Center's development. The current funding level is as follows;

Cash Donations from Private Sources: $185,176
Cash from Approved Grants (US Forest Service): $32,000

Total Cash to Date: *$217,176*

In Kind Donations
- Waterfront Property (10.5 acres) $2,044,600
- Legal Services
  - Birch, Horton, Bittner & Cherot 4,500
- Design Assistance $27,500
  - Burns and Peterson
  - Peratrovich, Nottingham & Drage
  - Cambridge Seven Associates
- Scientific Advice and Assistance $33,110
- Business and Professional Management $27,079

TOTAL IN KIND DONATIONS *$2,136,789*

D. Funding Plan: To fund the construction of the Alaska SeaLife Center, state, federal, and private foundations and organizations will be approached for assistance. To date proposals have been submitted for funding assistance from the State's portion of the EXXON Valdez criminal settlement fund and also to the EXXON Valdez trustee council. Other funding sources that will be applied to are;

Private Corporations
- British Petroleum Corp.
- ARCO Corp.
- EXXON Corp.
- Alaska Native Corporations
- Fred Meyer Inc.
- Alaska Airlines
- Princess Tour Lines
- Various Other Alaska Corporations

Rehabilitation Funding Sources
- World Wildlife Fund
- Scripps Foundation
- Morris Animal Foundation
- Jacques Cousteau Foundation
- Greenpeace
- Cedam International

Science & Philanthropic Foundations
- Rockefeller Foundation
- Pratt Foundation
- Kellogg Foundation
- Hewlett Packard Foundation
- National Science Foundation
- Shuman Foundation
- Mott Foundation
- Merdock Foundation
- Fred Meyer Foundation
- Pew Charitable Trust
- Charles Engelhard Foundation
- American Conservation Association
- Needmor Fund
- MacArthur Foundation

E. Funding Strategy Current plans are to obtain construction funds from the below sources. This strategy will be modified based on actual funding receipts.

State of Alaska EXXON Valdez Criminal Settlement	$12,500,000
EXXON Valdez Trustee Council	25,000,000
Scientific/Philanthropic Foundations	7,000,000
Rehabilitation Foundations	2,000,000
Private Industry	1,500,000
Total Funding Goal	*$48,000,000*

IV. BUSINESS ORGANIZATION

A. Business Form. The Alaska SeaLife Center will be a not for profit corporation. A Board of Directors will oversee the operation of the Center and establish policy. The Board will consist of business leaders, university scientists, a municipality representative, and State and Federal officials who have an interest in the marine environment. The Seward Association for the Advancement of Marine Science (SAAMS) will retain a single seat on the board. This nonprofit, unincorporated association, which acted as the project facilitator, will have no control over the Center other then through its single seat on the Board.

As a not for profit organization, all excess revenues collected by the Center will be used to maintain and support the Center's three objectives of marine research, rehabilitation and public education. Ownership of the facility will be retained by the corporation and ownership of the land on which the Center is located will be retained by the City of Seward.

Daily operations of the Center will be turned over to a Director, who is responsible to the Board of Directors. The director will oversee the management of the Center, its staff and animals. He will be responsible to run the Center in a cost effective, profitable manner. He will be supported by a medical, scientific and maintenance staff of initially 31 people and a maximum of 45 persons when the Center reaches maximum utilization. See the appendix D for the Center's organizational chart.

V. MARKETING

A. Objectives:

The Center's marketing strategy has two objectives. The first is to attract sufficient visitors each year to insure its financial soundness. To insure this success, a goal of 400,000 to 425,000 visitors per year has been established. The second and equally important objective is to create a world class rehabilitation and research facility specializing in marine mammals and birds.

B. Strategies and Tactics:

Public Attendance To reach its attendance goal, the Center will advertise nationally and State wide. A ticket pricing strategy will be implemented that will attract the resident and resident school populations during the non-tourist season. Special programs aimed at specific age groups will be implemented to deliver the Center's environmental message and also foster an interest in science among the young. Cruise lines, tour groups and the railroad will be approached to provide packaged tours.

A membership drive will be instituted for annual and lifetime members that will allow unlimited visits to the Center. A monthly news publication will be issued to members that will advise them of the Center's activity and maintain their interest. Special interest groups such as "Friends of the Sea Otter" will also be established for those interested in specific species or rehabilitation efforts.

The Center in conjunction with local businesses will host small seminars for businesses and associations which will include tours of the Center during free periods.

Research and Rehabilitation. The Center will create three endowed chairs to insure a stable scientific core. These chairs will be filled by a marine mammal veterinary, a marine biologist specializing in marine mammals, and an ornithologist specializing in seabirds. These together with the Center's trained medical staff will be solid foundation upon which to build the research and rehabilitation programs. The Center will also have a visiting science program. These scientist will be supported by research grants and be charged minimal fees for facility use. The resident core scientists plus the Center's unique location and ability to hold large mammals will attract other scientists. Grant money to study specific marine topics will be applied for from foundations dedicated marine and mammal science. The successes and progress associated with these areas will be published in the Center's monthly journal. Since the public attraction portion of the Center will support the daily operating costs for research and rehabilitation, revenues derived from these sources will be used insure the Center progressively changes and remains modern.

APPENDIX A
SAAMS Organization

Organizational Information

Mailing Address:	*Seward Association for the Advancement of Marine Science* *PO Box 1329* *Seward, AK 99664-1329*
Telephone Number:	*(907) 224-3080*
Facsimile Number:	*(907) 224-3392*
IRS Tax Exempt No.:	*92-0123479*
Contacts:	*Mr. Willard E. Dunham* *(907) 224-5623*
	Ms. Sharon Anderson *(907) 224-5506*
	Dr. A. J. Paul (Scientific Advisor) *(907) 224-5261*
	Mr. Thomas D. Smith *(907) 224-5261*

Seward Association for the Advancement of Marine Science (SAAMS)

Purpose:

To undertake projects that will enhance the understanding of the Alaska marine ecology, its fishes, mammals and sea birds and to support other scientific studies, organizations and projects whose goal is to also further our understanding of the Alaska marine ecology.

Organization:

SAAMS is a private, non-profit organization composed of private individuals whose goal is to advance marine science knowledge in the state of Alaska. SAAMS projects are intended to assist non-profit, public service science organizations such as the Institute of Marine Science and the School of Fisheries and Ocean Sciences of the University of Alaska Fairbanks. It is important to understand that SAAMS does not engage directly in research but undertakes projects that facilitate marine science.

Current Project:

SAAMS has undertaken the development of a marine mammal facility to be located in Seward, Alaska. This facility, the Alaska Sea Life Center, will provide mammal exhibits for public viewing, provide public education on the Alaskan marine ecosystem, support scientific research of marine mammals, and provide support to rehabilitate stranded and stressed marine mammals and birds.

Organizational Relationship:

SAAMS is the project director and fund raising arm of the Alaska Sea Life Center. It will steer the project through completion with the technical assistance of design and management consultants. SAAMS will maintain oversight of the Center through an appointed Board of Directors who represent the business, academic, scientific, Alaska Native and rehabilitation communities. The Center's Board will be charged with insuring that three missions - education, science and rehabilitation - are being met and that scientific findings are presented to the public in a balanced manner. Daily operations of the Center will be through a facilities director who will be advised by a scientific and technical committee comprised of experts in each of the Center's three missions.

Board of Directors

Chairman - Willard E. Dunham
Willard E. Dunham, retired manager of the Seward Job Services Office in Seward. Dunham is active in various local civic activities and is currently serving as Chairman of the Seward Trade Board. He is a member of the Alaska State Chamber of Commerce, served as co-chairman of the Spring Creek Prison Location Task Force, is Chairman of the Seward Fish and Game Advisory Board and a member of the Kenai Peninsula Borough Vocational Education Committee. Mr. Dunham is the owner of the Print Shop and Seward Secretarial Service and a partner in DLK Enterprises.

Vice Chairman - Karen Swartz
Karen Swartz, retired Managing Editor of the Seward Phoenix Log and a member of the Seward City Council. Swartz previously served on the City Council for a total of six years. She was formerly the Director of the Mount Marathon Outreach Office, a member of Alaska Presswomen Association and a member of the Seward Harbor Commission.

Secretary - Carol Ann Lindsey
Carol Ann Lindsey, secretary/treasurer of Harbor Enterprises.

Treasurer - Sharon Anderson
Sharon Anderson, secretary/treasurer of Anderson Tug and Barge Company. Anderson is active in many local and civic organizations and is a former member of the Seward Trade Board. She is currently a member of the Seward Port Development Committee, a member of the Resource Development Council of Alaska, the Director of the Defense Orientation Conference Association, a life member of the Navy League and is the current chairman of Seward United Way.

Boardmembers: **John C. (Andy) Anderson**
President, Anderson Tug and Barge
Life Member, Navy League

Michael Brown
Chairman, Chugach Alaska Corporation Board of Directors

Board Members (Continued)

William C. (Bill) Noll
Former Deputy Commissioner, Alaska Department of Commerce, Office of International Trade
Former Vice President, Suneel Alaska Corporation
Former Mayor, City of Seward

Tyler Jones
City Manager, City of Seward
Former Transportation Projects Director, Anchorage Economic Development Corporation
Former Port Director, Port of Anchorage

Darryl Schaefermeyer
Former City Manager, City of Seward
Former Staff Assistant, U. S. Senator Ted Stevens
Former member, Kenai Peninsula Borough Assembly
Member, International City Managers Association
Founding Member, Seward Rotary Club, Club President, 1986-87

Jack Scoby
Member, Seward Port Development Committee
Principal, Kenai Fjords Tours, Inc.

Ex-Officio Board Members

Lee McAnerney, Board Member Emeritus
Founding Charter Member, Seward Association for the Advancement of Marine Science
Former Councilmember and Mayor, City of Seward
Board Member, Resource Development Council of Alaska
Board Member, Alaska Industrial Development Authority
Board Member, Alaska Municipal Bond Bank

Dr. Michael Castellini
Professor, University of Alaska Fairbanks

Joan K. Wadlow
Chancellor, University of Alaska Fairbanks

Donald F. Behrend
Chancellor, University of Alaska Anchorage

Jerome Komisar
President, University of Alaska

Dr. Michael Castellini
Professor, University of Alaska Fairbanks
Scientific Advisor

The Honorable Jay Hammond
Former Governor, State of Alaska

Dr. Joyce Murphy
Animal Rehabilitation Advisor

Ex-Officio Board Members (Continued)

Ms. Linda Murphy, CMC/AAE
City Clerk, City of Seward
Board of Directors, International Institute of Municipal Clerks
Administrative Advisor

Dr. A. J. Paul
Professor, University of Alaska Fairbanks
Scientific Advisor

Captain Thomas D. Smith, U. S. Coast Guard (Ret.)
Assistant Director for Coastal and Marine Operations, University of Alaska Fairbanks
Facilities Advisor

Mr. Everett P. Diener
Manager of Engineering & Utilities, City of Seward
Technical Planning Advisor

Mr. David Cline
Audobon Society, Anchorage

Mr. Richard Barnes
President, ENSTAR Commonwealth North

Seward Association for Advancement of Marine Science

Articles of Incorporation and Bylaws

The corporation shall have perpetual duration.

III.

The corporation is organized for any lawful purpose, including, but not limited to, educational, social, cultural purposes including marine research, public education, and providing educational and scientific programs, and any other lawful purpose or endeavor permitted under the laws of the State of Alaska to non-profit corporations incorporated under Alaska Statute 10.20.

IV.

The address of the initial registered office shall be 1127 West 7th Avenue, Anchorage, AK 99501, and the name of its initial registered agent shall be Suzanne Cherot.

William C. Noll
P. O. Box 1789
Seward, Alaska 99664

We, the incorporators, sign our names and verify the contents hereof this 6th day of February, 1990.

Sharon E. Anderson
SHARON E. ANDERSON

Lee McAnerney
LEE McANERNEY

William C. Noll
WILLIAM C. NOLL

STATE OF ALASKA)
)ss.
THIRD JUDICIAL DISTRICT)

THIS IS TO CERTIFY that on this 6th day of February, 1990, before me, the undersigned, a Notary Public in and for the State of Alaska, duly commissioned and sworn as such, personally appeared Sharon E. Anderson, Lee McAnerney and William C. Noll, to me known to be incorporators of SEWARD ASSOCIATION FOR THE ADVANCEMENT OF MARINE SCIENCE, and known to me to be the individuals whose names are subscribed to the above Articles of Incorporation, and they verified and acknowledged to me that they have read the foregoing document, understand the contents thereof, and believe all statement made in the document are true.

WITNESS my hand and notarial seal on the day and year first above written

Michelle Knoxek
Notary Public for Alaska
My commission expires: 10/13/93

SECTION 4. Ex-officio Members. The Board of Directors shall have the authority to appoint honorary members to the Board of Directors, which shall be ex-officio members of the Board.

SECTION 5. Dues. Each member of the Board shall be required to pay the sum of $100.00 annually to the corporation.

SECTION 6. Regular Meetings. A regular meeting of the Board of Directors shall be held without other notice than these Bylaws immediately after, and at the same place as, the annual meeting of members. The Board of Directors may provide, by resolution, the time and place, either within or without the State of Alaska, for the holding of additional regular meetings without other notice than such resolution.

SECTION 7. Special Meetings. Special meetings of the Board of Directors may be called by or at the request of the President or any two directors. The person or persons authorized to call special meetings of the Board may fix any place, either within or without the State of Alaska, as the place for holding any special meeting of the Board called by them.

SECTION 8. Notice. Notice of any special meeting of the Board of Directors shall be given at least two days previously thereto by written notice delivered personally or sent by mail or telegram to each director at his address as shown by the records of the Corporation. If mailed, such notice shall be deemed to be delivered when deposited in the United States mail in a sealed envelope so addressed, with postage thereon prepaid. If notice be given by telegram, such notice shall be deemed to be delivered when the telegram is delivered to the telegraph company. Any director may waive notice of any meeting. The attendance of a director at any meeting shall constitute a waiver of notice of such meeting, except where a director attends a meeting for the express purpose of objecting to the transaction of any business because the meeting is not lawfully called or convened. Neither the business to be transacted at, not the purpose of, any regular or special meeting of the Board need be specified in the notice or waiver of notice of such meeting, unless specifically required by law or by these Bylaws.

SECTION 9. Quorum. A majority of the Board of Directors shall constitute a quorum for the transaction of business at any meeting of the Board; but if less than a majority of the directors are present at said meeting, a majority of the directors present may adjourn the meeting from time to time without further notice.

SECTION 10. Manner of Acting. The act of a majority of the directors present at meeting at which a quorum is present shall be

SECTION 3. Removal. Any officer elected or appointed by the Board of Directors may be removed by the Board of Directors whenever in its judgment the best interest of the Corporation would be served thereby, but such removal shall be without prejudice to the contract rights, if any, of the officer so removed.

SECTION 4. Vacancies. A vacancy in any office because of death, resignation, removal, disqualification or otherwise, may be filled by the Board of Directors for the unexpired portion of the term.

SECTION 5. President. The President shall be the principal executive officer of the Corporation and shall in general supervise and control all of the business and affairs of the Corporation. The President shall preside at all meetings of the members and of the Board of Directors. The President may sign, with the Secretary or any other proper officer of the Corporation authorized by the Board of Directors, any deeds, mortgages, bonds, contracts or other instruments which the Board of Directors has authorized to be executed, except in cases where the signing and execution thereof shall be expressly delegated by the Board of Directors or by these By-Laws or by statute to some other officer or agent of the corporation; and in general the President shall perform all duties incident to the office of President and such other duties as may be prescribed by the Board of Directors from time to time.

SECTION 6. Vice President. In the absence of the President or in event of the President's inability or refusal to act, the Vice President (or in the event there be more than one Vice President, the Vice Presidents in the order of their election) shall perform the duties of the President, and when so acting, shall have all the powers of and be subject to all the restrictions upon the President. Any Vice President shall perform such other duties as from time to time may be assigned to the Vice President by the President or by the Board of Directors.

SECTION 7. Secretary. The Secretary shall keep the minutes of the meetings of the members and of the Board of Directors in one or more books provided for that purpose; see that all notices are duly given in accordance with the provisions of these By-Laws or as required by law; be custodian of the corporate records and of the seal of the Corporation and see that the seal of the Corporation is affixed to all documents, the execution of which on behalf of the Corporation under its seal is duly authorized; keep a register of the post office address of each member which shall be furnished to the Secretary by such member; and in general perform all duties incident to the office of Secretary and such other duties as from time to time may be assigned to the Secretary by the President or by the Board of Directors.

SECTION 2. Other Committees. Other committees not having and exercising the authority of the Board of Directors in the management of the corporation may be designated by a resolution adopted by a majority of the directors present at a meeting at which a quorum is present. Except as otherwise provided in such resolution, members of each such committee shall be members of the corporation, and the president of the corporation shall appoint the members thereof. Any member thereof may be removed by the person or persons authorized to appoint such member whenever in their judgment the best interest of the corporation shall be served by such removal.

SECTION 3. Term of Office. Each member of a committee shall continue as such until the next annual meeting of the members of the corporation and until the member's successor is appointed, unless the committee shall be sooner terminated, or unless such member be removed from such committee, or unless such member shall cease to qualify as a member thereof.

SECTION 4. Chairman. One member of each committee shall be appointed chairman by the person or persons authorized to appoint the members thereof.

SECTION 5. Vacancies. Vacancies in the membership of any committee may be filled by appointments made in the same manner as provided in the case of the original appointments.

SECTION 6. Quorum. Unless otherwise provided in the resolution of the Board of Directors designating a committee, a majority of the whole committee shall constitute a quorum and the act of a majority of the members present at a meeting at which a quorum is present shall be the act of the committee.

SECTION 7. Rules. Each committee may adopt rules for its own government not inconsistent with these Bylaws or with rules adopted by the Board of Directors.

ARTICLE V.
CONTRACTS, LOANS, CHECKS AND DEPOSITS

SECTION 1. Contracts. The Board of Directors may authorize any officer or officers, agent or agents of the Corporation, in addition to the officers so authorized by these Bylaws, to enter into any contract or execute and deliver any instrument in the name of and on behalf of the Corporation, and such authority may be general or confined to specific instances.

SECTION 2. Checks, Drafts, Etc. All checks, drafts or other orders for the payment of money, notes or other evidences of indebtedness issued in the name of the Corporation, shall be signed by such officer or officers, agent or agents of the Corporation and

INTERNAL REVENUE SERVICE
DISTRICT DIRECTOR
2 CUPANIA CIRCLE
MONTEREY PARK, CA 91754

DEPARTMENT OF THE TREASURY

Date: JUL. 25, 1991

SEWARD ASSOCIATION FOR THE
ADVANCEMENT OF MARINE SCIENCE
P O BOX 730
SEWARD, AK 99664

Employer Identification Number:
92-0132479
Case Number:
951114007
Contact Person:
TYRONE THOMAS
Contact Telephone Number:
(213) 725-6753

Accounting Period Ending:
December 31
Foundation Status Classification:
See Attached
Advance Ruling Period Begins:
Feb, 9, 1990
Advance Ruling Period Ends:
Dec. 31, 1994
Addendum Applies:
NO

Dear Applicant:

Based on information supplied, and assuming your operations will be as stated in your application for recognition of exemption, we have determined you are exempt from Federal income tax under section 501(a) of the Internal Revenue Code as an organization described in section 501(c)(3).

Because you are a newly created organization, we are not now making a final determination of your foundation status under section 509(a) of the Code. However, we have determined that you can reasonably be expected to be a publicly supported organization described in sections 509(a)(1) and 170(b)(1)(A)(vi).

Accordingly, you will be treated as a publicly supported organization, and not as a private foundation, during an advance ruling period. This advance ruling period begins and ends on the dates shown above.

Within 90 days after the end of your advance ruling period, you must submit to us information needed to determine whether you have met the requirements of the applicable support test during the advance ruling period. If you establish that you have been a publicly supported organization, you will be classified as a section 509(a)(1) or 509(a)(2) organization as long as you continue to meet the requirements of the applicable support test. If you do not meet the public support requirements during the advance ruling period, you will be classified as a private foundation for future periods. Also, if you are classified as a private foundation, you will be treated as a private foundation from the date of your inception for purposes of sections 507(d) and 4940.

Grantors and contributors may rely on the determination that you are not a private foundation until 90 days after the end of your advance ruling period. If you submit the required information within the 90 days, grantors and contributors may continue to rely on the advance determination until the Service

SEWARD ASSOCIATION FOR THE

required to file, simply attach the label provided, check the box in the heading to indicate that your annual gross receipts are normally $25,000 or less, and sign the return.

If a return is required, it must be filed by the 15th day of the fifth month after the end of your annual accounting period. A penalty of $10 a day is charged when a return is filed late, unless there is reasonable cause for the delay. However, the maximum penalty charged cannot exceed $5,000 or 5 percent of your gross receipts for the year, whichever is less. This penalty may also be charged if a return is not complete, so please be sure your return is complete before you file it.

You are not required to file Federal income tax returns unless you are subject to the tax on unrelated business income under section 511 of the Code. If you are subject to this tax, you must file an income tax return on Form 990-T, Exempt Organization Business Income Tax Return. In this letter we are not determining whether any of your present or proposed activities are unrelated trade or business as defined in section 513 of the Code.

You need an employer identification number even if you have no employees. If an employer identification number was not entered on your application, a number will be assigned to you and you will be advised of it. Please use that number on all returns you file and in all correspondence with the Internal Revenue Service.

If we have indicated in the heading of this letter that an addendum applies, the addendum enclosed is an integral part of this letter.

Because this letter could help resolve any questions about your exempt status and foundation status, you should keep it in your permanent records.

If you have any questions, please contact the person whose name and telephone number are shown in the heading of this letter.

Sincerely yours,

Michael J. Quinn

Michael J. Quinn
District Director

APPENDIX B
Science Tehnology Report

Sea Technology Magazine, February 1993
ST Special Report

The Emerging Undersea Leisure Industry

Resurgent Interest in the Marine Environment has Led to More Public Aquariums, Successful Ventures with Tourist Submarines

By L. Bruce Jones
President
L. Bruce Jones & Associates Ltd.

As Americans find themselves with more available leisure time, we are seeing a substantial increase in interest in the subsea environment. One of the principal manifestations of this heightened interest is the number of new public aquariums in the planning and construction stages, as well as the elevated attendance noted at most aquatic and marine science exhibit facilities.

The success of the tourist submarine industry also bears mute testimony to our resurgent interest in the marine environment. Add the success of semisubmersible tourist vessels and the emerging manufacture and sales of personal and leisure submarines to the design work being done on

(Continued on page 38)

Major Operational North American Public Aquariums: Pertinent Statistics

Attraction Name Location - Year opened	Annual Attendance	Cost ($mil)	Bldg Size (sq. ft.)	Adult Adm ($)	Site Size (acres)	Member #'s	Volunt. #'s	Volunt. (hrs/yr)	Employee #'s (f t/m)
Aquarium of the Americas New Orleans, LA - 1990	Rec 1,000,000 Hi 2,310,000	$42	115,000	$8.00	17	30,000			
Monterey Bay Aquarium Monterey, CA - 1984	1,777,000 2,100,000	$45 - $50	210,000 +?	$10.50	2.2	80,000	600	60,000	249
National Aquarium Baltimore, MD - 1981	1,420,000	$30 - $35	115,000 - 94,000	$11.50	5.8	60,000	600	75,000	150
New England Aquarium Boston, MA - 1969	1,300,000	$6	75,000	$7.50	2.5	10,000	500	50,000	148
John G. Shedd Aquarium Chicago, IL - 1930	2,100,000	$3.25 - $43	225,000 - 170,000	$7.00		17,000	300	31,000	220
Vancouver Aquarium Vancouver, B.C. - 1956	Rec 810,000 High 960,000	$0.3	76,000	$7.50	2.0	40,000	294	30,000	118
Mystic Marinelife Aquarium Mystic, CT - 1973	740,000		57,000	$6.50	16	16,000	185	15,000	85
Texas State Aquarium Corpus Christi, TX - 1990	750,000	$31.6	43,000	$7.00	7.3	4,200	578	36,869	56
New York Aquarium Brooklyn, NY - 1986	736,000	$12 - $22	75,000	$5.75	14	45,000	130	8,000	60
Seattle Aquarium Seattle, WA - 1977	Rec 640,000 High 690,000	$5.0	72,725	$6.50	3.73	5,000	298	25,000	45
Oregon Coast Aquarium Newport, OR - 1992	*800,000	$24	40,000	$7.00	20				
New Jersey State Aquarium Camden, NJ - 1992	*1,200,000	$52	120,000	$8.50	4.5	20,000	377	26,000	105
Tennessee Aquarium Chattanooga, TN - 1992	*1,000,000	$45	130,000						

underwater hotels and hybrid structures, and it appears clear that an entirely new undersea leisure industry is emerging.

Aquariums: Public & Private

Last year, more than 100 million people visited America's public zoos and aquariums. U.S. marine theme parks such as SeaWorld and our larger public aquariums are some of the most heavily visited attractions in the world.

Some experts indicate that there may be as many as 70 new aquarium projects undergoing evaluation in the U.S. this year. Two dozen are in the advanced planning stage.

This increase in interest is fueled by a better educated public, a public that is rapidly developing an almost insatiable curiosity about the wonders of the sea.

New capital-intensive aquarium projects costing in excess of $50 million are underway in Florida and Tennessee, with slightly less expensive projects in Charleston, South Carolina; Cleveland, Ohio; Albuquerque, New Mexico; and Duluth, Minnesota. The Monterey Bay Aquarium is planning a major $50 million expansion as is Chicago's Shedd Aquarium, and expansion programs are being implemented at no less than ten other public aquarium facilities nationwide.

In addition to large aquarium projects, there are a number of smaller facilities currently under construction. These include the Dauphin Island Science Center, the Pier 39 Aquarium, the recently completed Stephen Birch Aquarium Museum at the Scripps Institution of Oceanography, and the St. Lawrence Aquarium & Ecological Center.

"Some experts indicate that there may be as many as 70 new aquarium projects undergoing evaluation in the U.S. this year. Two dozen are in the advanced planning stage."

Recently completed projects include the newly opened $24 million Oregon Coast Aquarium located in the small coastal city of Newport, Oregon (population 9,500). This 45,000-square-foot facility was designed to play host to an estimated 400,000 visitors in its first year but will actually receive 1.2 million.

In 1990, the larger Texas State Aquarium opened its doors, expecting to entertain some 250,000 visitors in year one. At the end of that year, some 732,000 people had visited the facility. New Orleans had a similar experience; the facility anticipated 850,000 first-year visitors but actually received 2.3 million, making that city's Aquarium of the Americas the most popular public aquarium in the U.S.

The reason is profitability.

Last year the Monterey Bay Aquarium showed a net profit of more than $5 million on total revenues of $25 million. Not bad in anyone's book.

Operating in the Black

Most aquariums are not as profitable as Monterey's; however, virtually all of America's public aquariums operate in the black, and as architects, exhibit designers, and engineers have refined the areas of aquarium construction, life support technology, and visitor throughput, profit ratios have increased such that the newest aquariums are typically the most lucrative. In many cases aquariums form the cornerstone for a waterfront urban renewal project as

"New aquariums differ from their older counterparts by providing displays intended to accurately depict marine creatures in their natural environments, allowing people to learn not only about the animals but also about the specific worlds they inhabit."

---

well. For instance, Baltimore's National Aquarium attracts 1.5 million people a year who spend an estimated $128 million in the immediate vicinity.

New aquariums differ from their older counterparts by providing displays intended to accurately depict marine creatures in their natural environments, allowing people to learn not only about the animals but also about the specific worlds they inhabit. This new trend has supplanted the older aquarium philosophy where animals were put on display in a row of tanks.

Also new is the opportunity to interact with creatures through touch tanks and to better understand technology by actually operating various scientific devices. Now more than ever, aquarium visitors have a chance to really gain some insight into man's fragile relationship with the marine environment.

New aquariums seek not only to educate but to entertain as well, and to that end many new facilities have exhibits that are truly awe-inspiring. The advent of monolithic acrylic sheet has allowed for the creation of huge tanks that when viewed through crystal-clear walls tends to create the effective illusion of being immersed in the marine environment.

San Francisco's new Pier 39 aquarium will take that concept one step further, moving visitors through a clear acrylic tube surrounded by 770,000 gallons of water filled with the sea creatures of San Francisco Bay.

Tourist Submarines

The tourist submarine industry has allowed more than 3 million people to experience the wonders of the subsea world first-hand. The industry, which had its contemporary beginnings in 1985, has expanded from one 28-passenger submarine to an international fleet of nearly 40 vehicles plying the waters of the Atlantic, the Pacific, and the Mediterranean.

With ticket prices in the $70 range, this rapidly growing industry has proven profitable for a number of operators and has allowed interested individuals to view the undersea environment in a way that had been limited solely to divers.

Related to tourist submarines are the relatively new semi-submersibles. Essentially a cross between a tourist sub and a glass-bottom boat, semi subs look like a submarine from the surface but do not submerge. Passengers sit inside a heavily ballasted deep hull that is internally configured to look like the inside of a submarine. Large viewports provide excellent viewing for the passengers.

L. Bruce Jones is an independent business development and technical consultant specializing in the marine leisure industry. He has been responsible for the design and implementation of various tourist submarine operations and is currently the chairman of the Manned submersibles Committee of the Marine Technology Society. Jones is also chairman of the Board of Trustees of the proposed $24 million San Juan Aquarium.

APPENDIX C
Project Schedule & Plan

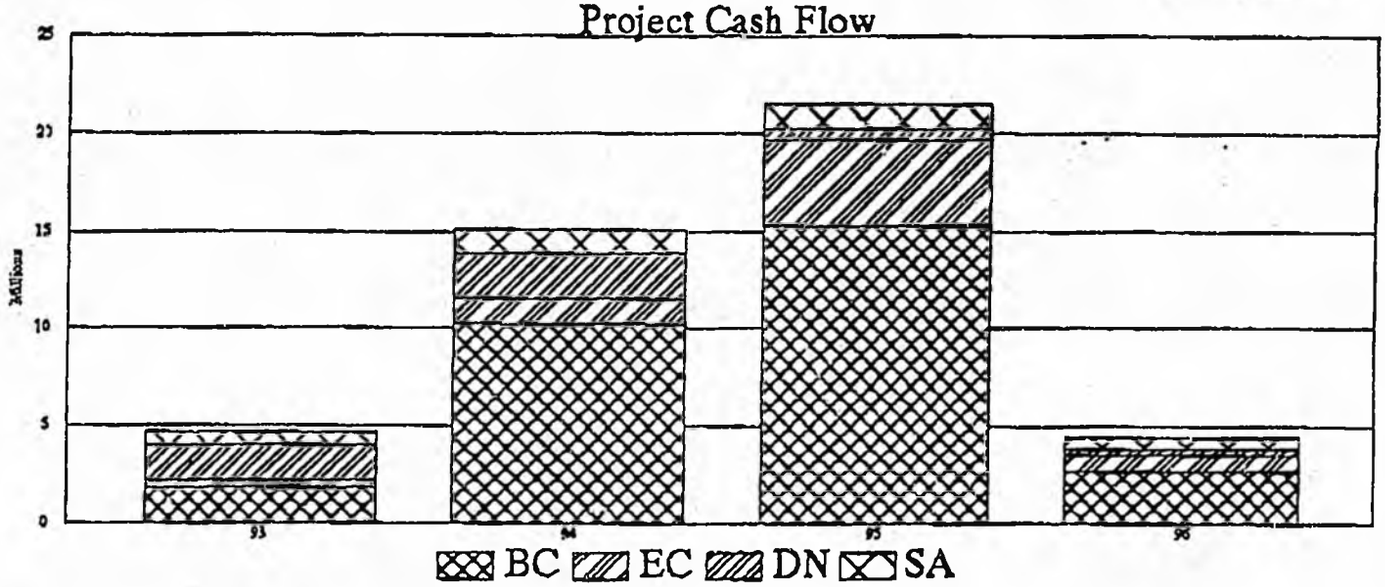
ALASKA SEA LIFE CENTER
IDEA, INC. 23 MAR 93
ALASFLOW.WK3

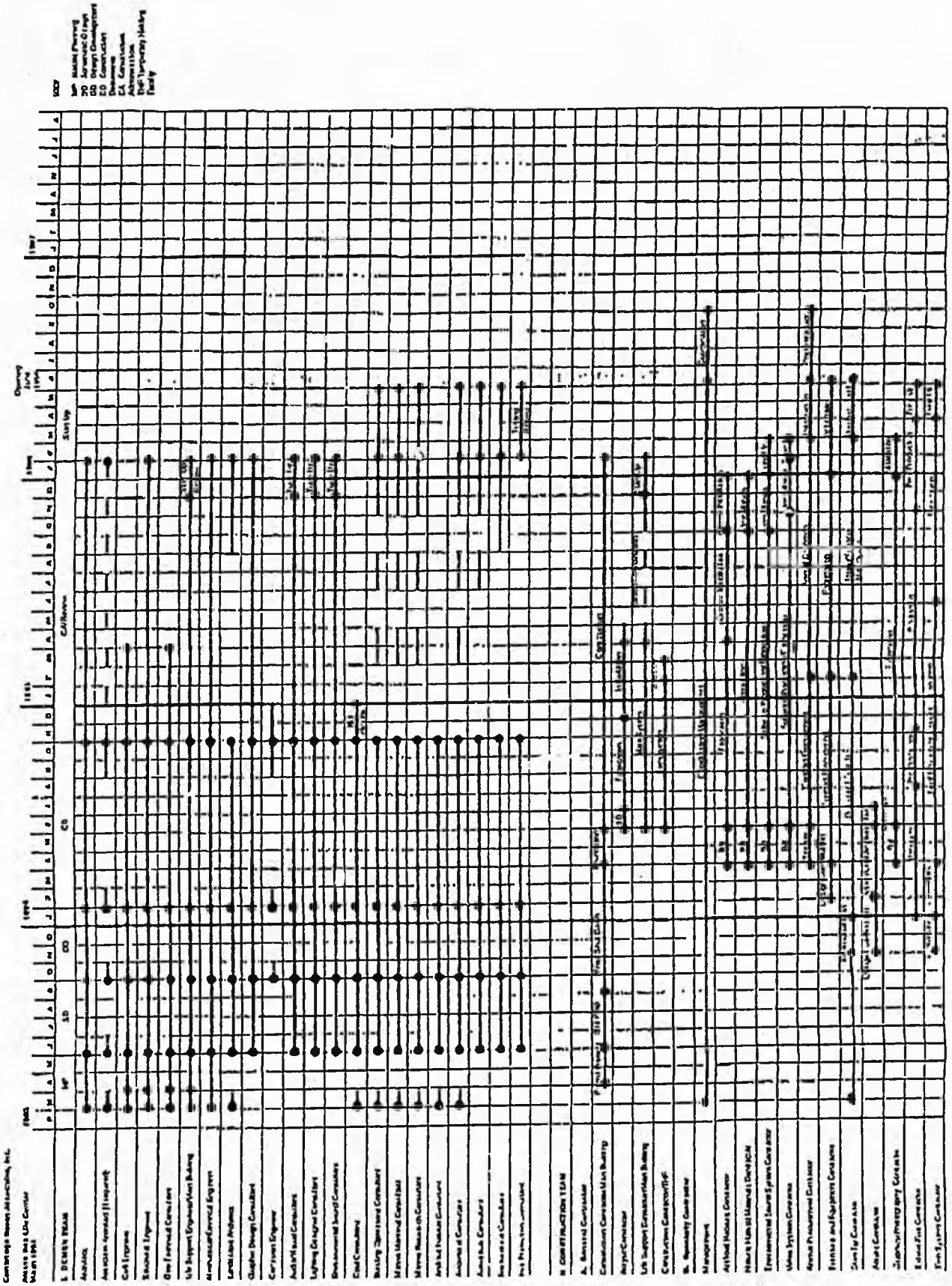
PROJECT CASH FLOW ESTIMATE IN DOLLARS

Budget Item	Budget Estimate		92	DEC 93	DEC 94	DEC 95	JUN 96
Building Construction	30,000,000		0	1,800,000	10,200,000	15,300,000	2,700,000
Exhibit Construction	7,000,000		0	420,000	1,330,000	4,410,000	840,000
Design	5,100,000		0	1,836,000	2,346,000	612,000	306,000
Mgmt, Admin, Startup	3,700,000		0	629,000	1,221,000	1,221,000	629,000
Total Budget	45,800,000	Yearly	0	4,685,000	15,097,000	21,543,000	4,475,000
		Cumulative	0	4,685,000	19,782,000	41,325,000	45,800,000

ALASKA SEA LIFE CENTER

Project Cash Flow

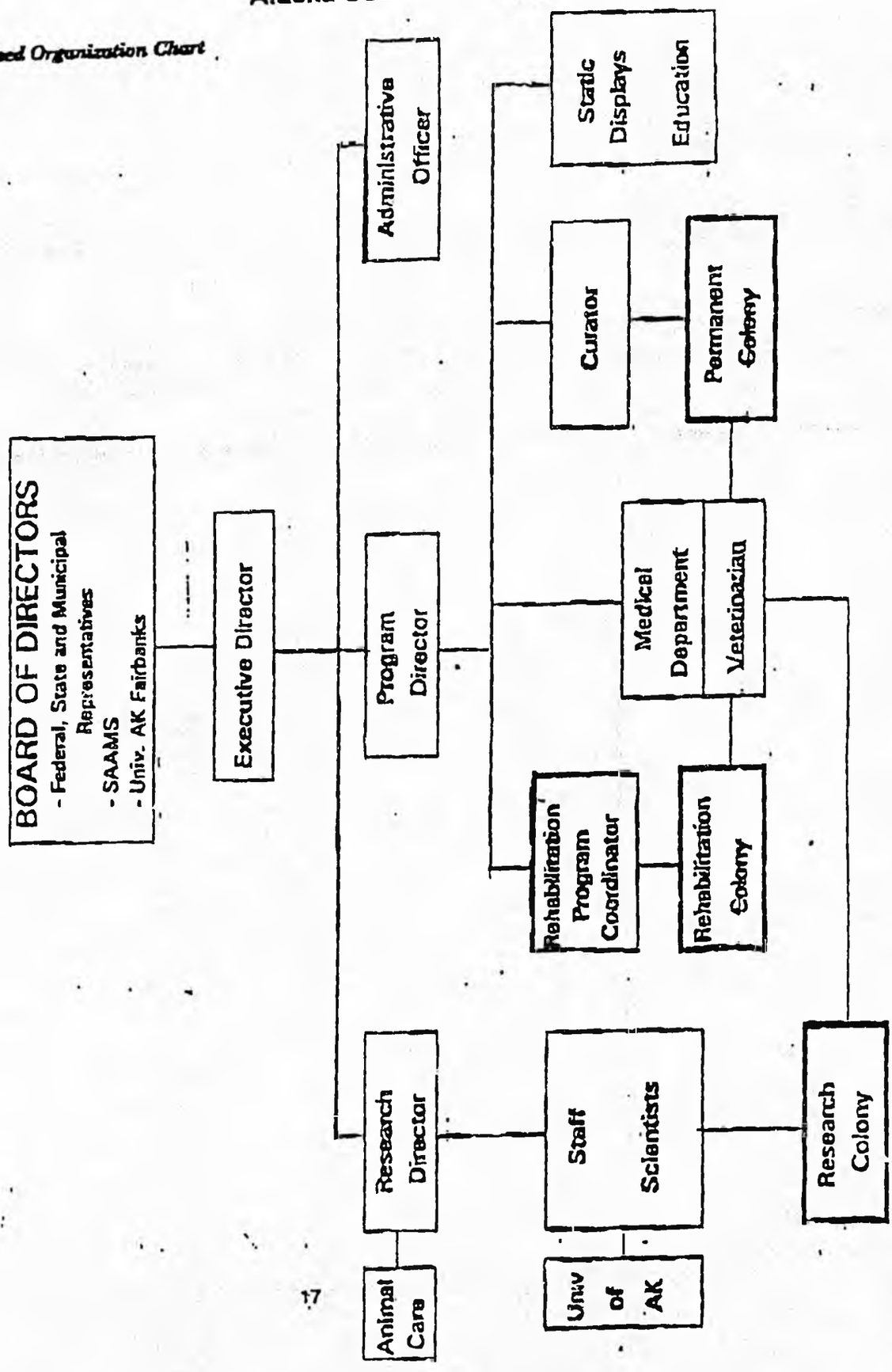




APPENDIX D
Organization Chart

Alaska Sea Life Center

Proposed Organization Chart



APPENDIX E
Letters of Support

WALTER J. HICKEL
GOVERNOR

P. O. Box 110001
Juneau, Alaska 99811-0001
(907) 465-3500

STATE OF ALASKA
OFFICE OF THE GOVERNOR
JUNEAU

February 11, 1993

Mr. Willard E. Dunham, Chairman
Seward Association for the Advancement
of Marine Science
P.O. Box 27
Seward, AK 99664

Dear Bill,

It was good to meet with you and discuss the proposed Alaska Sealife Center in Seward. As you know, I am very supportive and interested in this project. Intellectual and informative visions like these keep our great state ahead of all the rest.

The State of Alaska is very fortunate to have professional, caring people like Dr. Joyce Murphy to provide rehabilitation for these animals.

I commend you and your organization on the excellent presentation that you provided. Keep up the good work, and I look forward to hearing about further progress of the project.

With best regards.

Sincerely,

Walter J. Hickel

Walter J. Hickel
Governor

WALTER J. HICKEL
GOVERNOR

STATE OF ALASKA
OFFICE OF THE GOVERNOR
JUNEAU

January 13, 1992

Mr. Willard E. Dunham
Chairman, Board of Directors
Seward Association for Advancement
of Marine Science
P. O. Box 1329
Seward, AK 99664

Dear Mr. Dunham:

I appreciate your invitation to serve as an honorary board member of the Seward Association for the Advancement of Marine Sciences. I gladly accept.

I am concerned about our environment, particularly that area impacted by the oil spill from the Exxon Valdez. I believe that the proposed Seward project can go a long way in proving that mankind can live in harmony with nature and all that surrounds it. Because of my personal concern, I have asked Commissioner Harold Heinze of the Department of Natural Resources, and Commissioner Edgar Blatchford of the Department of Community and Regional Affairs to closely follow the board's proceedings. Though I will not be able to attend the meetings, the commissioners, through their representatives, will closely monitor the board's proceedings.

On a more personal note, please extend my appreciation to the many who attended the reception at the Marine Science Institute. Ermalee and I thoroughly enjoyed the hospitality of the fine people of Seward.

With best regards.

Sincerely,

Walter J. Hickel

Walter J. Hickel
Governor

cc: Commissioner Harold Heinze
Commissioner Edgar Blatchford

STATE OF ALASKA

OFFICE OF THE GOVERNOR

OFFICE OF INTERNATIONAL TRADE

WALTER J. HICKEL, GOVERNOR

7TH FLOOR FRONTIER BUILDING
3601 C STREET, SUITE 798
ANCHORAGE, ALASKA 99503-5934
PHONE: (907) 561-5585

March 10, 1991

Dr. A.J. Paul
Institute of Marine Science
Seward Marine Center
Box 730
Seward, Alaska 99664

Dear Dr. Paul:

I write to convey the support of the Office of International Trade for your special appropriation request for the school of fisheries and ocean science. In particular, the office fully endorses the creation of the Alaska Marine Mammal Center in Seward. The School of Fisheries and Ocean Science can contribute substantially to the groundwork necessary to develop the center.

International tourism development is a priority for the Office of International Trade. Our Strategic Plan calls for locating foreign capital to develop Alaska's infrastructure and to establish Alaska as a destination tourist spot. The Alaska Marine Mammal Center's focus -- research, rehabilitation and public education -- can render Alaska a prime location for scientific research, environmental management and a destination for international visitors to Alaska.

We are eager to work together with you to support your funding request and to marshall support for the establishment of the Alaska Marine Mammal Center. Please let me know how else our office can demonstrate enthusiasm for the project. I look forward to working together to bring an exciting internationally renowned project to Alaska.

Sincerely,

Ginna Brelsford

Ginna Brelsford
Trade Specialist

cc: Senator Kertulla
Senator Menard
Representative Kubina
Chief of Staff Hodel
Commissioner Olds
OMB Director Stasny
OMB Budget Review Director Frasca
Municipal Liaison Overstreet
Commissioner Blatchford

UNIVERSITY OF ALASKA ANCHORAGE

3211 Providence Drive
Anchorage, Alaska 99508

July 26, 1990

OFFICE OF THE CHANCELLOR

Mayor Bill Noll
City of Seward
PO Box 1789
Seward AK 99664

Dear Mayor Noll:

I was pleased to learn of your proposal to establish a marine mammal study center in Seward. Such a center, incorporating research and public education, would be of great value to Alaska and to other parts of the circumpolar north.

The future of our ecosystems which support our natural resources is dependent upon an accurately informed citizenry. This requires education based upon up-to-date information generated by scientists on the cutting edge of their fields. Marine ecosystems will be under increasing pressure as oceans are increasingly utilized for food, minerals and sources of transport. Due to the positions they occupy in food webs, marine mammals are important indicator species for the health of these ecosystems. Thus the importance of increased knowledge of these animals is clear.

A marine mammal center in Seward would attract productive scientists from other states and nations, as well as Alaska. It would be of great value to the University of Alaska in pursuing research and public service activities. From the standpoint of the University of Alaska Anchorage (UAA), such a center would provide opportunities for faculty and graduate student research in physiology, morphology, ecology, etc. Basic research opportunities would transcend the interests of marine scientists, and include those focused on human health. This would include UAA and UAF scientists in the Washington-Alaska-Montana-Idaho (WAMI) medical program and in the Alaska-Siberia Medical Research Program. All of these endeavors should combine to bring increased federal and private foundation funding to Alaska for high priority needs.

The educational value of a marine mammal center would range from formal college course work for credit to a broad array of short courses, seminars, conferences, and other programs for a variety of publics. The UAA College of Continuing Education could be invaluable in helping to plan and implement a broad program of public education for the proposed center.

UNIVERSITY OF ALASKA ANCHORAGE
Office of the Chancellor

In summary, I envision many significant advances in research and education that could flow from a marine mammal study center in Seward. These advances would be of great value to Alaska, the nation, the northern Pacific Rim nations, and the circumpolar north. Accordingly, I commend you for your vision and initiative in proposing this center, and pledge the support of UAA in assisting you to make it a reality.

Sincerely,

Donald F. Behrend
Chancellor

DFB:sr

Joan K. Wadlow, Chancellor
907 474-7112
FAX 907 474-7225

UNIVERSITY OF ALASKA FAIRBANKS

Office of the Chancellor
320 Signers' Hall
Fairbanks, Alaska 99775-0500

February 25, 1993

Mr. Willard Dunham
Chairman of the Board SAAMS
P.O. Box 730
Seward, Alaska 99664

Dear Willard:

What a valuable asset the Seward Sea Life Center will be to Seward, the University of Alaska Fairbanks, and the entire state! Everyone should applaud the many people involved in this vision and now the planning, because it links from the start three critical functions: (1) the public education exhibits, (2) rehabilitation, and (3) marine mammal research. The combination is what makes the facility neat and especially valuable to Alaska.

The University of Alaska Fairbanks is pleased to be a part of this venture. Our marine mammal scientists can contribute important knowledge to the understanding of current concerns about marine mammals, including sea lions. With this facility, unique in the Pacific Northwest, scientists from everywhere will be able to collaborate and give us answers to critical questions sooner. The University of Alaska Fairbanks, in its Strategic Plan, has committed to help solve the practical problems of Alaska. The research facilities at the Center will help them accomplish this even more.

Please let me know if I may be of assistance (907) 474-7112.

Sincerely,

Joan.

Joan K. Wadlow, Chancellor
University of Alaska Fairbanks

JKW/smw

Office of the Dean

UNIVERSITY OF ALASKA FAIRBANKS
School of Fisheries and Ocean Sciences
200 O'Neill, Fairbanks, Alaska 99775-1090 (907) 474-7531 FAX (907) 474-7204

January 27, 1993

Willard Dunham
Seward Assn. for the Advancement of Marine Sciences
City of Seward
P. O. Box 1009
Seward, AK 99664

Dear Willard:

We are greatly encourged by your progress in developing the Sea Life Center at Seward. As you know, we have selected Seward as our primary coastal location and have worked for many years to develop a comprehensive marine facility there. The new center will be a tremendous boost to Alaska's capabilities.

We have no intention of establishing additional coastal facilities for UAF at any other location, including Valdez. Although we do contract research out of Valdez, a permanent facility is not needed for our work there. We have facilities at Juneau and Kodiak, but these are fisheries and technological programs and not marine research and educators. We continue to be committed to the development of Seward as a world class coastal marine center.

Yours sincerely,

Vera Alexander
Dean, School of Fisheries and Ocean Sciences
Director, Institute of Marine Science

VA/lmb

3/11

T Board CB 6/12/92

School of Fisheries and Ocean Sciences

T 3-

UNIVERSITY OF ALASKA FAIRBANKS
Fairbanks, Alaska 99775-1080

June 9, 1992

RECEIVED
JUN 12 1992
OFFICE OF THE
CITY CLERK

Mr. Darryl Schaefermeyer
City Manager
City of Seward
P. O. Box 167
Seward, Alaska 99664

Dear Darryl,

I am glad you wrote, since it gives me the opportunity to do something I have been meaning to for some time, and that it to write and congratulate you and SAAMS for the excellent progress on the Alaskan Sea Life Center. The University is 100% behind this venture, and I have discussed it both with President Komisar and Chancellor Wadlow. I sent word to the legislature and governor through Jim Hasselberger, the Governor's representative in Fairbanks, that not only was the Center not in competition with the University, but that the University was supporting it wholeheartedly and wanted the capital money to survive. I don't know whether it helped in any way, but we did want to make it clear that this was a priority for us, too.

I am also glad that the IMS Seward Marine Center, especially A.J. Paul, has been working effectively with you on the project. Our marine mammal group is very excited about the prospect of working with the Center. We now have five marine mammal professionals in IMS - Mike Castellini, Bud Fay, Ward Testa and Brendan Kelly, and Bob Elsner, although technically retired, is still active. We also have just appointed Charles Monet as a research associate, and he will be working out of Seward. Ironically, he recently abandoned Cordova, where he had worked previously.

With respect to the Marine Mammal Specialist, unfortunately we did not get the position funded. However, the Alaska Sea Grant College Program has found the money for a half-time position, and w re preparing to advertise

on this basis. Hopefully we will be able to fund additional "soft" money to make the position whole. The position is not to be at the Prince William Sound Science Center. No such decision has been made. The advertisement actually doesn't mention location at all, and I have specified that it can only be located at a coastal site where we have a permanent facility, and I am confident that Seward is the best such site. Cordova does not qualify. The Sea Grant Program Director has something to say about it, of course, since he is providing the money, whereas if it had been funded from state appropriation moneys, I could simply dictate, and was clearly slated for Seward. I think we can get the position for Seward, especially in view of the tremendous progress being made towards the Sea Life Center. It is important to realize, however, that this is not the permanent fully-funded position that we had hoped for.

Yours sincerely,

Vera Alexander
Dean, SFOS
Director, IMS

cc. Willard Dunham, Chairman
Seward Association for the Advancement of Sciences

Office of the De
CB-11/30/92
cy: S. Adams

UNIVERSITY OF ALASKA FAIRBANKS
School of Fisheries and Ocean Sciences
200 O'Neill, Fairbanks, Alaska 99775-1090 (907) 474-7531 FAX (907) 474-7204

November 24, 1992

RECEIVED
NOV 30 1992
OFFICE OF THE
CITY CLERK

Darryl Schaefermeyer
City Manager
City of Seward
P. O. Box 167
Seward, Alaska

Dear Darryl:

Thank-you for your letter of November 4, 1992. I am very aware of your concerns regarding the MAP marine mammal specialist position, and I share your interest in seeing the position located in Seward. To date, the situation with respect to the position has not changed, in that we have not found any state appropriation moneys to support it, and the present position is only half-time funded with NOAA moneys through the Alaska Sea Grant College Program. Because of this, it moves wherever the Sea Grant project needs the expertise. Once again, this is controlled ultimately by the director of the Sea Grant Program, Ron Dearborn. Kate Wynne is occupying the position, but this is not a permanent tenure-track faculty position at this point. When SFOS acquires a real faculty/MAP specialist position, this will change, and we will be able to designate Seward as the home base.

Meanwhile, if there is anything I can do to support the Sea Life Center by explaining the total lack of marine mammal research facilities in Alaska, and the need for the Seward facility, please let me know. Dr. John French, Director of FITC and a member of the Trustee's advisory group, has publicly supported the Alaska Sea Life Center's request for funds from the oil spill settlement. We are all solidly behind the project.

One area in which we have been able to enhance the Seward operation is in the area of public education, and we are working towards markedly improving the program at the K. M. Rae building, with the full cooperation of Sea Grant and MAP. The UAF museum will be working with us also. Meanwhile, I hope that our marine mammal faculty, especially Michael Castellini, will continue to work with you in developing the Alaska Sea Life Center. There is a great need for marine mammal research facilities. We simply don't have any now that we have given up on the inadequate ones which we had shared with the Institute of Arctic Biology here. I think you will find Drs. Castellini, Testa, Elsner, Fay, and Kelly all becoming Seward faculty, as has Sven Ebbesson, once the facilities are there.

Yours sincerely,

Vera Alexander
Dean

7/11/90 Ron

UNIVERSITY OF ALASKA FAIRBANKS

Alaska Sea Grant College Program
School of Fisheries and Ocean Sciences
138 Irving II
Fairbanks, Alaska 99775-5040
(907) 474-7086 FAX (907) 474-6285

RECEIVED
JUL 11 1990
OFFICE OF THE
CITY CLERK

July 6, 1990

Mayor William C. Noll
City of Seward
P.O. Box 167
Seward, AK 99664

Dear Mr. Noll:

We recently learned of tentative plans to develop an international class marine mammal research and public education facility in Seward. We believe this is an excellent idea for Seward and the State of Alaska, and offer our unreserved encouragement.

The National Sea Grant Program, a division of the National Oceanic and Atmospheric Administration in the U.S Department of Commerce, has for twenty-five years supported university research, education, and public outreach on marine resources, particularly efforts that yield economic benefits to coastal communities. The Alaska Sea Grant College Program has traditionally focused research and outreach on issues important to commercial fishing and processing. We also have produced a national award-winning and widely used grade school curriculum package, called Alaska Sea Week. The series includes a volume on marine mammals.

Presently we are supporting research on marine mammals, and a new focus on coastal tourism development. One research project examines vocalizations in killer whales in Prince William Sound, another assesses interactions between marine mammals and commercial fishermen. A technical report and public education booklet are forthcoming on the latter project. We also are organizing a scientific workshop on sea lions and other marine mammals, slated for next spring. As for coastal tourism, we have begun a pilot project for waterfront interpretation and promotion in three Alaska coastal communities.

As you further develop your concept, we would welcome any opportunity to participate. We have been thinking about ways to more publicly highlight the Seward Marine Science Center and more fully utilize the Ray Building as a public attraction. Our projects could complement each other's ideas and greatly expand both the scientific importance and public impact of our respective efforts. Please contact us if we can help. Good luck.

Cordially,

Ron Dearborn
Director

Kurt Byers
Communications Manager

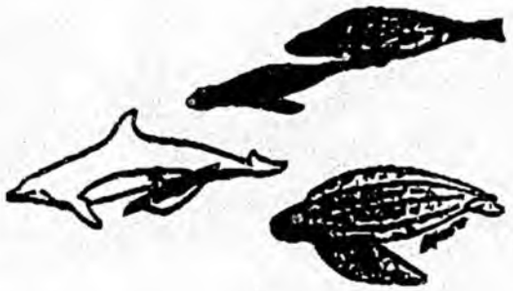
UNIVERSITY OF CALIFORNIA, SAN DIEGO

BERKELEY • DAVIS • IRVINE • LOS ANGELES • RIVERSIDE • SAN DIEGO • SAN FRANCISCO SANTA BARBARA • SANTA CRUZ

SCRIPPS INSTITUTION OF OCEANOGRAPHY
PHYSIOLOGICAL RESEARCH LABORATORY
SCHOLANDER HALL A-004

LA JOLLA, CALIFORNIA 92093-0204

July 24, 1990



Mayor William Noll
Seward Association for the Advancement
of Marine Science
P.O. Box 730
Seward, Alaska 99664

Dear Mayor Noel:

On my recent visit to Seward and your offices with Dr. M. Castellini, I was very impressed with the potential facilities there. I hope your plans for establishing a marine mammal center are realized. There is no doubt in my mind that if such a facility, in its key location, were available that myself and my colleagues would be anxious to use it in the course of our ongoing research on the behavior and physiology of birds and mammals. Therefore, if there is any assistance I can give you or Dr. Castellini in this endeavor, please feel free to contact me.

Sincerely,

G. L. Kooyman

Gerald L. Kooyman, Ph.D.

GLK:pf

cc: M. Castellini

MARK O. HATFIELD
MARINE SCIENCE CENTER

4-Council, Staff
CB 9/12/90

OREGON STATE UNIVERSITY
2030 S. Marine Science Drive · Newport, Oregon 97365·5296
Telephone 503·867·0100 Fax 503·867·0138
Bitnet HMSC@ORSTATE.BITNET

September 5, 1990

Mayor William Noll
Seward Assoc. for the Advancement
of Marine Science
P.O. Box 730
Seward, AK 99664

Dear Mayor Noll:

I am writing you at the request of Dr. Michael Castellini of the University of Alaska, Fairbanks who advised me that you are endeavoring to obtain information from the scientific community of interest in the proposed construction of a marine mammal center in Seward.

There are few opportunities where people can view marine mammals endemic to the Alaska region and even less where scientists might have access to these animals for non-lethal studies. I would personally favor seeing such a facility available to University of Alaska and researchers throughout the world to conduct studies of importance for a better understanding of these animals. Many such studies are important for continued conservation of these animals.

I have been active in marine mammal research for over 20 years and can assure you that such a facility would be used by many responsible scientists.

Sincerely,

Bruce R. Mate, Ph. D.
Associate Professor
Oceanography

BRM:vb

TEXAS A&M UNIVERSITY AT GALVESTON

Marine Mammal Research Program
Department of Marine Biology
P.O. Box 1675
Galveston, TX 77553-1675

Director: (409)740-4413
Technician: 740-4420
Students: 740-4425
FAX: 762-8276

July 24, 1990

Mayor William Nall
Seward Association for the Advancement of Marine Science
P.O. Box 730
Seward, AK
99664

Dear Mr Mayor

I am an Assistant Professor of Marine Mammalogy at Texas A&M University at Galveston and have been active in marine mammal research for 11 years. I am writing in support of the proposal to build a marine research facility in your city. I think that such a facility would be incredibly useful from both the research perspective and public education. I have only recently moved to Texas from California, where I was located at the University of California at Santa Cruz, and previous to that was at the University of Guelph, in Canada. Both of these facilities had the capability of holding captive marine mammals and I am now in the position of attempting to create a research program without that capability for the first time. I dearly miss it. The capability to hold marine mammals in captivity, even for short periods of time, allows us to learn things about their biology that we could never learn in the wild state. This knowledge will expand our capabilities for the better protection of endangered species as well as possibly preventing other species from becoming threatened. I enthusiastically support the development of a facility in Seward and would very much like the opportunity to make use of those facilities at some time in the future.

Sincerely yours

Graham Worthy

Graham A.J. Worthy
Assistant Professor of Marine Mammalogy

Tennessee Aquarium

701 Broad Street • Tivoli Center • Lower Lobby • Chattanooga, TN 37402 • (615) 266-3467

1/28/91

Dr. A. J. Paul
P.O. Box 1197
Seward, Alaska 99664

Dear Dr. Paul:

It was a pleasure to hear from you. I did speak to Mayor Noll and was told of your ambitious plans to create a Marine Mammal complex. If anyone should have the type of facility we discussed, it should be Alaska.

I can tell you that I would be happy to assist in any way I can. I would most likely be restricted to reviewing and advising at this stage because of my commitment to opening the new Tennessee Aquarium over the next year and a half.

Please keep me informed of your progress and I wish you the best of luck in your efforts to gain support.

Sincerely,

William S. Flynn
President
Tennessee Aquarium

United States Department of the Interior

NATIONAL PARK SERVICE

ALASKA REGIONAL OFFICE
2525 Gambell Street, Room 107
Anchorage, Alaska 99503-2892

IN REPLY REFER TO

N2219(KEFJ)

05 JUN 1990

Dr. A. J. Paul
P.O. Box 1197
Seward, Alaska 99664

Dear Dr. Paul:

Thank you for your letter of May 1 requesting our support for the proposed Marine Mammal Center in Seward. We agree that Seward seems to be an ideal place for such a center and that the time for a project of this nature is ripe. Such a center could add vital dimensions to the knowledge and protection of sea mammals and benefit many parties, especially our sister agency, the Fish and Wildlife Service. They have the primary responsibility for the protection and management of sea mammals.

I have enclosed a copy of a letter to Mayor Bill Noll from Kenai Fjords Superintendent Anne Castellina regarding the center. I have also asked Ms. Castellina to contact her counterpart at Alaska Maritime National Wildlife Refuge and let him know of this project. She will contact you as events progress.

Good luck with your efforts to establish this important scientific and educational facility.

Sincerely,

Paul F. Haertel
Acting Regional Director

Enclosure

United States Department of the Interior
NATIONAL PARK SERVICE
Kenai Fjords National Park
1212 Fourth Avenue
Post Office Box 1727
Seward, Alaska 99664

IN REPLY REFER TO:

N2219

May 23, 1990

William C. Noll
Mayor, City of Seward
P.O. Box 167
Seward, AK 99664

Dear Mayor Noll,

Kenai Fjords National Park would like to take this opportunity to offer its support for the proposed Seward Marine Mammal Center outlined in your May 10, 1990 letter. The goals of scientific research, public education, and rehabilitative services for distressed or injured mammals are consistent with Kenai Fjords' Congressional mandate to:

> "...maintain unimpaired the scenic and environmental integrity of the...coastal fjords and islands in their natural state; and to protect seals, sea lions, other marine mammals, and marine and other birds, and to maintain their hauling and breeding areas in their natural state..."

Recognition by Congress of this area's outstanding natural environment, diverse ecosystems, and abundant wildlife led to the establishment of the park in 1980. Since then the park has worked to study, protect and interpret the living laboratory of change characterized by the 580,000 acres within the park boundaries.

Over the past ten years we have become increasingly concerned by the as yet unexplained decline in seal and sea lion populations, the long term effects on marine mammals of oil spills and other pollution, and the possible adverse effects of increasing numbers of visitors and commercial operators in the fjords. These, and other areas of concern, deserve study. The National Park Service in Alaska is currently engaged in strengthening and expanding its efforts in resource management. The "Alaska Science Initiative" was endorsed by Congress and partially funded in 1990 and shows promise of receiving additional funding in 1991 and beyond. Kenai Fjords will benefit from this initiative with the addition of several resource management specialists. Their ability to interact with scientists at a Marine Mammal Center such as the one proposed would greatly enhance their work. Park interpreters involved in environmental education programs would also reap the benefits from the Center as would the community of Seward and the larger worldwide scientific community .

The City of Seward, Kenai Fjords National Park, the Alaska Maritime National Wildlife Refuge, and the Institute of Marine Science, Seward Marine Center would all gain from the establishment of a Marine Mammal Center in Seward as would the growing number of visitors and schoolchildren to this area. Seward offers a unique location for this facility. The study subjects are here in abundance and easily accessible. Federal and State agencies concerned and mandated to protect the marine mammals are already based in Seward. There cannot be many other areas in Alaska (if any) where all of these factors mesh as well as they do here.

We look forward to working with you and the Seward Association for the Advancement of Marine Science (SAAMS) as your objectives and plans continue to expand and clarify.

Sincerely,

Anne D. Castellina

Anne D. Castellina
Superintendent

Sponsored by: Swartz

CITY OF SEWARD, ALASKA
RESOLUTION NO. 93-008

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SEWARD, ALASKA, SUPPORTING THE SEWARD ASSOCIATION FOR THE ADVANCEMENT OF MARINE SCIENCE'S ALASKA SEA LIFE CENTER PROJECT

WHEREAS, the Seward Association for the Advancement of Marine Science (SAAMS) has contracted with Cambridge Seven Associates, Inc., to develop a conceptual plan for the proposed Alaska Sea Life Center and to prepare project promotional materials; and

WHEREAS, this project has been funded primarily from private monetary contributions and donations of time and services from various individuals and businesses in Seward and throughout the state; and

WHEREAS, the city of Seward has long considered this project to be a viable and highly desirable one as evidenced by both the dedication of valuable waterfront property to house the facility and a $50,000 appropriation made to SAAMS under the provisions of Resolution No. 91-135; and

WHEREAS, the Alaska Sea Life Center will provide much needed research and rehabilitation services and will become a major tourist attraction for Seward, thus benefiting all of southcentral Alaska through the influx of visitors to the state while providing public education through its exhibits, displays and aquarium; and

WHEREAS, the project will be a major urban renewal effort and will considerably enhance the attractiveness of the downtown area for residents and visitors alike; and

WHEREAS, the Alaska Sea Life Center will provide more than 30 direct jobs and will account for many more employment opportunities in needed support and ancillary facilities such as a new hotel, a convention center, gift shops, restaurants and other visitor dependent businesses; and

WHEREAS, upon the opening of the Alaska Sea Life Center, Seward will become a major port of call for cruise ships and will play an indirect role in providing the revenues to support proposed new docks in Resurrection Bay; and

WHEREAS, the research facility has the potential to bring in millions of federal and foreign dollars in grants to scientists and to address and solve many of the issues threatening Alaska's fishing industry;

Robert Clarke
3121 Nowell Avenue • Juneau, Alaska 99801 • (907) 586-2031 • FAX 586-5998 Communication • Public Affairs

FOR IMMEDIATE RELEASE

Former Alaska Governor Jay Hammond today commended Governor Hickel's proposal to use oil spill fines for a Seward marine research center, and for re-purchasing timber leases n Kachemak Bay.

Hammond also announced he has joined the Seward Association for the Advancement of Marine Sciences as an honorary trustee of the proposed research, rehabilitation and education facility.

Statement of Jay S. Hammond:

"In 1989, in a special television Report From Valdez, I referred to a marine science research, rehabilitation and education facility as perhaps the most positive and lasting benefit that could come from the Exxon-Valdez tragedy.

"In 1991, using a privilege granted to former Alaska Governors, I addressed the State House and Senate to endorse the buy back of Kachemak Bay timber leases, as my administration had re-purchased oil leases in this area, in 1975.

"Governor Hickel's request to use oil spill fines and settlement monies for a world class marine research, education and rehabilitation facility on the North Pacific Ocean at Seward, and for the Kachemak Bay timber buy-back, may indeed represent the best assurance we have for something permanent and positive from the tragedy of 1989.

"I commend Governor Hickel and I commend his proposal to the Alaska Legislature as well."

##

Seward SeaLife Center Endorsements

"The Exxon-Valdez oil spill was an alarm clock going off -- a rude awakening for the Pacific Basic generally but most critically for the North Pacific Ocean Mo marine research, education and rehabilitation facility of the kind planned at Seward, exists; not in Japan, Korea or Russia. So far, the facility at Santa Cruz, California is the closest to the sub-arctic waters of the North Pacific.

"The Seward SeaLife Center will fill "a gaping hole" in that regard for the Pacific Century now dawning. If the Exxon Valdez oil spill helps in any way to fill this great void, then history may say something positive and lasting resulted from the 1989 tragedy.

"The Seward facility as conceived is something more than merely a critically needed research, education and rehabilitation center. I predict its positive economic impacts on the community and the region will be enormous and self sustaining.

"There is no doubt in my mind that if such a facility, in its key [Seward] location were available, that myself and my colleagues would be anxious to use it in the course of our on-going research of the behavior and physiology of birds and mammals. If there is any assistance I can give.. this endeavor. please feel free to contact me.

Gerald L. Kooyman, Ph.D
Scripps Institution of Oceanography, La Jolla, CA

"Over the past ten years we have become increasingly concerned by the as yet unexplained decline in seal and sea lion populations, the long term effects on marine mammals of oil spills and other pollution, and the possible adverse effects of increasing numbrs of visitors and commerical operators in the [Kenai] fjords. These, and other areas of concern, deserve study. [We] support for the proposed Seward Marine Mammal Center. The goals of scientific research, public education and rehabilitative services for distressed or injured mammals are consistent with Kenai Fjords' Congressional mandate.. There cannot be many other areas in Alaska (if any) where all [research, education and rehabilitation] factors mesh as well as they do [in Seward]."

Anna Castellini, Kenai Fjords Superintendent
U.S. Department of Interior/National Parks

"[The marine mammal research facility planned for Seward] would be incredibly useful from both the research perspective [and for] public education...I am now...attempting to create a research program without the capability [of holding live marine mammals for study] for the first time and sorely miss it. I...would very much like the opportunity to make use of [the Seward SeaLife Center's research] facilities in the future."

Graham A.J. Worthy, Marine Mammal Research Program
University of Texas, Galveston

"There are few opportunities where people can view marine mammals endemic to the Alaska region, and even less where scientists might have access to these animals for non-lethal studies. I would personally favor seeing such a facility available... for researchers throughout the world to conduct studies of importance for better understanding of these animals...[A]ctive in marine mammal research for over 20 years, [I] can assure you the [Seward] facility would be used by many responsible scientists."

Bruce R. Mate, Ph.D, Oceanography Professor
Oregon State University

"...If anyone should have [this Marine Mammal facility], it should be Alaska

William S. Flynn, President
Tennessee Aquarium

"[I]n addition to our many other research, education and out reach activities] we are supporting...a new focus on coast tourism development [in] three coastal communities. As you develop your project we would welcome any opportunity to participate... Our projects [complement one another] and greatly expand both the scientific inportance and public impact of our respective efforts."

Kurt Byers, Sea Grant College
School of Fisheries/Ocean Science

"Alaska's Institute of Marine Science [already] conducts valuable marine mammal research at its Seward Marine Center, and Seward may be the appropriate location to conduct long-term studies on resident [marine mammal] populations."

William W. Fox, Director
NOAH/ U.S. Department of Commerce

"Seward seems to be the ideal place for [marine mammal research, education and rehabilitation] and the time for a project of this nature is ripe. Such a center could add vital dimensions to the knowledge and protection of sea mammals and benefit many parties. Good luck with your efforts to establish this important scientific and educational facility."

Paul Haertel, Acting Regional Director
National Park Service/ Dept of Interior

"On behalf of the International North Pacific Ocean Climate Program, all my U.S., Canadian and Russian colleagues were very impressed. As a result of their visit, the Soviets now plan to use Seward as a staging area for their scientific work in the Northeast Pacific. It was also suggested that we have another meeting in Seward in a few years to discuss the results of our joint efforts."

Thomas C. Royer, Marine Science Professor
University of Alaska, Fairbanks

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The Anchorage Times

"Putting Alaska first"

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WILLIAM J. TOBIN *Asst. Publisher* — JAMES H. SLACK *General Manager*

J. RANDOLPH MURRAY *Editor*
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DENNIS FRADLEY *Editor, Editorial Pages*

Robert B. Atwood, Publisher Emeritus

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.

House Bill 269
Section 3

Kachemak Bay State Park Acquisition $7,000,000

With $15 million already committed from the Alyeska and EXXON civil settlement monies, approximately $7 million more is needed from the criminal fund to meet a $22 million price. This project has particular value in that it matched considerable funds coming from other sources. The property is under imminent threat from logging and contains fish and wildlife species that were injured by the spill.

AGREEMENT FOR SALE AND PURCHASE OF LANDS AND INTERESTS WITHIN KACHEMAK BAY STATE PARK

THIS AGREEMENT is made by and between the Seldovia Native Association (SNA), Timber Trading Company (TTC), Cook Inlet Region, Inc. (CIRI), as "Sellers", and the State of Alaska as "Purchaser" (collectively, the "Parties").

1. GRANT OF OPTION. Sellers hereby each grant to Purchaser the exclusive option to purchase all Sellers' property rights within the Kachemak Bay State Park, as more particularly described in Attachment A ("the Property"), such purchase to be made in accordance with the terms and conditions of this Agreement.

2. EXERCISE OF OPTION. Purchaser hereby agrees, subject to all appropriations required to be made by the Alaska Legislature to provide for payment of the purchase price and subsequent approval of such appropriations by the Governor of Alaska, to exercise its exclusive option to purchase the Property in accordance with the terms and conditions of this Agreement.

3. OPTION TERMS. The option payment is Ten Dollars ($10.00), the receipt and sufficiency of which is hereby acknowledged by Sellers. The option may be exercised during the period beginning with Purchaser's execution of this Agreement and ending December 31, 1993 unless extended in writing by the parties. This option shall be exercised by written notice from Purchaser to Sellers at the below provided addresses.

4. PURCHASE PRICE. The purchase price for the Property is $22 million, with agreed upon payments of $15.5 million to SNA, $4.5 million to TTC, and $2 million to CIRI.

5. INTEREST CONVEYED. At closing, Sellers each shall execute and deliver to Purchaser such deeds or assignment documents as may be necessary to convey their respective interests to the property. SNA and CIRI do hereby warrant and represent to Purchaser as follows: (1) that SNA and CIRI are vested with title to the property to the extent conveyed to SNA and CIRI pursuant to BLM Interim Conveyance Numbers 139, 304 and 372 with respect to SNA and Interim Conveyance Numbers 102, 140, 305 and 373 with respect to CIRI, and (2) that no liens, encumbrances, defects or third party interests have been created in the Property, except that SNA has conveyed certain timber rights on the Property to TTC pursuant to the Timber Sale Agreement dated May 30, 1987 ("Timber Agreement"). TTC does hereby warrant and represent to Purchaser as follows: (1) that TTC holds all interests in the Property conveyed by the Timber Agreement; and (2) that no liens, encumbrances, defects or third party interests have been created in the interest conveyed to TTC by the Timber Agreement. At closing, Sellers each shall execute and deliver to Purchaser such deeds or assignment documents warranted as above described as may be necessary to convey their respective interests to the Property. If any Seller fails to convey title or other interest as required by this Agreement, Purchaser is no longer bound by this Agreement with respect to any Seller. No Seller shall be liable for the acts or inability of another Seller to convey title.

6. RIGHT TO ENTER PROPERTY. Sellers agree that from the date this Agreement is fully executed by the Parties, Purchaser and its agents, upon reasonable notice, shall have the right to enter the Property for all lawful purposes in connection with this Agreement, including environmental audit purposes, provided Purchaser provides sufficient indemnification to the Sellers.

7. CLOSING PLACE AND DATE. The Parties agree to endeavor in good faith to close on or before 60 days after all appropriations made by the Alaska Legislature have been made and approved by the Governor, including those related to funds provided by the Alyeska settlement and the Exxon Valdez Trustee Council; provided, however, if documents that are required to be provided or completed and executed by the Parties have not been tendered by that date, the closing shall

take place within 60 days after receipt of such documentation. The date, time and location of closing shall be set by Purchaser.

8. OTHER AGREEMENTS AND ACTIONS. The Parties agree to take other action or enter into other agreements reasonably necessary to the exercise and closing of this Agreement, including Attachment C.

9. TERMINATION. Unless otherwise agreed to in writing by each of the parties, this Agreement shall terminate upon closing or on December 31, 1993, whichever is earlier; provided, however, this Agreement shall automatically terminate if, during its 1993 session, the Legislature does not appropriate all funds required to be appropriated to provide for payment of the purchase price, or if the Governor vetoes such appropriation by the Legislature.

10. SEVERABILITY. In the event any of the provisions of this Agreement are deemed to be unenforceable, the enforceability of the remaining provisions of this Agreement shall not be affected.

11. SIGNATURE AUTHORITY. Each signatory to this Agreement represents that he has the authority to bind his principal to this Agreement. This Agreement may be executed in several counterparts, each of which shall be an original, but all of which shall constitute the same instrument.

12. NOTICE. Written notices shall be provided to the parties at the following addresses:

Seldovia Native Association
P.O. Drawer L
Seldovia, AK 99663-0250

Cook Inlet Region, Inc.
P.O. Box 93330
Anchorage, AK 99509-3330

Timber Trading Company, Inc.
3501 Denali St., Suite 202
Anchorage, AK 99503

State of Alaska
Department of Natural Resources
Director, Division of Land
P.O. Box 107005
Anchorage, AK 99510-7005

Craig Tillery
State of Alaska
Attorney General's Office
1031 West 4th Ave. Suite 200
Anchorage, AK 99501

Seldovia Native Association
By: Fred H Elvsaas
Its: PRESIDENT
Date: 3-10-93

Timber Trading Company, Inc.
By: John L Stimson
Its: President
Date: 3/15/93

Cook Inlet Region, Inc.
By: Margaret J. Brown
Its: Senior Vice President
Date: 3/17/93

State of Alaska
By: [illegible]
Its: Attorney General
Date: 3-10-93

ATTACHMENT A

SNA LANDS TO BE ACQUIRED BY STATE

* All land described below is within Seward Meridian and is identified in BLM Interim Conveyances 139, 304, 372

Parcel	Legal Description	Approximate Acreage
1	Township 7 South, Range 12 West	
	A. Sec. 13 (fractional): W 1/2 NE 1/4 NW 1/4 NE 1/4, SE 1/4 NW 1/4 NE 1/4, W 1/2 NW 1/4 NE 1/4, S 1/2 NE 1/4 NW 1/4, S 1/2	575
	B. Sections 22 (fractional): excluding Lot 1 of USS 3606	370
	C. Section 29: excluding ~~USS 4738,~~ ADL 41084-41085 located in NW 1/4 SW 1/4	410
	D. Section 30: excluding USS 3912, USS 3977 Tracts A, C, D, ASLS 76-114, ADL 41704, located in SW 1/4 SW 1/4	408
	E. Sections 19 (fractional), 20 (fractional), 21 (fractional), 23 (fractional), 24 (fractional), 25 (fractional), 27 (fractional), 28, 31, 32, 33, 34, 35: All	6,049
	F. Section 27 (fractional), 26, 36: All	1,580
2	Township 8 South, Range 12 West	
	A. Sections 1, 2, 3, 4, 7, (fractional), 8 (fractional) 9, 10, 11, 12, 13, 14, 15, 22, 23, 24, 25, 26, 27, 28: All	12,385
	B. Section 5 (fractional): excluding ADL 49431 located in the W 1/2 W 1/2 SW 1/4	615
	C. Section 6 (fractional): excluding ADL 48787 and ADL 49431 locatd in the E 1/2 SW 1/4; ADL 46149, ADL 46150, ADL 46151, ADL 46152, ADL 46153, and ADL 46650 located in the N 1/2, SE 1/4; and ADL 41043 located in the SW 1/4 NE 1/4 and NW 1/4 SE 1/4	300
	D. Section 16 (fractional): excluding ADL 46773 located in the SW 1/4 SW 1/4	615
	E. Section 21 (fractional): excluding ADL 47665 located in the SW 1/4 NW 1/4, ADL 41036 located in the N 1/2 SW 1/4, ADL 41300 located in the S 1/2 SW 1/4	495
	Cumulative Total	23,802

Attachment A

CIRI Lands Remaining w/in Kachemak Bay State Park

Seward Meridian, Alaska

Township 7 South, Range 12 West
- Sec. 12, W2, SE4, S2NE4;
- Sec. 31, all;
- Sec. 33-34, all.

Containing 2,469.00 acres, more or less.

Township 8 South, Range 12 West
- Sec. 2, W2;
- Sec. 3-4 all;
- Sec. 5, (fractional), excluding ADL 49431;
- Sec. 6, (fractional), excluding ADL 48787, ADL 49431, ADL 46149, ADL 46150, ADL 46151, ADL 46152, ADL 46153, ADL 46650 and ADL 41043;
- Sec. 7-8, (fractional), all;
- Sec. 9-11, all;
- Sec. 13-15, all;
- Sec. 16, (fractional), excluding ADL 46773;
- Sec. 21, (fractional), excluding ADL 47665, ADL 41036 and ADL 41300;
- Sec. 22-27, all;
- Sec. 28-29, (fractional), all;
- Sec. 30, (fractional), excluding U. S. Survey 3605;
- Sec. 31-33, (fractional), all;
- Sec. 34, all.

Containing 15,408.33 acres, more or less.

Township 8 South, Range 13 West
- Sec. 24, Lot 8 of U. S. Survey 4742.

Containing 5.00 acres.

Township 9 South, Range 13 West
- Sec. 1, (fractional), all;
- Sec. 2, E2, NW4;
- Sec 11, NE4.

Containing 1,275.00 acres, more or less.

Aggregating 19,157.83 acres, more or less.

ATTACHMENT B

Any and all property in which Timber Trading Company has an interest in the following described Seldovia Native Association land outside Kachemak Bay State Park - Peterson Bay and Island Peninsula.

Township 7 South, Range 12 West, Seward Meridian.

Section 10: USS 4737, Lots 1, 2, and 3
: That portion of Tract "A" excluding: USS 1539

Section 11: That portion of Tract "A" excluding: USS 1557
USS 3362 - Tract B, Lots 1 and 2

Section 14 & 15: That portion of Tract "A" excluding:
USS 1539
USS 2893
Tract A of USS 3362
USS 3908
USS 3918
Lots 1, 2, 3, and 4 of USS 3973
Lots 1 and 2 of USS 4736
Lots 1 and 3 of USS 4737
Lots 1-13 inclusive, Block 1, Harbor Heights Subdivision
Lots 1-11 inclusive, Block 2, Harbor Heights Subdivision

Attachment C

AGREEMENT REGARDING TIMBER HARVEST RIGHTS

ON LANDS ADJACENT TO PETERSON BAY

State of Alaska agrees that nothing in that Agreement for Sale and Purchase of Lands and Interests Within Kachemak Bay State Park (the"Agreement") shall restrict the ability of Timber Trading Company, Inc. ("TTC") to pursue the permits necessary for timber harvest operations on lands subject to the Agreement provided, however, TTC shall not commence timber harvest operations on such lands until such time that the Agreement has terminated. TTC agrees not to exercise its timber harvest rights on lands adjacent to Peterson Bay, including Island Peninsula, before April 30, 1999, as more particularly described in Attachment B to the Agreement or to convey such harvest rights to any other entity except to Seldovia Native Association ("SNA"), provided if the transfer is to SNA it will be subject to this restriction against harvest prior to April 30, 1999.

Timber Trading Company, Inc.

By: John L. Sturgeon

Its: President

Date: 3/15/93

State of Alaska

By: [illegible]

Its: Attorney General

Date: 3.10.93

Revised and Acknowledged

Seldovia Native Association

By: Fred H. Elconin

Its: PRESIDENT

Date: 3-10-93

JAN 7 1993

RESOLUTION OF THE
EXXON VALDEZ SETTLEMENT TRUSTEE COUNCIL

We, the undersigned, duly authorized members of the Exxon Valdez Settlement Trustee Council, after extensive review and after consideration of the views of the public, find as follows:

1. The Seldovia Native Association owns lands within Kachemak Bay State Park ("park inholdings"), consisting of approximately 23,802 acres and more particularly described in Attachment A. These inholdings were selected pursuant to the Alaska Native Claims Settlement Act. The timber rights for the inholdings are held by the Timber Trading Company and the subsurface rights by Cook Inlet Region, Inc. ("CIRI"). The subsurface rights held by CIRI are not entirely coextensive with the surface rights due to minor exchanges between the State and CIRI.

2. The park is within the oil spill affected area and the tidelands adjoining the park inholdings were oiled in 1989.

3. A substantial portion of the park inholdings are threatened with imminent clearcut logging. Permit applications are pending for the logging of 5900 acres. Additional acreage is also subject to the threat of logging. The majority of threatened lands are coastal lands surrounding China Poot and Neptune Bays with smaller parcels at the head of Sadie Cove. Logging may commence on these lands during the 1993 season.

4. The park inholdings provide exceptional services to recreational users. Much of the recreational use is concentrated on or adjacent to the park's near shore waters and tidelands including areas which were oiled in 1989. Activities include pleasure boating, sport fishing for silver, pink and sockeye salmon, winter king salmon fishing, recreational dipnetting, clam digging, shrimping, kayaking, crabbing, beachcombing, photography, hiking, mountain bike riding, and wildlife observation. Logging would further impact these services.

5. The park inholdings include important habitat for several species of wildlife for which significant injury has been documented. There is substantial evidence that the park inholdings at Neptune and China Poot Bays are particularly important marbled murrelet nesting areas. The extent to which marbled murrelets are naturally recovering is unknown. Harlequin ducks, a species which continues to suffer injury, nest and forage in the China Poot drainage. Logging would directly effect these activities and hence rehabilitation of these two species. Restoration of black oyster catchers and river otters, which use shore lines adjacent to uplands slated for logging, would be impacted by logging. Harbor seal haul outs, numerous archeological sites, anadromous fish streams and intertidal and subtidal biota are all found in

substantial quantity in the threatened areas and would be impacted. Sea otters in China Poot Bay may be impacted by the increased logging activity. A murre colony on Gull Island which is immediately offshore from the timber harvest area will likely be impacted by the increased disturbance that attends any logging operation. Murres and sea otters were injured by the oil spill and do not yet appear to be recovering.

6. Existing laws and regulations, including but not limited to the Alaska Forest Practices Act, the Clean Water Act, the Alaska Coastal Management Act, the Bald Eagle Protection Act and the Marine Mammals Protection Act, are intended, under normal circumstances, to protect resources from serious adverse affects from logging and other developmental activities. However, restoration, replacement and enhancement of resources injured by the EXXON VALDEZ oil spill present a unique situation. Without passing on the adequacy or inadequacy of existing law and regulation to protect resources, biologists, scientists and other resource specialists agree that, in their best professional judgment, protection of habitat in the spill affected area to levels above and beyond that provided by existing law and regulation will likely have a beneficial affect on recovery of injured resources and lost or diminished services.

7. There has been widespread public support for the acquisition of the park inholdings.

8. The purchase of the park inholdings is an appropriate means to restore injured resources and services in the Kachemak Bay region.

9. Approximately 7,500 acres of land, identified by an underlined marking on Attachment A, have been specifically identified as having both high natural resource or service values and as being immediately threatened with logging. This acreage has an estimated value of approximately $7,500,000 to $8,400,000.

THEREFORE, we request the Attorney General of the State of Alaska and the Assistant Attorney General of the Environmental and Natural Resources Division of the United States Department of Justice to petition the United States District Court for the District of Alaska for withdrawal of the sum of $7,500,000 from the EXXON VALDEZ Oil Spill Settlement Account ("Exxon Settlement Account") established in the Court Registry Investment System as a result of the governments' settlement with the Exxon companies. These funds shall be paid into the Alyeska Settlement Fund established by the State of Alaska as required in the Alyeska Settlement Agreement, and, together with the interest thereon, used to purchase fee simple title to the park inholdings. Title to the land shall be granted to the State of Alaska for inclusion of the lands in the Kachemak Bay State Park. The use of these funds is conditioned as follows: (1) the purchase must be completed by December 31, 1993; (2) the total purchase price may not exceed $22,000,000; and (3)

the park inholdings must be purchased in fee simple title including all timber and all subsurface rights. If any of these conditions is not met the funds shall be returned, together with accrued interest, to the Exxon Settlement Account.

Dated this 11th Day of December, 1992 at Anchorage, Alaska.

MICHAEL A. BARTON
Regional Forester
Alaska Region
USDA Forest Service

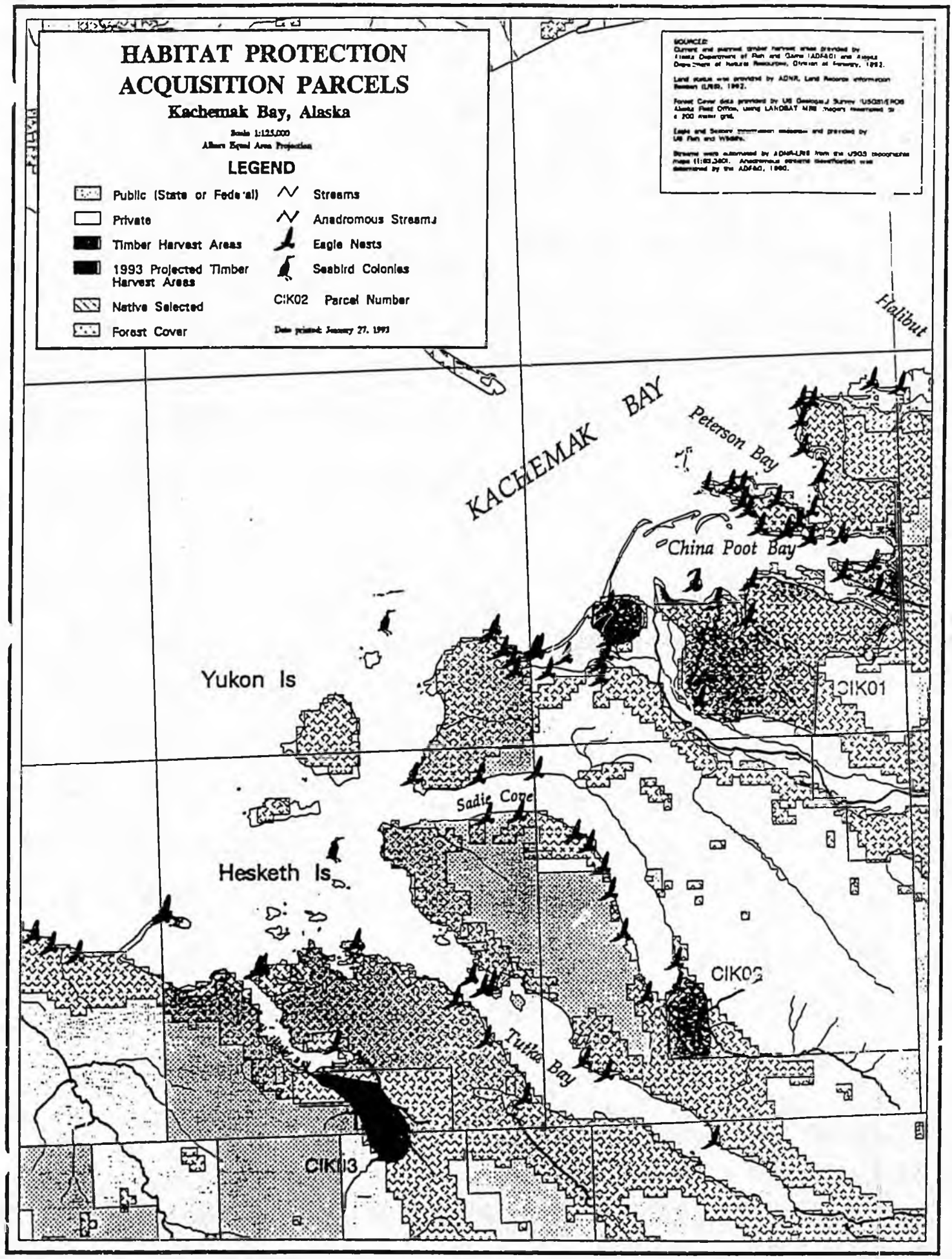
CHARLES E. COLE
Attorney General
State of Alaska

CURTIS V. MCVEE
Special Assistant to the
Secretary
U.S. Department of the Interior

STEVEN PENNOYER
Director, Alaska Region
National Marine
Fisheries Service

CARL L. ROSIER
Commissioner
Alaska Department of
Fish and Game

JOHN A. SANDOR
Commissioner
Alaska Department of
Environmental Conservation


HABITAT PROTECTION ACQUISITION PARCELS
Kachemak Bay, Alaska
Scale 1:125,000
Albers Equal Area Projection
LEGEND
Public (State or Federal)
Private
Timber Harvest Areas
1993 Projected Timber Harvest Areas
Native Selected
Forest Cover
Streams
Anadromous Streams
Eagle Nests
Seabird Colonies
CIK02 Parcel Number
Date printed: January 27, 1993
SOURCES:
Land status was provided by ADNR, Land Records Information Section (LRIS), 1992.
Eagle and Seabird information collection and provided by US Fish and Wildlife.
Halibut
KACHEMAK BAY
Peterson Bay
China Poot Bay
Yukon Is
Sadie Cove
Hesketh Is
CIK01
CIK02
CIK03
Tutka Bay

HABITAT PROTECTION PARCEL ANALYSIS

PARCEL #: CIK 01	PARCEL NAME: China Poot, Kachemak Bay		
[1]LANDOWNER: Seldovia Native Association	[2]PARCEL ACREAGE: 7,500	[3]TOTAL ACREAGE: 106,000	[4]AFFECTED ACREAGE: 5,300

INJURED RESOURCE / SERVICE	POTENTIAL FOR BENEFIT	COMMENT
Anadromous Fish	Moderate	Five cataloged anadromous streams on parcel. Coho, chum, sockeye, and pink salmon and Dolly Varden spawning and rearing habitat; enhanced sockeye salmon runs in Leisure Lake and Hazel Lake.
Bald Eagle	High	Intertidal foraging and feeding on anadromous fish. Thirty seven documented nest sites on parcel.
Black Oystercatcher	Low	Likely that oystercatchers use gravel spits and intertidal for feeding and nesting.
Common Murre	Moderate	Murre colony (est. 5,075 birds) on Gull Rock may benefit from adjacent habitat protection.
Harbor Seal	Moderate	Harbor seals feed in area and frequently haul-out on nearshore rocks and bars.
Harlequin Duck	Moderate	Probable nesting in upper riparian areas; probable feeding in streams and estuaries.
Intertidal/subtidal biota	High	China Poot Bay is documented as one of the most productive shallow benthic habitats in Kachemak Bay.

HABITAT PROTECTION PARCEL ANALYSIS

PARCEL #: CIK 01	PARCEL NAME: China Poot, Kachemak Bay	
Marbled Murrelet	High	High confidence that nesting occurs on parcel. Large numbers of murrelets forage on Kachemak Bay.
Pigeon Guillemot	Low	Foraging occurs in adjacent marine waters.
River Otter	Moderate	High use area for feeding and latrine sites; possible denning inland.
Sea Otter	Low	Established population in area; feeding and possible pupping in adjacent marine waters.
Recreation/Tourism	High	Neptune, Peterson, and China Poot bays and Gull Rock receive high use. Highly visible from Homer and Kachemak Bay. Adjacent to Kachemak Bay State Park.
Wilderness	Low	Area is moderately developed, primarily recreational homesites. High human use area
Cultural Resources	Moderate	Twenty eight documented archeological sites on parcel.
Subsistence	Moderate	Within resource use area of Port Graham and English Bay.
ECOLOGICAL SIGNIFICANCE: China Poot, Neptune, and Peterson bays are highly productive estuaries that provide habitat for birds, anadromous fish, mammals, and intertidal marine life. This area receives very high recreational use, has significant archeological sites, and is highly visible from Homer and adjacent marine waters. The timbered lands are probably important to marbled murrelets. This area also provides access to a recreational dip-net fishery at the outlet of Leisure Lake.		

HABITAT PROTECTION PARCEL ANALYSIS

PARCEL #: CIK 01	PARCEL NAME: China Poot, Kachemak Bay
ADJACENT LAND MANAGEMENT: This parcel is adjacent to Kachemak Bay State Park; the park receives a significant amount of recreational use by residents of Anchorage and the Kenai Peninsula and is also an important tourist attraction. The parcel is also adjacent to other Seldovia Native Association lands.	
IMMINENT THREAT/OPPORTUNITY: This parcel is proposed for logging in 1993. Permit approvals are pending additional information, Corps of Engineers Public Notice, and ACMP review.	
PROTECTION OBJECTIVE: 1) Maintain water quality of the estuary and associated riparian habitats for anadromous fish; 2) maintain bald eagle, marbled murrelet, and harlequin nesting habitat; 3) maintain and enhance recreational opportunities and scenic values; and 4) maintain public access to Leisure Lake stream.	
USEFUL PROTECTION TOOL(S): Timber acquisition; fee simple purchase; conservation easement; cooperative management; public access acquisition.	
RECOMMENDED ACTION: The Trustee Council has approved a resolution to acquire fee title for Kachemak Park inholdings. Habitat and service values are among the highest for imminent threat lands evaluated. Request SNA to provide interim protection; begin negotiations to acquire long term protection; December 31, 1993 deadline.	

1. Parties other than landowner may own partial rights (eg. timber, minerals).
2. Area evaluated.
3. Estimated acreage held by the owner in the spill area.
4. Estimated area to be affected by imminent development activity.

HABITAT PROTECTION PARCEL ANALYSIS

PARCEL #: CIK 02	PARCEL NAME: Sadie Cove		
[1]LANDOWNER: Seldovia Native Association	[2]PARCEL ACREAGE: 400	[3]TOTAL ACREAGE: 106,000	[4]AFFECTED ACREAGE: 400

INJURED RESOURCE / SERVICE	POTENTIAL FOR BENEFIT	COMMENT
Anadromous Fish	Moderate	Two cataloged anadromous streams. Pink and chum spawning.
Bald Eagle	Moderate	Three documented nest sites on parcel.
Black Oystercatcher	None	
Common Murre	None	
Harbor Seal	Low	Foraging in Sadie Cove estuary.
Harlequin Duck	Low	Possible nesting in upper reaches of riparian habitat (adjacent to parcel). Potential feeding in lower stream and estuary.
Intertidal/subtidal biota	Low	Species diversity and richness relatively low at head of Sadie Cove.
Marbled Murrelet	Low	No evidence of use of this parcel.
Pigeon Guillemot	None	
River Otter	Low	Probable feeding in adjacent marine habitat and stream.
Sea Otter	Low	Occasional use of Sadie Cove for feeding and shelter.
Recreation/Tourism	Moderate	Recreational cabins and boating. High scenic values.
Wilderness	Low	Area is moderately developed, primarily recreational homesites. Moderate evidence of human use.

HABITAT PROTECTION PARCEL ANALYSIS

PARCEL #: CIK 02	PARCEL NAME: Sadie Cove	
Cultural Resources	None	No evidence that archeological sites exist on parcel.
Subsistence	Low	Waterfowl, marine mammals
ECOLOGICAL SIGNIFICANCE: Sadie Cove is a deep fjord estuary that provides habitat for anadromous fish and overwintering waterfowl. It is a moderately used recreational area accessible by boat from Homer.		
ADJACENT LAND MANAGEMENT: Kachemak Bay State Park; Seldovia Native Association.		
IMMINENT THREAT/OPPORTUNITY: This parcel is proposed for logging in 1993.		
PROTECTION OBJECTIVE: 1) Maintain water quality of the estuary and associated riparian anadromous fish habitat; 2) protect bald eagle nesting and roosting habitat.		
USEFUL PROTECTION TOOL(S): Timber acquisition; fee simple purchase; conservation easement; cooperative management.		
RECOMMENDED ACTION: Request interim protection from SNA, partial interests (timber rights, easement) and/or cooperative management may provide adequate long-term protection.		

1. Rights other than title may be held by other parties.
2. Area evaluated.
3. Total acreage held by the owner in the spill area.
4. Estimated area to be affected by imminent development activity.

House Bill 269
Section 4

Kachemak Bay State Park Visitors Center $500,000

This section provides funding for the construction of a visitors' center and associated facilities in or near Kachemak Bay State Park. Access to the Kachemak Bay State Park is currently provided by charter and tour boats from Homer, Seldovia, Halibut Cove and Peterson Bay. In addition, the Center for Alaskan Coastal Studies at Peterson Bay was visited by approximately 2000 people last year, including 600 students from throughout Alaska who spent two nights and three days in the park.

Presently the park has no facility to serve as an introduction to the park and its natural resources and is lacking in other visitor facilities. With the acquisition of the park inholdings and anticipated growth in visitors to the area, it is expected that more amenities will be needed.

The visitor center and associated facilities would serve as an introduction to the park and educational and interpretative goals of the center. Funding would also be used to provide safe visitor access to the park by placement of mooring facilities and docks for boats in locations that provide easy access to trails and other public use areas.

The Department of Natural Resources will work with the communities of Kachemak Bay and the Kachemak Bay State Park Citizen's Advisory Board to identify the specific nature and location of the center and other interpretative facilities and needed access points.

The Kachemak Bay State Park Citizens' Advisory Board has been discussing the need for a number of capital improvement projects associated with the State Park. The needs identified include: a public dock for accessing park trails, facilities for Halibut Cove Lagoon which would provide improved access to hiking trails, camping and other facilities, and public mooring buoys for placement near trailheads, camping areas, or public use cabins to make the park more accessible to visitors.

House Bill 269
Section 5

Mariculture Technical Center $3,200,000

Mariculture development in Alaska faces two serious impediments. Regulations prohibit the import into Alaska of shellfish (including shellfish spawn, or "spat") other than oysters. Oyster mariculture operations in Alaska currently have available only spat from outside the state, and that supply is unreliable. Thus, future growth of oyster mariculture is restricted by the lack of an instate spat production facility and development of any other type of mariculture is similarly restricted. A Mariculture Technical Center would provide a site for both research and production of spat for oysters and larval species other than oysters. According to the terms used to define restoration in the oil spill settlement documents, building up the mariculture opportunities would be "acquisition of equivalent services" for the loss of services the oil spill caused to commercial and subsistence fisheries.

Mariculture Technical Center
Alaska Department of Fish and Game

House Bill 269
Section 5

TOPIC

Restoration of bivalve shellfish resources and commercial fishing and subsistence services lost due to the Exxon Valdez Oil Spill through support of the Alaska aquatic farm industry by construction and operation of a mariculture center for technology development and seedstock production.

ISSUE

Several varieties of clams have been negatively impacted by the spill and oil remains under a number of blue mussel beds. These beds may eventually have to be cleaned and the mussels will need artificial reseeding for rapid recovery after cleaning. Futher, salmon and herring fisheries, among others, have been negatively affected as have subsistence hunting and fishing. The project described herein would be required for any direct restoration of bivalve shellfish and would support a mariculture industry that would serve as a replacement for lost subsistence and commercial fishing services. The aquatic farm industry does not have practical research and development facilities or a source of native seedstocks available to it. Growth of the industry is severely constrained as a result. Facilities do not exist to assist in the restoration of shellfish resources important to subsistence or commercial users.

POSITION OF THE DEPARTMENT

To address the most critical constraints, ADF&G requests funding for construction and operation of a Mariculture Technical Center. The department is neutral on the location of the Center as long as the technical needs (water quality, productivity, etc.) of the facility are met and the location does not compromise its usefulness to the aquatic farm industry.

POSITION OF OTHER DEPARTMENTS

DCED and DCRA have funded projects to help develop the industry. DNR, DEC and OMB/DGC are actively involved in permitting aquatic farms.

BACKGROUND

Native littleneck and butter clams were impacted by both oiling and clean-up, particularly high pressure, hot water washing. Littleneck clams transplanted to oiled areas in 1990 grew significantly less than those transplanted to unoiled sites. Subsistence harvests of fish and wildlife in 10 of 15 villages surveyed declined from 4 - 78% when compared to pre-spill levels. The decline was and continues to be particularly notable in the villages of Tatitlek and Chenega. In 1989 emergency commercial fishery closures were ordered throughout the oilspill

area. Many species suffered biologically significant injury and are currently under more restrictive management.

The private for-profit aquatic farm (mariculture) industry was formalized by legislation passed in 1988. A moratorium was placed on finfish farming, which was prohibited by legislation passed in 1990.

To date 163 farm applications have been received. Eighty one farms were permitted. Eleven applications are currently in final stages of review. Sixty nine farms have current permits. A statewide application period is scheduled to end April 30. The 1992 farm product inventory was valued at $4.8 million.

Farming of locally occurring species such as scallops, little-neck clams, blue mussels and abalone has been severely constrained by lack of knowledge about the culture and farming of these and a source of seed. By establishing the technology to culture and farm them, the aquatic farm industry would be able to diversify and be very competitive on the world market.

This facility would provide staff and space to accomplish applied research such as development of hatchery techniques for scallops and little-neck clams and of Alaskan specific broodstocks that could be utilized directly by private shellfish hatcheries that would be developed in-State. The facility would be able to provide seedstocks while private facilities were coming on-line. Space would be available in the facility for private research and demonstration projects. ADF&G would operate the basic facility. The industry could help fund Center operations by purchasing seedstocks produced by facility projects. The opportunity exists to restore or replace locally important subsistence and commercial shellfish stocks using technology and facilities developed at this center.

The Alaska Shellfish Grower's Association (ASGA) unanimously supported the proposal. At the department's request, ASGA appointed a committee to work with the department in developing the facility concepts, design and location.

Sites were considered and ranked according to biological, technical, and logistical factors by a technical subcommittee and an industry subcommittee. Seward and Juneau (Auke Bay) were considered to have the highest technical potential.

CONTACT PERSON

Carl L. Rosier, Commissioner
465-4100

MISCELLANEOUS FACTS

* Operational funds of $300,000/ year in 1995 and beyond would be derived from reprogramming general funds currently

budgeted for the transition of some hatcheries to the private sector.

* 69 aquatic farms have current permits in Alaska.

* There are no operating shellfish hatcheries in Alaska.

* All Pacific oyster seed is purchased from hatcheries outside Alaska.

* Native corporations in Kodiak, Tatitlek, Cordova, Yakutat Klawock, Chenega and Angoon have obtained farm permits.

* The most interest in aquatic farming has been demonstrated in Kachemak Bay and Prince William Sound. There are currently 23 farms in Kachemak/Resurrection Bay and 17 farms in Prince William Sound.

* The Chugachmiut Corporation, a non-profit corporation representing the people of the Chugach Native Region proposed a small oyster hatchery in Seward to provide dependable supply of seed to their farms. This facility would be able to directly apply technology developed at the Center.

WHAT

A. Goal

The goal of this project is to assess the feasibility of using aquatic farming technology to restore, replace or enhance bivalve shellfish populations in oil-affected areas and to mitigate the negative affects of the *Exxon Valdez* oil spill on native communities.

B. Objectives

The initial objectives of the project are to assess the feasibility of a shellfish production hatchery and a mariculture technical center to be used to restore, replace and/or enhance bivalve shellfish populations in oil-impacted areas. A report on the feasibility of the proposed facilities relative to potential uses will be generated from data collected during the year. Alternative configurations will be considered and analyzed. This initial study will also attempt to identify potential species and establish production goals for those species.

Native communities and organizations in the affected area would be involved from the outset in development of this project. Pending the results of the feasibility analysis, they would be the logical entity to operate the production shellfish hatchery.

If full funding for construction of the facilities is not realized from oil spill funds, additional funding sources will be required before they can be built. Though this would not affect the stated objectives, it would alter the project time frames and facility priorities

WHY

A. Benefit to Injured Resources/Services

Bivalve shellfish populations were severely impacted by the oil spill and by the cleanup efforts following. All of the affected populations were used to some degree by marine mammals, birds, fishes and in many cases for human subsistence. This project would provide the facilities and infrastructure to research techniques to restore, replace and/or enhance affected populations using shellfish hatchery and aquatic farm-based technology.

HOW

A. Methodology

Utilizing concepts already developed for the Seward shellfish hatchery and the ADF&G Mariculture Technical Center, a feasibility analysis of the project will be conducted. Engineering and biological expertise will be retained to conduct the analysis. If construction funds are later approved, direct restoration, replacement and/or enhancement of bivalve shellfish will be accomplished via an onshore production hatchery operated by the private sector using technology developed at a State-operated research center. The combination of the two facilities is necessary to accomplish the overall production objectives of this project because of the lack of technology for indigenous species.

Analysis of similar projects in other areas will be conducted. The information will be incorporated into the project design.

Evaluation and feasibility determinations of potential projects for restoration, replacement or enhancement of bivalve shellfish in more remote areas, but of import to marine mammals, birds and fish will also be accomplished.

B. Coordination with other efforts

During the process of needs assessment and feasibility analysis, necessary coordination of efforts needs will also be determined and analyzed. At this time ADF&G is aware of efforts by Alaska native groups to establish a shellfish hatchery and an aquatic farm industry in the oil-affected area. This project is supportive of and will be coordinated with those efforts to insure maximum efficiency and utility.

ENVIRONMENTAL COMPLIANCE

Project compliance with the National Environmental Policy Act (NEPA) will be assessed during the feasibility phase. Until project design and specifications are finalized, specific NEPA requirements cannot be determined. Aquatic farms are addressed under a Corps of Engineers' general permit (GP 91-7). If facilities are constructed, a determination of compliance with the Alaska Coastal Management Plan (ACMP) will be required. The required State and Federal permits will be identified and incorporated into the project planning process.

WHEN

The feasibility study will occur this budget year (1/1/93 - 9/30/93). The clam restoration/enhancement demonstration project will occur next budget year.

If the project is determined to be feasible and appropriate budgets realized, construction of the facilities will begin in 1993 (Oil Year 6). The facilities will be operational in 1994.

Mariculture Technology Center

Site Review Committee -- Agency/University

1. James O. Cochran.
   Mariculture Coordinator
   Alaska Department of Fish and Game
   (907)465-6150

2. Raymond RaLonde
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   (907)789-4441

Report of the Mariculture Technology Center
Site Review Committee
November 27, 1991

As presented by F.R.E.D. the Mariculture Technical Center will serve a number of purposes.

1. To provide a facility and support services to enable both public and private funded mariculture research and development in support of the Alaska mariculture industry.

2. To provide indigenous species seed stock for the mariculture industry. Sale of the seed stock would be used to assist with operating expenses.

3. To enable the Alaska Department of Fish and Game to conduct research on restoration and enhancement of marine organisms.

4. To provide technical training on culture of shellfish and aquatic plant to participants in the mariculture industry.

To facilitate maximum utilization of the MTC, the objectives of the proposed facility are to:

1. Construct the facility to operate as a macroalgae, and shellfish hatchery.

2. Construct a facility that can be easily modified to support varied types of mariculture research.

3. Site and construct a facility that is capable of culturing multiple species.

The MTC will not be a production size shellfish hatchery. Technological developments and support services will be used to support private shellfish production hatcheries.

The initial phase of development of the proposal is to select a site for construction. F.R.E.D. in cooperation with the Alaska Shellfish Growers Association (A.S.G.A.), and the University of Alaska formed a committee to review possible sites, and make recommendations as to the locations best suited for the MTC. Six sites were selected for review based upon input from F.R.E.D., A.S.G.A., and the University of Alaska. The sites selected for review were: Kasitsna Bay(Seldovia), Seward, Kodiak, Yakutat, Auke Bay, and Sitka.

Each proposed location was evaluated by using the following criteria

1. Water quality of the potential intake water to a facility.

2. Past record of culture of microalgae, macroalgae, and invertebrate larva.

3. Reasonable access to a growout area to enable continuation of research from the MTC to actual marine conditions.

Water quality data were collected from laboratories, Institute of Marine Science cruses, research papers, personal interviews, and environmental impact studies. Most shellfish hatchery operators suggest that a bioassay be conducted of the water supply before hatchery construction. Since bioassay data is not available the proposed sites, a history of successful invertebrate larva culture was included as a selection criteria. Although not a high priority we thought it reasonable that a potential nursery area be accessible since research on marine organisms often is not complete until the organisms are transferred to the marine environment, and their adaptation, survival, and growth are assessed.

Since the MTC is proposed to be a multi species facility, the committee agreed to evaluate each location on the feasibility to culture scallop larva and giant kelp (*Macrocystis*). Laboratory culture of both of these organisms requires more stringent water quality requirements than other marine organisms having mariculture potential. Combining the requirements of both these organisms the water quality requirement we selected were:

1. Water temperature less than 15^{0} C

2. Low primary productivity as indicated by algae cell counts, zooplankton blooms, and chlorophyll a measurements

3. Salinity above 28 ppt (preferred 30-32 ppt)

4. Low heavy metals

5. Low suspended solids (Clear water)

6. Access to deep water to ensure stable, nutrient rich water quality.

Exact water quality criteria cut-off values were not assigned, but an overall estimate as to the quality of each site was assessed from information available about each site. If levels of any or a combination of the above criteria could potentially lead to problems of facility operation, or could be environmentally limiting to the success of scallop larva and giant kelp, the proposed location was ranked accordingly.

As the data was analyzed we found that locations fell into groups.

House Bill 269
Section 6

Ft. Richardson Pipeline $4,000,000

This pipeline improvement would immediately double fish production of the hatchery that is currently only utilized at 50% capacity due to lack of water. The increased production would be used to mitigate the predicted loss of the Kenai River sockeye salmon sport fishery in 1994, 1995, and perhaps beyond 1995 by planting fish in lakes, and streams throughout Upper Cook Inlet and the Kenai Peninsula.

This sum would cover the full cost of constructing a pipeline to improve the Fort Richardson hatchery operation. This project has extremely high restoration value in providing sport fishing opportunities to the same group of fishermen who have lost and will continue to lose opportunities to catch Kenai River sockeye. The decrease in sport fishing opportunities for sockeye salmon on the Kenai River will have significant social and economic impact on the Cook Inlet area. Over 335,000 angler days were spent in pursuit of salmon on the river in 1990. A major portion of this effort was directed toward sockeye salmon, with an average annual harvest of 107,500 sockeye valued at approximately $10 million.

This project is largely ready to start; the Municipality of Anchorage strongly supports this project and has prepared an Environmental Assessment that is currently being reviewed by the U.S. Fish and Wildlife Service.

F Hatchery Water Supply System
Alaska Department of Fish and Game
House Bill 269
Section 6

TOPIC

Construction of a Water Pipeline at Ft. Richardson Hatchery

ISSUE

Sec. 6 of HB-269 (Exxon Valdez oil spill restoration projects) appropriates $4 million to construct a water pipeline to Ft. Richardson Hatchery which would increase the capacity of that facility to raise fish to benefit sport fisheries.

POSITION OF THE DEPARTMENT

ADF&G supports this project. The department believes this project represents the best potential for increasing sport harvest and fishing participation and the resulting economic benefit from sport fisheries in southcentral and interior Alaska.

POSITION OF OTHER DEPARTMENTS

BACKGROUND

The Ft. Richardson Hatchery is located in the Anchorage urban area and produces 3 million rainbow trout, 850,000 chinook salmon and 600,000 coho salmon, annually. These fish are released at over 200 sites in southcentral and interior Alaska. Funding for this hatchery comes entirely from sport fishermen through Federal Aid in Sport Fish Restoration Funds (also called D-J or W-B) and from sport fishing license revenues deposited into the Fish and Game Fund. All fish production projects at this facility are designed to benefit sport fisheries, although commercial, subsistence, and personal use fisheries receive some ancillary benefits from the production of anadromous salmon.

Fish production at Ft. Richardson Hatchery is currently limited by the cost and quantity of available water. The proposed new water supply system and associated modifications to this hatchery would approximately double the capacity for fish production at the hatchery and reduce the cost per fish produced by providing a primary source of gravity fed water from Ship Creek via two pipelines. One line will provide ambient water and another will provide heated water (60°F) with waste heat gained from Anchorage Municipal Light and Power's Plant No. 2.

Completion of this project would increase the number of trout and salmon stocked in the Anchorage and Railbelt areas by 3.7 million fish and would provide an estimated 142,000 recreational fishing days to the people of southcentral and interior Alaska. This will translate into approximately 54 full-time jobs and personal income of $1.56 million to the Anchorage and surrounding areas. Operating costs of the hatchery would be increased due to the increased production capability, however, funds would come from D-J and fishing license revenues, not General Funds.

The justification for the use of restoration funds for this project is that the increased production will provide an alternative to lost sport fishing opportunities in Cook Inlet that are expected to occur due to the oil spill.

CONTACT PERSON

Carl L. Rosier, Commissioner
465-4100

MISCELLANEOUS FACTS

* Cost of fish production at Ft. Richardson Hatchery would be reduced from $6.92/lb to $5.60/lb. Cost of production at other Alaskan Hatcheries is as much as 3.7 times the cost of production at Ft. Richardson Hatchery.
* Rainbow trout are the most popular resident sport species in Alaska, and the vast majority of rainbow trout harvested in Alaska are produced at Ft. Richardson Hatchery.
* The Anchorage Economic Development Corporation has stated that the proposed expansion project will have a very positive impact on Anchorage and other railbelt communities.

EXXON VALDEZ OIL SPILL PROJECT DESCRIPTION

Project Number: 93026

Project Title: Fort Richardson Hatchery Water Pipeline

Project Category: Restoration Enhancement

Project Type: Fish

Lead Agency: Alaska Department of Fish and Game

Cooperating Agencies: None

Project Term: January 1, 1993 to June 30, 1994

INTRODUCTION

Overescapement of sockeye salmon occurred in the Kenai River as a result of the Exxon Valdez oil spill. This has led to a dramatic reduction in smolt survival.

The Fort Richardson Hatchery currently uses only 50% of available fish rearing space because the existing water supply is limited. Construction of a water pipeline to connect the Fort Richardson Hatchery to the Municipal water system would allow immediate doubling of fish production. This increased production would then be used to provide alternative sport fishing opportunities as early as 1994, thus reducing the impact caused by the loss of the Kenai River sockeye salmon sport fishery.

The increased production of rainbow trout and king, coho, and pink salmon resulting from this project would be released into lakes and streams throughout Upper Cook Inlet and on the Kenai Peninsula providing direct alternative sport fishing opportunities for severely impacted fishermen. Completion of this project would also increase hatchery dependability and reduce cost per unit of production so all areas served by the Fort Richardson Hatchery would indirectly benefit.

WHAT

The goal of this project is to provide alternative sport fishing opportunities to reduce the social and economic impact of the loss of the Kenai River sockeye salmon sport fishery. As a result of the expected closure of the Kenai sockeye salmon fishery it is estimated that at least 100,000 angler days will be lost each year. Increased production at the Fort Richardson Hatchery would ameliorate this loss.

Fish production objectives are as follows:

Species	Number	Size	Potential Angler Days
Rainbow Trout	250,000	100.0 g	50,000
King Salmon	800,000	15.0 g	25,000
King Salmon (catchables)	50,000	100.0 g	20,000
Silver Salmon	600,000	20.0 g	32,000
Pink Salmon	2,000,000	0.15 g	15,000

WHY

The decrease of sport fishing opportunities for sockeye salmon on the Kenai River would have significant social and economic impact on the Cook Inlet area. Over 335,000 angler days were spent in pursuit of salmon on the Kenai River in 1990. A major portion of this effort was directed toward sockeye salmon with an average annual harvest of 107,500 sockeye salmon valued at approximately $10,000,000.

The extremely low number of out-migrant smolts in 1991 and 1992 strongly suggests that sockeye salmon production in the Kenai River will be affected. It is possible that sockeye salmon fishing will be closed for a number of years starting in 1993. However, if immediate action is taken, the Fort Richardson Hatchery water pipeline project would provide alternative sport fishing opportunities during the years the Kenai River loses are expected to be most severe and would significantly reduce these impacts.

HOW

The main project objective would be met by constructing a water delivery system connecting the Municipal Water Utility with the hatchery. The main elements of this system include a cold water line running directly from the Municipal Water Plant to the hatchery and a second line that will provide heated water (via heat exchangers in the Sullivan Power Plant which is adjacent to the Water Plant) to accelerate fish growth.

An engineering feasibility study was completed in 1991 by F. Robert Bell and Associates. This study determined that this project was both technically and economically feasible. In a separate study the Anchorage Economic Development Corporation determined that this project would have a benefit/cost ratio of 2.8:1.

Fish cultural methodology will follow well established, standard Department of Fish and Game and FRED Division procedures and policies.

In the Fall of 1992, a peer review synthesis meeting will examine the proposed benefits and associated potential ecological risks of wild versus hatchery fish.

Construction permits will be required. They will be the responsibility of the contractor. The hatchery is on a military reservation. Access permits to the reservation may be required. This project may be required to meet requirements under Clean Water Act.

WHEN

If this project is approved by the Trustee Council, a minor amount of preliminary work would begin immediately. In cooperation with the Municipality we would solicit proposals for engineering and design for review so that an engineering firm could be hired as soon as an EIS was completed and funds were available. Major milestones are as follows:

Fall 1992	Project peer review synthesis meeting
January 1993	Environmental Impact Statement
January - March 1993	Public Review of EIS
March 1993	Contingent upon favorable public review and concurrence of the Trustee Council, design and construction funding is approved
March -- June 1993	Project design and engineering
April 1993	Collect rainbow trout eggs
June 1993	Award construction contract
July 1993	Collect king salmon eggs
September 1993	Collect coho eggs
January 1984	Water system on-line to support additional fish
June 1984	Release fish

ADDENDUM

1. The Municipality of Anchorage (which strongly supports this project) has an easement for this pipeline route; the corridor already contains an existing powerline.

2. After the pipeline is completed, the program will be partially operated by federal funding as it currently is; consequently, the NEPA public review process has been and will be followed before fish are released. This review process has been incorporated into the development of the ADF&G "Statewide Stocking Plan for Recreational Fisheries" (copy available upon request from FRED Div., Alaska Dept. of Fish and Game, 333 Raspberry Rd., Anchorage, AK 99518-1599). This document has been scheduled for review and updating in 1993. In addition, before any new release location is approved, it is also subjected to another ADF&G review process that addresses fish genetics, fish disease and fisheries management concerns (Fish Transport Permit or FTP process). Thus all releases are subject to both the federal NEPA and state FTP processes currently and will be in the future.

House Bill 269
Section 7

Construction and Placement
of Recreational Activities $4,750,000

The expenditure of funds pursuant to this section will be coordinated with actions of the Trustee Council responsible for authorizing expenditures from the funds received as part of the EXXON Valdez Oil Spill Civil Settlement, Alaska Department of Natural Resources, and all other state and federal land management agencies with responsibilities in the spill affected region.

The Trustee Council is distributing the Draft 1994 Restoration Plan and from April 12-30 will be conducting a series of public meetings to solicit additional public comment on all aspects of proposed restoration projects, studies and habitat acquisition. The Trustees Council has already authorized the expenditure of up to $20 million dollars for acquisition of critically, imminently threatened habitat, and has a science-based process for identifying additional lands for acquisition within the spill affected region from Prince William Sound, to the Southern Kenai Peninsula and the coastal Kodiak Archipelago. A copy of the draft proposal now out for public review has been provided to the committee.

This section provides $4,750,000 plus interest earned on the restitution funds for the construction of recreational amenities, including recreational cabins, mooring buoys, floating docks, and similar projects, within Prince William Sound, the southern Kenai Peninsula and the coastal areas of the Kodiak Archipelago. It also provides for the acquisition of sites and easements necessary for those amenities.

These funds would be used to supplement the work of the Trustees by providing improvements while maintaining their natural character. Envisioned are natural recreations areas that will consist of a constellation of sites, facilities and programs that will attract visitors by many modes of transportation.

Construction and Placement of Recreational Amenities

Recreational amenities constructed pursuant to this section are intended to increase access, minimize impacts and provide outdoor and educational opportunities for a wide variety of outdoor users. For example, construction of an outhouse may provide safeguards against pollution of a beach presently experiencing high use and impact from kayakers. At another site, mooring buoys may allow power boat users or sailboats to gain access to particular locations. The construction of rustic cabins may allow families with small children or the elderly to spend time in remote areas. Other examples of the type of potential site specific amenities that are being considered include the location and construction of trails and picnic shelters. Decisions on such amenities would be developed in consultation with local communities, the public and user groups.

House Bill 269
Section 8

Habitat Acquisition in Kenai Watershed $3,000,000

The Kenai watershed is one of the department's highest priorities for protection in the oil spill affected area. Key properties are currently available, but the opportunities for purchase may pass before they can be purchased out of civil settlement funds.

This one time acquisition is especially important because the oil spill's impact on the Kenai River sockeye runs is turning out to be possibly the most serious single negative resource impact of the spill. Researchers have shown that the 1989 spill event may have brought the population down to levels from which natural recovery is unlikely. Research recently analyzed from the 1992 field season do not show a natural recovery of this system. In past years, the Kenai fishery has supported a healthy harvest of 3,000,000 fish. Each year that this system fails to produce a commercial harvest, the loss to the Kenai Peninsula economy will be somewhere between $50 to $125 million.

Restoration of Kenai River Watershed
Alaska Department of Fish and Game

TOPIC

Habitat restoration and protection on the Kenai River.

ISSUE

Section 8 of Senate Bill 183 appropriates $3 million to restore and protect damaged or threatened fish habitat along the Kenai River and its tributaries. This will benefit restoration of anadromous fish populations, including sockeye salmon, and services, including sport fishing, which were injured by the Exxon Valdez oil spill.

POSITION OF THE DEPARTMENT

ADF&G supports this project. Habitat restoration and protection is integral to the restoration of injured fishery resources and services in the Kenai River watershed. This project will help landowners to restore and protect important bank and riparian habitats damaged by shoreline development and decades of heavy sport fishing use.

POSITION OF OTHER DEPARTMENTS

This project is consistent with the goals and policies of the Kenai River Comprehensive Management Plan which was adopted by the Kenai Peninsula Borough and the departments of Natural Resources and Fish and Game in 1986.

BACKGROUND

Kenai River sockeye salmon stocks suffered population declines and well as sublethal injuries resulting from fishing closures in 1987, '88, and '89 caused by the Exxon Valdez and prior Glacier Bay oil spills. Smolt survival continues to be poor in this system; in 1992 the outmigration was only 3% of the average. As a result, adult returns are expected to decline and be very low in 1994 and successive years.

Spawning and rearing habitats in the Kenai River watershed have experienced damage and are under ever increasing pressure because of a rapid increase in river front development and increased sport fishing use. Studies on the Kenai have shown that certain types of bank alterations, including smooth bulkheads and areas heavily trafficked by sport fishermen are causing a lowering fish habitat value. Without corrective action to repair damage and provide for human uses in non-damaging ways, the Kenai River watershed will experience continued degradation of habitat functional values and fish populations may continue to decline.

This project will: 1) provide funding to help landowners to restore and protect damaged high value fish habitats that are identified through ongoing inventories such as the Kenai River Cumulative Impacts (309) Study using bioengineering techniques that have been demonstrated to be effective in the Kenai River, 2) purchase less-than-fee acquisitions such conservation easements in critical and vulnerable fish habitat areas, 3) provide for on-going monitoring of fish habitat restoration and protection in the Kenai River watershed.

CONTACT PERSON

Carl L. Rosier, Commissioner, 465-4100

MISCELLANEOUS FACTS

- There are over 2,336 private-owned parcels fronting the Kenai River with an assessed land valuation in excess of $120 million.

- The Kenai River system supports Alaska's largest recreational fishery (323,368 angler days in 1991) and contributes 40% of the commercial sockeye salmon catch in Cook Inlet.

- Although portions of the upper watershed of the Kenai River are in National Forest and National Wildlife Refuge ownership, most of the river corridor and shorelands are privately owned and are currently being developed for residential, recreational, and commercial uses. Past and present habitat alterations include: clearing of vegetation; land filling; construction of docks, groins, boat ramps, canals, boat basins; bank stabilization including bulkheads, armoring, and revetments, and bank disturbance and erosion caused by foot traffic, off-road vehicles, and livestock grazing.

House Bill 269
Section 9

Main Bay Hatchery Upgrade $2,000,000

In the 1991 legislative session the Prince William Sound Aquaculture Corporation requested $5 million as a Capital Improvement Project to upgrade the Main Bay hatchery to increase salmon production. The legislature only approved $3 million. In order to carry out the legislature's intent and to assist in restoration of sockeye in the area, this additional money is needed. This project enhances the damaged fishery resources of Prince William Sound as well as serving as a replacement for natural sockeye production lost with the collapse of Coghill Lake. This facility would also be used to promote the long term recovery of the Coghill system.

Main Bay Hatchery Upgrade
Prince William Sound Aquaculture Corporation

TOPIC

Enhance the damaged fishery resources of Prince William Sound and restore natural sockeye salmon production by upgrading Main Bay Hatchery to meet production objectives for sockeye salmon

ISSUE

Main Bay Hatchery, owned by the State of Alaska and now operated by Prince William Sound Aquaculture Corporation, cannot meet its production objectives and assist affected commercial fisheries and associated infrastructure in recovering from the oil spill. In 1992 the legislature appropriated $3 million of the needed $5 million required to allow the hatchery to meet its planned objectives. This allocation would provide full funding for the necessary improvements to the Main Bay facility.

POSITION OF THE DEPARTMENT

The Alaska Department of Fish and Game supports this appropriation, finding that it is necessary to allow the hatchery to meet its planned potential.

POSITION OF OTHER DEPARTMENTS

The money would be appropriated to the Department of Commerce and Economic Development as a grant for the Prince William Sound Aquaculture Corporation.

BACKGROUND

The Department of Fish and Game began operation of Main Bay Hatchery, located approximately 80 miles west of Cordova, in 1982. The hatchery was operated as a chum salmon facility until 1987, when it was converted to sockeye salmon production.

In 1991 the operation was contracted to Prince William Sound Aquaculture Corporation for a period of 20 years. An agreement is in place for a $5 million in hatchery improvement funds to enable the facility to become economically viable.

Concept plans developed jointly by ADF&G and PWSAC defined a two phase construction and development plan. To accomplish the phase 1 production objectives of 6.1 million smolt from three stocks, three million dollars have been appropriated to date.

CONTACT PERSON

Carl L. Rosier, Commissioner
465-4100

MISCELLANEOUS FACTS

* Main Bay Hatchery is the world leader in development of sockeye smolt hatchery technology.

* A new pipeline will be built to meet rearing and raceway water requirements.

* The facility will be modified to allow stock separation to prevent cross-stock pathogen transmission.

* A new powerhouse will be built for electrical power generation.

* New incubation and supply equipment will be purchased for the increased production capacity.

* Support facilities will be expanded.

House Bill 269
Section 10

Fishery Industrial Technology Center $3,000,000

The total cost of design, engineering, and construction of an addition to the existing Fisheries Industrial Technology Center in Kodiak is estimated at $8 million. This phase of the facility's development will include a gravity fed seawater system, wet and dry marine laboratories on a scale that will accommodate behavorial studies on adult fish, and public education facilities. These will provide the State of Alaska and federal agencies involved in restoration of marine vertebrates and invertebrates with research capacity and technical assistance to study fisheries restoration, monitoring, enhancement, and enhanced utilization of fishery resources in the Western Gulf of Alaska.

The Center will play a significant role in current and future dar age assessment and restoration and in the enhancement of those fisheries in Prince William Sound, Kodiak area, and Cook Inlet that were injured in 1989 and continue to be injured by the spill.

Fishery Industrial Technology Center Addition
University of Alaska, Fairbanks

TOPIC

Providing long-term environmental monitoring and restoration work in the spill affected area by expanding the capabilities of the Fishery Industrial Technology Center in Kodiak.

ISSUE

Following the Exxon Valdez oil spill the need for a multi-agency fisheries science and technology center in the Gulf of Alaska was identified. Currently, agencies participating in oil spill projects occupy isolated, outdated and inadequate facilities. Monitoring and restoration projects are hampered by these inadequacies. This project would provide modern, consolidated facilities for all agencies participating in oil spill projects.

POSITION OF THE DEPARTMENT

ADF&G supports this project because of the role the center can play in current and future damage assessment and restoration work, and in the enhancement of those fisheries in Prince William Sound, Kodiak area, and Cook Inlet which were injured in 1989 and continue to be affected by the spill.

POSITION OF OTHER DEPARTMENTS

Not applicable.

BACKGROUND

The first phase of the University of Alaska, Fairbanks, School of Fisheries and Ocean Sciences (SFOS), Fishery Industrial Technology Center (FITC) has been completed. It is the first building of the proposed multi-agency fisheries science and technology Center (FSTC). The building is being used by the University and the National Fisheries Service at this time.

The FSTC will house University biotechnology, fisheries science, fish harvesting technology, food safety, and toxicology programs. National Marine Fisheries Service programs are expected to include marine mammal studies, the fishery observer program, resource assessment, conservation engineering and utilization research. ADF&G utilization is expected to focus on wildstock shellfish (king crab, etc.) restoration and enhancement. The Department of Environmental Conservation has also expressed interest in utilizing the facility.

The FSTC will improve the quality, timeliness and cost effectiveness of fisheries information acquisition and dissemination, fundamental and applied research, technology transfer and instructional programs.

CONTACT PERSON

Carl L. Rosier, Commissioner

MISCELLANEOUS FACTS

* Seven federal and two state agencies, the University of Alaska, the Kodiak Island Borough and the City of Kodiak have participated in the planning for this facility.

* A major component of this facility will be a seawater system with associated mechanical support and filter beds.

* Many projects will be sponsored by interested industry partners to develop technologies or solve problems outside the central focus areas on a proprietary basis.

House Bill 269
Section 11

Subsistence Restoration Projects $5,000,000

Funds would be appropriated to the Department of Community and Regional Affairs for payment as grants to unincorporated rural communities to assist in restoration, replacement, and enhancement of subsistence resources or services injured or lost as a result of the EXXON Valdez oil spill.

The 1989 oil spill, and its aftermath, caused major dislocations for rural residents of the area. Subsistence resources that were relied upon are suffering still from reduced populations and/or the presence of oil.

This appropriation will allow the state trustees and the local villages and communities to work together to develop local projects designed to deal with specific dislocations and injuries caused by the spill.

It is possible that projects identified will gain additional funding from the civil settlement, if they meet the requirements of that decree. Also envisioned are projects that will establish basic sanitation, docks and fuel facilities, or those that will help establish long-term employment.

As tourism grows in the spill affected area, and federal and native lands are set aside by the federal government or the Trustees, these funds will be used to support a sustainable economy for residents of the area.

Subsistence Restoration Projects
Alaska Department of Community and Regional Affairs

TOPIC

Restoration of subsistence resources or services damaged or lost due to the Exxon Valdez Oil Spill through projects which restore, replace or enhance subsistence resources and subsistence harvests.

ISSUE

Projects funded under this section will improve access to traditional foods; restore, replace or enhance subsistence resources or services; and provide recovery monitoring of affected resources and services.

POSITION OF THE DEPARTMENT

Restoration to the pre-spill level of subsistence harvest is essential to the survival of oil spill-affected communities. Restoration efforts should include continued testing for contamination, reliable public information programs, and restoration of harvest opportunities.

POSITION OF OTHER DEPARTMENTS

The Departments of Natural Resources and Environmental Conservation support these projects.

BACKGROUND

Before the spill, subsistence harvests in the oil spill area, especially in the 15 small communities affected, were relatively large and diverse. In 10 of these communities which were studied intensively in 1989, harvests declined between 14 and 77 per cent. As late as 1992, harvests have not fully rebounded, due to continued concerns about contamination and local perception of declines in numbers of marine mammals, sea ducks and marine invertebrates. Many of the affected communities have made it clear to the Exxon Valdez Trustee Council that restoration of their traditional subsistence harvests should be a top priority for restoration activities.

The Oil Spill Health Task Force, a cooperative, inter-agency effort of ADF&G, ADEC, ADHSS, ADCRA, the Indian Health Service, NOAA, EXXON, the North Pacific Rim, and Kodiak Area Native Association, engaged in research and public information work from the time of the spill through 1992. Their work will form the basis for restoration work in coming years.

CONTACT PERSON

Carl L. Rosier, Commissioner, Alaska Department of Fish and Game, 465-4100

House Bill 269
Section 12

Response and Cleanup Research .00

These funds would be appropriated to the Department of Environmental Conservation to enter into contracts for research programs directed to the prevention, containment, cleanup or amelioration of oil spills in the State of Alaska. The department of will work with the academic community, inventors, and industry to develop more effective technologies to deal with oil spills.

In the last year, both the federal and state governments have worked to identify key technologies necessary to reduce risks and improve response for spills in the Arctic and the subarctic. A plan is being developed to support coordinated research in these areas. The potential research is varied.

One example is research needed to "prove up" promising technologies such as bioremediation, in-situ burning, and dispersants that could ameliorate spills on water and land without harmful side-effects. Currently, federal and state regulators are poised to preauthorize further use of these techniques once additional research or testing is completed.

Other possibilities include the development of remote sensing and mapping technologies to spot and track oil spills and the development of near-shore response capabilities using vessels of opportunity throughout the state. Federal and state contingency requirements are costly and may be insufficient in extreme situations. These costs can be reduced and response capabilities made more effective by use of existing vessels with appropriately developed cleanup equipment.

Funds will be spent in consultation with the three EXXON Valdez State Trustees, the Hazardous Substance Spill Technology Review Council, other government agencies, industry and the academic community.

Background Documents
available from ADEC on
Oil Spill Research & Development
needs in Alaska and the U.S.

1. Research and Development; Excerpts from Alaska Oil Spill Commission Final Report. February 1990.

2. Research Needed to Respond to Oil Spills in Ice-infested Waters; Findings and Recommendations of the U.S. Arctic Research Commission. Issue No. 8 - May 1992.

3. Excerpts from National Research Council: Review of the Interagency Oil Pollution Research and Technology Plan (Pre-pub Copy). 1993.

4. Oil Spill Response Technologies and Findings; Excerpts from Hazardous Substance Spill Technology Review Council 1991 Annual Report.

5. Position Paper: Prince William Sound Oil Spill Recovery Institute.

6. Research and Development Coordinator Position Announcement; Prince William Sound Science Center.

The materials listed above are available from ADEC in support of Section 12 appropriation request.

Attached is item two explaining current needs in the Arctic. Other materials are available by request of the ADEC Commissioner's Office.

RESEARCH & DEVELOPMENT

The *Exxon Valdez* disaster has awakened industry, government and public interest in oil spill research. The May 1989 report to the president on the *Exxon Valdez* by Transportation Secretary Samuel Skinner and Environmental Protection Agency Administrator William Reilly bluntly concluded that "oil spill cleanup procedures and technologies are primitive." That view was echoed by the American Petroleum Institute, an industry group that issued a report calling for new private investment in research and development of spill response methods. Federal agencies are preparing research and development initiatives in spill response techniques, technology, training and deployment systems. There is also increasing interest in coordination and collaboration with other countries, particularly Canada, to provide faster progress, faster dissemination of research results, and less unnecessary duplication of effort.

Legislation now pending in Congress provides for the establishment and funding of oil spill research and development programs. One proposal would create a Prince William Sound Oil Spill Recovery Institute to identify and develop the best technology for dealing with spills in arctic and subarctic marine environments. Another would establish a minimum of six regional centers to address research needs.

Government-supported research and development should insure that public priorities are met, that government agencies expected to direct future oil spill response will be knowledgeable about new technologies and techniques, that regulation is appropriate and effective and that up-to-date response capabilities are maintained. Coordination and cooperation in research and development programs is in the interest of all concerned.

Alaska's interests in oil spill research should focus on specific Alaska marine habitats, the characteristics of oil and dispersant methods in arctic and subarctic waters, prevention research and training programs to ensure that Alaska response authorities will be fully prepared to understand and cope with future spills.

Alaska Oil Spill Commission Final Report, February 1990

Recommendation 56
Knowledge transfer

The United States, the State of Alaska and Canada should establish cooperative research programs to develop and disseminate knowledge on oil spill prevention and response.

Despite two decades of rising public concern for the environmental consequences of oil spills, research on the subject is still in its infancy. Prevention systems are haphazard. Spill response technology is untested and underdeveloped. Research investment is low, and institutional commitment to this field is scarce.

For a variety of reasons—including, predominantly, ignorance—the latest technologies were not used in the *Exxon Valdez* cleanup. Much of the available cleanup equipment had not been tested in the various circumstances facing cleanup crews. Due to caution or uncertainty, untested techniques were not quickly implemented.

The response effort was handicapped by the absence of a rapid, accurate and comprehensive system, available to all, for information on local conditions, habitat, fish and wildlife, currents and weather.

The primitive state of development of both prevention and response methods holds out some hope that, given sufficient investment, dramatic strides will be made in a short time.

Research dedicated to improving the state of knowledge in oil spill prevention and response should be undertaken to remedy information gaps. Among the topics that should be pursued are the relevant regional geography, environmental assets, weather, technological systems and basic research on the behavior of oil in water. Information management should be included in the agenda for response and contingency plans. Resources should be committed to ensure adequate information systems and services in emergency response efforts in the future.

Recommendation 57
State research center

The state should establish, in the University of Alaska system, an institute for research on oil spill prevention and response policy, technology, testing and evaluation.

An Alaska-based institute should be created and encouraged to strengthen its programs through consortium agreements with other institutions studying the safe transportation of hazardous substances. Research topics should include locality-specific investigations of marine habitat and the impact of oil, as well as prevention policy and response technology. The institute also could develop and administer education, training and safety licensing programs for participants in oil transportation and handling. The institute's efforts should be coordinated with similar programs developed under federal authorization. Its functions should include making recommendations to appropriate authorities regarding changes in standards and requirements in oil and gas and hazardous substance transportation.

The research program should be established independently of that conducted in support of fault-oriented litigation. Research since the Exxon *Valdez* wreck has been noticeably distorted by its litigation orientation.

Recommendation 58
Pretesting

Authorities responsible for testing and approval of response technologies such as dispersants, coagulants, burning and bioremediation should evaluate and decide whether to preapprove these technologies more rapidly.

Parties responding to the spill were handicapped to varying degrees by a lack of scientific knowledge concerning what was available, the properties and effectiveness of various technologies under varying conditions, and the lack of prior approval of response strategies. Those responsible for containment and cleanup were not fully advised on state-of-the-art methods or regularly provided with appropriate technology.

The system for testing and approving new response technologies is haphazard and slow and should be improved. Many emerging technologies hold promise, but they were untested and undeveloped at the time of the *Exxon Valdez* wreck.

The U.S. Navy's use of coagulants in containing and cleaning up shipboard fuel spills—fully tested for Navy use but no other—was of particular interest to the commission. The commission also was intrigued by reports of proposed vessel-based coagulant systems capable of jelling cargo in the vicinity of a breach and of vacuum-based systems for containing oil in a damaged vessel. Such avenues of development call for early and thorough exploration for possible use.

Key public agencies, notably the federal Environmental Protection Agency and the state Department of Environmental Conservation (both of which are involved in Regional Response Plans and the oversight of industry contingency plans), are charged with approving or disapproving response technologies for oil spill cleanup. A continuing, visible process for study, analysis and application of emerging technology is required.

Recommendation 59
Tanker simulator training

West Coast states should create a training center using simulators to advance the knowledge of masters, mates, pilots and shipboard bridge crews in the operations of very large vessels in West Coast ports.

There is currently no place on the West Coast where mariners can receive real-time simulation training in the bridge operations of very large ships. Maintaining an adequate pool of ships' officers and pilots fully trained in up-to-date circumstances will enhance safety and efficiency in the maritime industry.

House Bill 269
Section 13(a)

Whittier Access Improvements $15,000,000

The purpose of this project is to provide direct vehicular access between Portage and Whittier. This project is needed to stimulate economic development for the community of Whittier, Prince William Sound, and Southcentral Alaska. Health, safety, and environmental benefits are also expected to result from the project.

The project will be constructed in a 5 mile-long corridor between the eastern termini of the Portage Highway and the eastern end of the Passage Tunnel in Whittier. It will consist of approximately 2.5 miles of two-lane access road and bridge from the Portage Highway to Bear Valley and an approximately 2.5 mile one lane joint use road (auto and rail) through the existing tunnel to a connection with the local road system in Whittier.

These funds will be used toward the design and construction of this project.

Section 13(b)

Oil Spill Response Assistance Ferry $5,000,000

This appropriation cumulatively with other funds would be used to design and construct an oil spill response assistance ferry. The goal of this project is to increase the ability to respond to oil spills in Prince William Sound by providing a specially fitted vessel for use by the state in response actions.

NEW SHIP

OVERALL FUNDING STRATEGY FY 92 - FY 94

"TOTAL ESTIMATE" $85

A.	60.0	Federal FY 94 obligation over 2 years
B.	5.0	Match (part of Lump sum match to Fed $)
C.	15.0	Transfers (see page 2 for detail)
D.	5.0	Other
	$85.0	TOTAL

AMHS - NEW SHIP

FY 94 BUDGET - House Version

(Capital)	60.0	Federal authorization FY 94 over 2 years
(Capital)	5.0	within match state/federal (lump) as normal *(not identified specifically)*
(Operating transfer not GF)	7.0	transfer from Mitigation account to vessel replacement fund

March 3, 1993

Report No. 2

ALASKA'S SPILL RESPONSE COMMAND POST

BUILDING AN ALL AMERICAN SHIP
The ALASKA MODEL

"protecting coastal resources with a ready response command post"

ALASKA MARINE HIGHWAY

AN AMERICAN OCEAN GOING PASSENGER SHIP

ALASKA'S OCEAN GOING PASSENGER / VEHICLE SHIP

A READY SPILL RESPONSE

COMMAND POST

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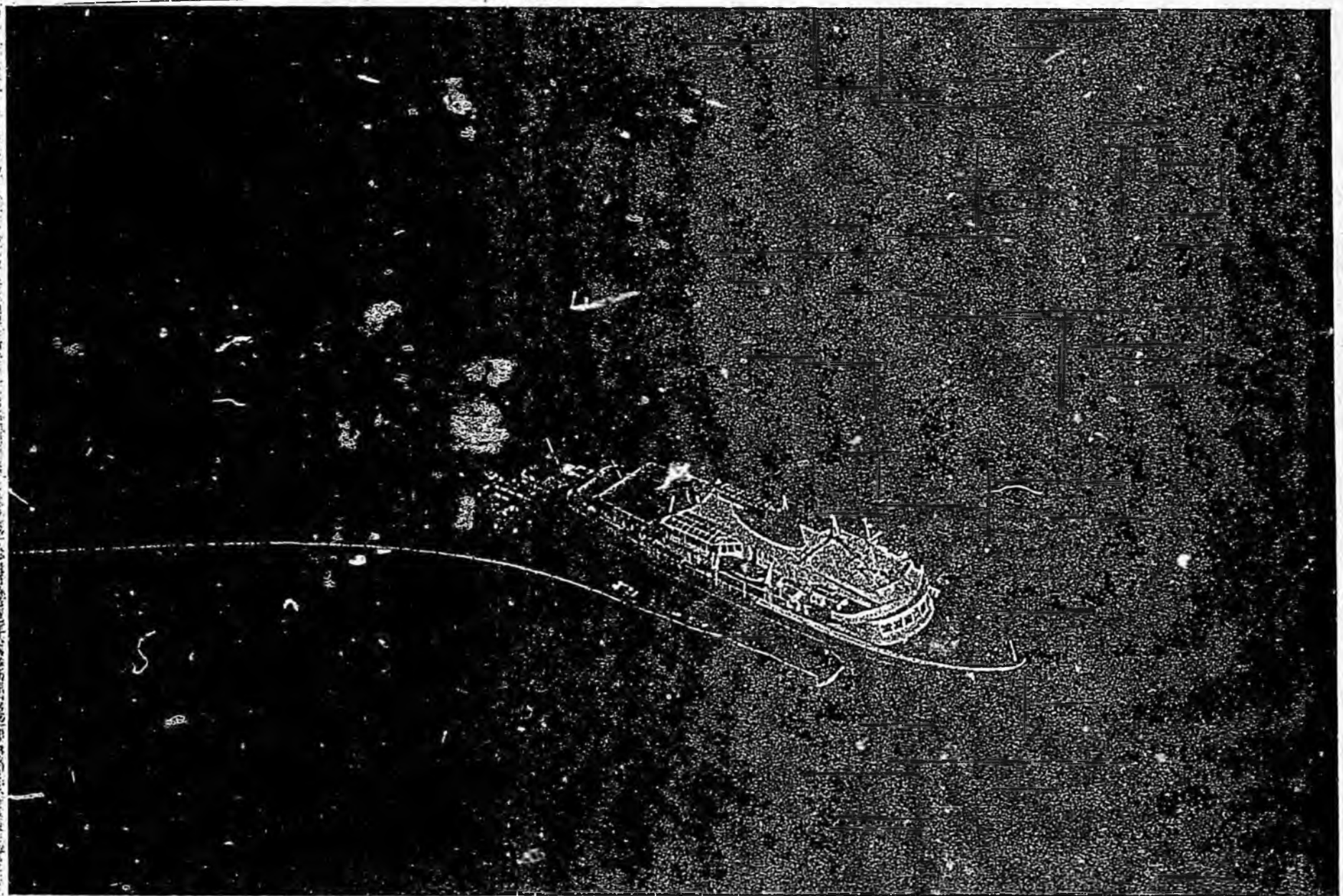

M/V Bartlett Supplying Support Vessels

ALASKA'S OCEAN GOING PASSENGER / VEHICLE SHIP

PROTECTING COASTAL RESOURCES

WITH A READY SPILL RESPONSE

COMMAND POST

- ALASKA'S COMMAND POST - CATASTROPHIC OIL SPILL RESPONSE PREPAREDNESS
- A LESSON LEARNED FROM ALASKA'S EXPERIENCES
- FEATURES INCLUDE ITEMS REQUIRED FOR SPILL RESPONSE AND EFFECTIVE ORGANIZED COMMAND POST
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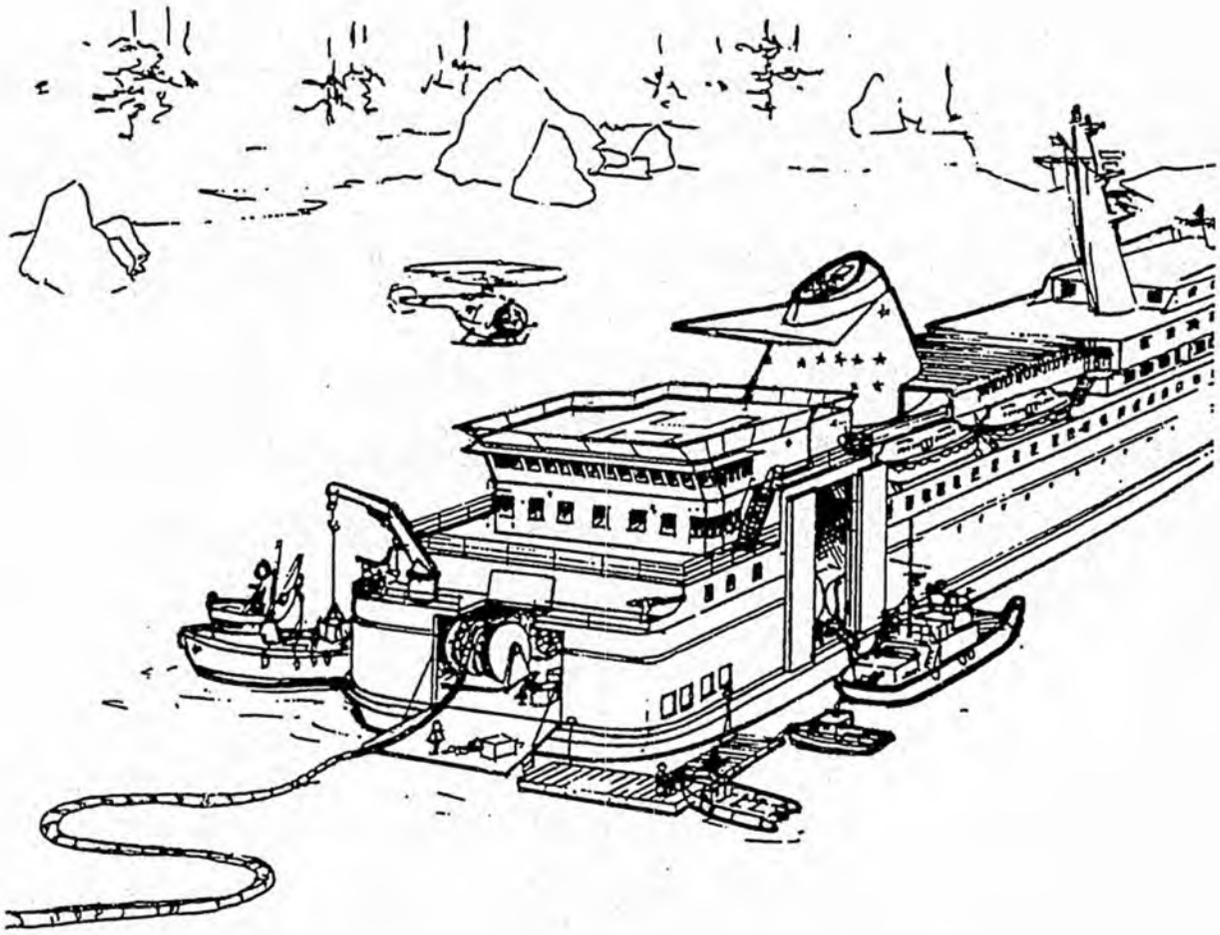
March 2, 1993

DESIGN FEATURES FOR SPILL RESPONSE AND AN EFFECTIVELY ORGANIZED COMMAND POST

- Command Center
- Command Conference Room
- Communications
- Command Center Work Stations
- Command Center Computer Stations
- Decontamination
- Laundry
- Deck crane
- Support vessel replenishment
- Diving station
- Marine Sanitation Device
- Floating Dock
- Helicopter Access
- Time on station
- Loading and storage of modular response units
- Wildlife recovery and storage
- Flammable liquid drum storage
- Press Room
- Electrical connections
- Medical Support/Sick Bay/Safety Officer
- Work areas
- Laboratory work area and sample storage



CONCEPT DESIGN - RESPONSE FEATURES

In the event of a catastrophic oil spill along Alaska's coastal line, rich in natural resources, the State will be prepared to respond. This response will be aided by its Ocean Going - Spill Response Command Post. Alaska is constructing a new ocean going passenger/vehicle ship. One of the design functions of this new vessel is to respond in the event of an emergency. The ship will not only be able to transport responders, and their equipment and supplies; it is being designed to support the State's On Scene Commander and support response functions. The vessel is being designed in consultation with staff from the Department of Environmental Conservation, and U.S. Coast Guard, and other interested responders, including industry representatives.

The following design features are being considered during the concept and preliminary design for Alaska's Ready Spill Response Command Post - an Ocean Going Ship. These criteria and specifications have been developed under the assumption that a purpose of the new ship will be for use during a catastrophic oil spill response and will provide the function necessary for a command and control platform for the Alaska On Scene Coordinator.

The vessel will support the Unified Command and the Department of Environmental Conservation field crews and contractors monitoring and providing oversight and in certain instances containment and cleanup. The vessel will provide berthing, amenities and meals for response staff with the ability to remain on station for a design minimum of 20 days.

The vessel will be capable of ocean passages and will be able to provide emergency response capability and operate in any ice free state waters. It will:

- transport response equipment and personel,
- act as a support base for response vessels,
- have versatile and significant communications capabilities,
- provide substantial enclosed workspace on the car deck,
- have the ability to act as a vessel traffic control platform, and
- be capable of loading and unloading roll on/roll off and containerized or modular response cargo from undeveloped docks.

The vessel will be limited to operation in clean water only. The vessel will not have any response related towing features. The ship will not be designed or have equipment for containment, recovery, storage, transfer lightering or salvage.

When used in the response mode the ship will be converted for use as a command and control response post. Approximately eighty per cent of the vessel will be direcly used to support response activities. During the concept design stage, it is the engineer's estimate that the response spaces and functions cost in excess of $17 million. This estimate will be refined as the vessel's design progresses.

RESPONSE FEATURES and SPECIFICATIONS

The following features and criteria are currently being studied for providing response capabilities. These criteria focus on the primary mission as a command and control platform and include features jointly worked on by both the Alaska Department of Environmental Conservation (DEC) and the Alaska Marine Highway System (AMHS).

Command Center

Provide a Unified Command Center to accommodate the following response sections:

- State On Scene Coordinator;
- Operations;
- Planning;
- Logistics;
- Finance;
- Conference Room;
- Radio/Communications Room *(The dispatcher will be located in this space and shall coordinate all field, vessel and air message traffic. UHF/VHF communication systems will be located here, and hand-held radios will be charged, low level maintenance performed and issuances made.);*
- Press Room; and
- Medical Support/Sick Bay (*provide provisions to locate the Safety Officer in this space).*

Each of these functional areas will have a separate dedicated space. Ideally these areas shall be located in close proximity to each other, preferably attached.

Command Conference Room

Provide a Command Conference Room adjacent to the Operation Command Center with one table capable of seating 12 persons comfortably. This room

will include full audio/visual capabilities (screen, projectors, video monitors, etcetera).

Communications

Provide dial telephone, fax, and computer data (modem) distribution systems connecti g all command centers and staterooms with both Satellite Communications (SATCOM) and Land Line capability. The system's purpose is to provide real-time communications with the DEC's Spill Response Center, the Governor's Office, US Coast Guard (both in Alaska and D.C.), applicable federal agencies, and the Responsible Party's Headquarters, and State of Alaska's Departmental of Environmental Conservation, Division of Spill Prevention and Response.

- Provide means to allow constant communications between operations and planning command centers with field monitoring resources located on-scene in support vessels and on shore.

- Provide a UHF/VHF communication systems comprised of a base station having one each VHF multi-frequency transceiver with repeater capability, one each UHF transceiver, one each Aircraft multi-frequency transceiver and remote control of the shipboard HF SSB radior transmitter. Provide duplication of the VHF, UHF and Aircraft scanner radios in the radio room in the form of a "hot patch" 2-way radio communications to the command staff in the Command Center.

- The Command Center radio systems are to be powered with UPS to allow 30 to 60 minutes of uninterrupted power and to insure clean power.

- Consideration should be given to establishing a dedicated communications center that shall include dispatching and hardware for all communications capabilities. Provide communication capability between vessels on the water, aircraft, portable earth stations and hand-

held radios being used by the shoreline crews, and locate same in the Radio Room.

- Provide an on board intercom or paging system which can also be integrated with the DEC areas on the car deck.

- Provide a ship-to-shore satellite communications systems comprised of two domes to accommodate a 48 line communications capability via multiplexing four channels. Each channel will accommodate voice or normal data transmissions at a 2400 baud rate. System to accommodate both data dumps and fax transmissions.

- Provide a PAHX with 145 line capacity with the capability to give detailed logging of telephone operations for billing purposes. The PAHX is to interface with the ship-to-shore satellite link to allow personnel to make phone calls from their staterooms.

- Provide video-conferencing capability, with projection monitor in the command center conference room and theater.

Navigation

- Provide an Inmarsat C receiver to allow a shore based station to interrogate vessel position information.

- Provide a GPS or Differential GPS system for vessel positioning information at the site of an emergency to aid in the tracking of an oil spill.

Support of Press

Provide facilities for a minimum of twelve (12) reporters and with two (2) telephone and two (2) fax connections.

Command Center Work Stations

Work Stations shall have a desk surface not less than 36" x 48", with the top surface 28" to 30" above deck, and with sufficient leg room clearance to allow a person to sit at the desk in a comfortable writing position. A 40 watt, single tube, adjustable height fluorescent light fixture shall be provided. A 120 v, 60 Hz, 15 amp, grounded, 3 prong, four outlet fixture shall be provided, of which two (2) outlets shall be connected to an Uninterrupted Power Source (UPS). Each work station shall have provided a single drawer, 3" high, 24" wide and 19" deep.

- A laydown table should be provided which shall have a minimum desk size of 40" x 72" and be located at a height of 36" - 40" above the deck. One of the longest lengths of the table shall have an unencumbered distance in front of it of not less than 30". A 40 watt, dual tube, fluorescent light fixture shall be provided. A 120 v, 60 Hz, 15 amp double outlet, grounded, 3-prong, fixture shall be provided.

Command Center Computer Stations

Provide sufficient space for the indicated number of Computer Stations provided by DEC at the time the Unified Command Center is activated. Sufficient space is a horizontal deck area not less than 48" wide and 36" deep, 72" height, with an unencumbered distance in front of not less than 30". A 40 watt, single tube, adjustable height fluorescent light fixture shall be provided. A 120- volt, 60 Hz, 15 amp, grounded, 3-prong, four outlet fixture shall be provided, of which two (2) outlets shall be connected to aUPS. Each work station shall have provided a single drawer, 3" high, 24" wide and 19" deep.

Decontamination

A walk through Decontamination Station will be provided adjacent to the personnel entry port, with showers and sufficient area to allow personnel wearing soiled and dirty clothing to disrobe, shower, and dress with clean clothes. Showers and dressing areas shall have either separation adequate to accommodate each sex or be a uni-sex facility. Capacity shall be sufficient to allow personnel to be processed at the rate of two (2) people every five (5)

minutes (24 persons per hour). The disrobe area shall be separate from the shower and dressing areas, and shall have provisions to store a minimum of thirty (30) winter clothing outfits. The dressing area shall have sufficient stowage for clean clothes, personal protection gear - including maintenance and issuance, and towels required by 50 persons. A slop tank shall be designed and sized to hold washdown water from decontamination. Oil/water separators or other appropriate treatment should be considered if treatment and release can be legally accomplished. If legal overboard discharge cannot be accomplished, the slop tank shall be designed as a holding tank for shoreside pump out to an approved facility. Additional containers shall be provided for oily contaminated solid waste generated from decontamination operations.

Laundry

Provide applicable connections on the vehicle deck for a portable laundry capable of processing a minimum of 750 clothing changes plus daily linen and towel service for 50 two-berth staterooms.

Deck crane

Provide crane lifting capacity sufficient to reach 40 feet outboard, with a maximum lifting capacity of 20,000 lbs and land it on the car deck. The deck crane should be mounted overhead of the vehicle car doors to permit hoisting of payloads from the vessel's car deck to support vessels moored at the float dock.

Support vessel replenishment

Provide replenishment to response support vessels capable of:

- Providing fresh watert.
- Collecting sewage.
- Providing fresh, chill, and frozen provisions sufficient for support vessels with crews.

Diving station

Provide water level access to support transfer and loading of diving operations, storage of high pressure air bottles, power for air compressors and an area to house diving gear, fill bottles and perform minor repairs

Marine Sanitation Device

Include a marine sanitation device capable of handling all on board generated and sewage from support vessels.

Floating Dock

Provide floating dock capability from the vehicle ramp while at anchor for support vessels, boarding and cargo transfer. The floating dock should be deployable from on board and be of sufficient size to dock four 30 ft support vessels. The float dock should include connections for mooring support vessels.

Helicopter Access

Provide clear access for helicopter to sling loads, transfer personnel or conduct medivac operations without landing. Provide a full helicopter landing facility with DEC providing a trained flight deck crew and all non-permanent equipment required to conduct flight deck operations, to include maintenance costs.

Time on station

Provide sufficient fuel, water and provisions at a spill for 20 days, to include a 2 day transit.

Loading and storage of modular response units

Provide for loading, storage and tiedown of modular response units up to 40 ft in length.

Wildlife recovery and storage

Provide an area for collection, bagging, refrigeration and storage of wildlife for use as evidence. Consider providing facilities for a DEC provided portable RO-RO refrigeration unit.

Electrical connections

Provide electrical connections (120, 220 and 440 volts) on the car deck at locations specified by DEC for monitoring and scientific payloads, and other response gear.

Medical Support/Sick Bay/Safety Officer

Provide a dedicated area with storage for medical supplies to support EMT III level medical support, stokes basket and holding area for two patients. Provide a desk, computer terminal and storage for safety supplies.

Work areas

Provide designated work areas on the car deck for repair and maintenance of outboards, monitoring and scientific equipment and other field equipment.

Laboratory work area and sample storage

Designate space on the car deck for the collection, processing and storage of samples with limited capability to perform wet chemistry. Sample storage should include a lab type, explosion proof, lockable storage and lockable closets or lockers for clean sample storage.

Flammable liquid drum storage

Provide secure locker space on the car deck in the form of a watertight paint locker rigged with CO_2 and sized to accommodate 15 overpack drums (80 gallon drums). Drum contents should be assumed to include flammable liquids.

Note: This is not considered a spill response function, but is being studied durng the design stage at the request of DEC.

ALASKA'S OIL SPILL RESPONSE - A CHALLENGE

Alaska is America's leading producer of oil. Alaska's oil production is critical to U.S. energy stability as imports of foreign oil to the U.S. has risen to over 50 percent of America's daily consumption. The two largest oil fields in North America, Prudhoe Bay and Kuparuk, will keep Alaska in the position of being a major energy-producing state for some time into the future. The State of Alaska continues to encourage responsible oil and gas development in areas of Alaska.

Responsible development includes assessment of risks to the public and the state's resources, learning from past practices, and designing and implementing mitigation measures. In the area of transportation of oil - both crude oil leaving the state, and refined products coming back to the state- PREPAREDNESS is one of the most basic and necessary corner stones of mitigating damage when an accident occurs.

The State of Alaska has well established reasons for needing to be prepared to emergencies. This need arises from:

- large number of tankers traveling along the Alaska coast,
- the quantities of product shipped,
- the sensitive environment with its valuable natural resources,
- the dependence of Alaskans on these natural resources,
- rouged and remoteness coastline, and
- past experience with the nation's largest oil spill.

The Alaska Oil Spill Commission in its February 1990 report summarized it's risk assessment and the need for preparedness:

> **"Clearly, some level of risk will always be present in oil transportation, but ways to reduce that risk are available now, and new ones continue to be developed. All parties, private and public, must commit to minimizing that risk as the highest priority for it is only through prevention that we can hope to reduce the increasing pollution of the seas."**

Lessons Learned

The risk of environmental damage from an oil spill in remote areas of the Alaska coastline exists and can be mitigated by preparedness. In retrospect lessons learned during the Exxon Valdez spill response and during other spill responses allows Alaska the opportunity to be better prepared for similar emergency response. In testimony before the US Congress an Alaskan representative[1] stated:

> ". A major lesson of this spill is that strong, insistent leadership by the State, in cooperation with local interests and local communities, has been essential to moving the cleanup efforts in the proper direction and seeing that important resources are recognized and protected. ...it is essential that all the parties involved in spill response have good logistical arrangements to support effective response."

A Congressional Office of Technology Assessment report stated:

> "...-Logistics: Having the right equipment on scene when needed is essential to a rapid response. Equipment may either be strategically located or a rapidly moved to the spill site, but either case the recovery effort will only be as good as the weakest link in the system."[2]

In a Report to the President on the Exxon Valdez oil spill response, it was reported that "communications were a problem, given the large area, the mountainous terrain, and the varied armada of vessels involved. A hodgepodge of radio equipment made communications difficult . Voids in radio coverage were aggravated by distances and geography inherent to Prince William Sound."[3]

AMHS and Spill Response

The usefulness of the state's ferry are well understood by both ADEC and the people living along the Alaskan coast. In water response and clean up to the Exxon Valdez oil spill was 80 to 90 miles from the nearest community connected to a surface transportation network, the City of Valdez. Two AMHS ferries supported the State's and the local fishermen's response during the Exxon Valdez spill. At the time these vessels had to be very quickly retrofitted to provided some of the necessary support functions. However they provided excellent working platforms. A floating dock was attached to the stern, allowing smaller support vessels to dock with the

mother ship. The ferry provided hotel support for workers defending Sawmill Bay. A decontamination center was set up. Oil recovery equipment was transported to the site and deployed. Oiled wildlife was collected. The ferry provided communication to the US Coast Guard ships and others. The ferry provided a command post on location.

The 1991 Annual Report by the State of Alaska Hazardous Substance Spill Technology Review Council states that "the Council feels that the concept of adding portable cleanup equipment to vessels of opportunity would give them a greatly needed secondary mission during a spill response. " It further states that "it is important to review and evaluate the possibility of a multi-faceted spill response capability... particularly in areas outside the established transportation routes such as Ketchikan, Kodiak, Dutch Harbor and Bristol Bay which continue to have limited response capabilities."

Alaska's Contingency Plan and AMHS

The Alaska Department of Environmental Conservation 's State Master Oil & Hazardous Substance Discharge Prevention and Contingency Plan[4] assigns the Department of Transportation and Public Facilities with "...provides ferries for transport, housing and general logistical support." Features of the new ship will give the State of Alaska personnel a working platform from which to carry out its command and control activities.

In any strategic operation, command and control are vital elements of an effective emergency operations. Another basic emergency response is providing logistical support. The command and control organization carries out their emergency response at a command center. The Command Center and its operations have an important impact on the outcome of any incident. There is a need for a well organized, easy flowing operation at the Command Post. In order to accomplish this, several basic needs must be met. Three vital needs which this new vessel will be provide are the ability:

- To control, locate and identify resources
- To control and locate overall operations

- To provide a working space for responders which is free from outside conditions which can hamper a response such as:
  - Inclement weather,
  - Noise and confusion,
  - Pressure from response personnel, civilian and media.

Command and Control

The new vessel incorporates a Command and Control Center and features for logistical support into its design and construction. By designing into the vessel and planning for the activities of spill response the State will be better prepared. The AMHS design team is working with representatives from the Alaska Department of Environmental Conservation to incoporate features that will meet the emergency response needs for a fully functional command and control post.

The new ship can also be used as a training center. This vessel can be available to governmental agencies for sophisticated, on site, training missions with several hundred participants. This will be a valuable tool in testing response plans and keeping current the skills of local response teams.

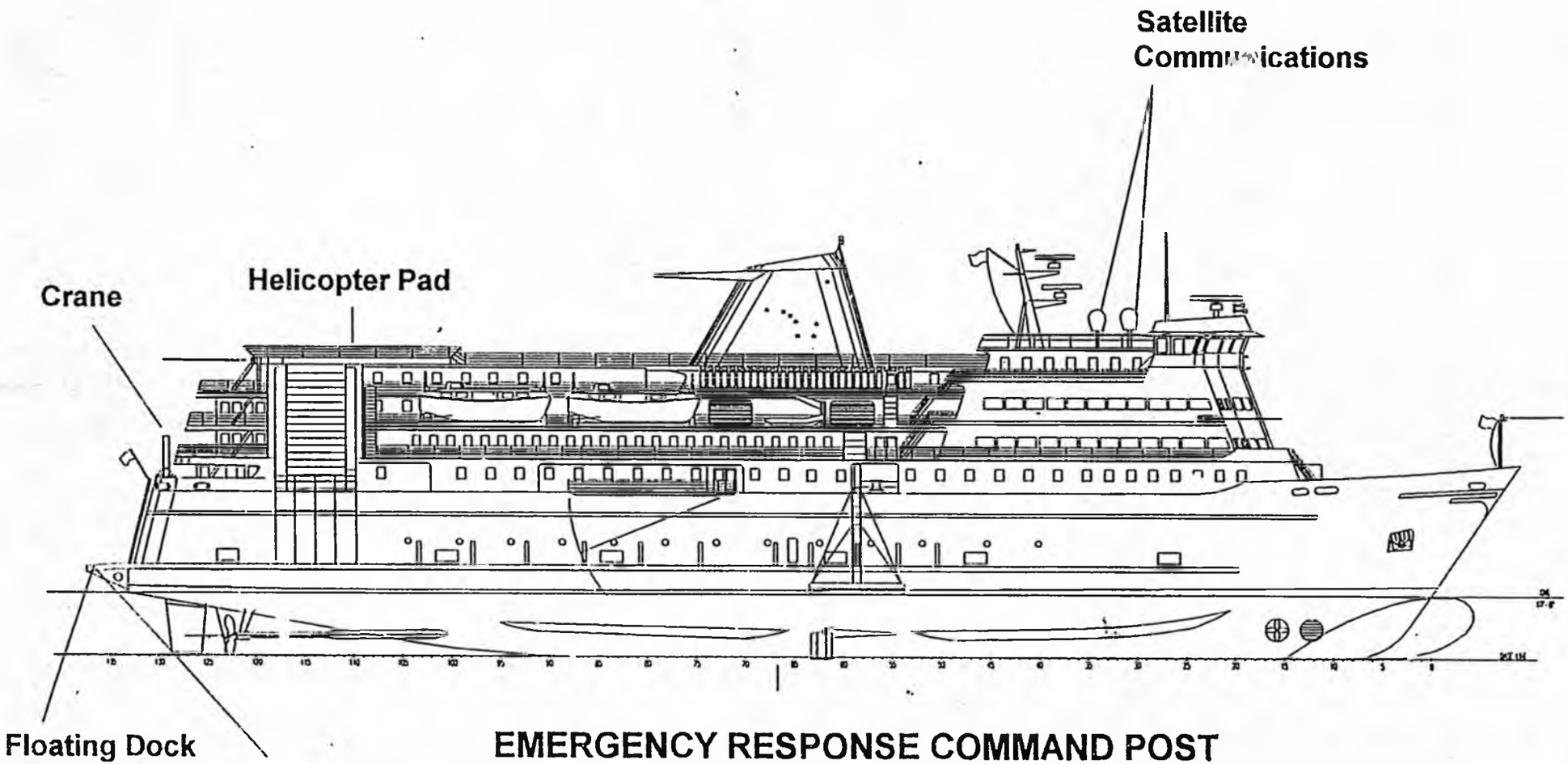
"What is required in a successful oil spill response is to blend the resources of state, federal and industry response teams into an effective organization, and to provide sufficient manpower and resources to make a significant attack on the spill..."[5] The new ship designed with emergency response capabilities will help meet Alaska's challanges and provide unit for a blending of the efforts of the responding parties and will help the state be prepared for a cataseptopic spill response.

---

[1] Testimony of Amy Kyle before the House Subcommittee on Water Resources, June 28, 1989.
[2] Congress of the United States, Office of Technology Assessment, Coping With an Oiled Sea, Background paper, An Analysis of Oil Spill Response Technologies, 1990, p 7.
[3] The National Response Team, The Exxon Valdez Oil Spill - A Report to the President, May 1989, p 23.
[4] State of Alaska, Stte Master Oil & Hazardous Substance discharge Prevention and Contingency Plan, May 1991, p 400-29.
[5] State of Alaska, Report of the Alaska Oil Spill Ckommission, Executive Summary, January 1990, p 39.

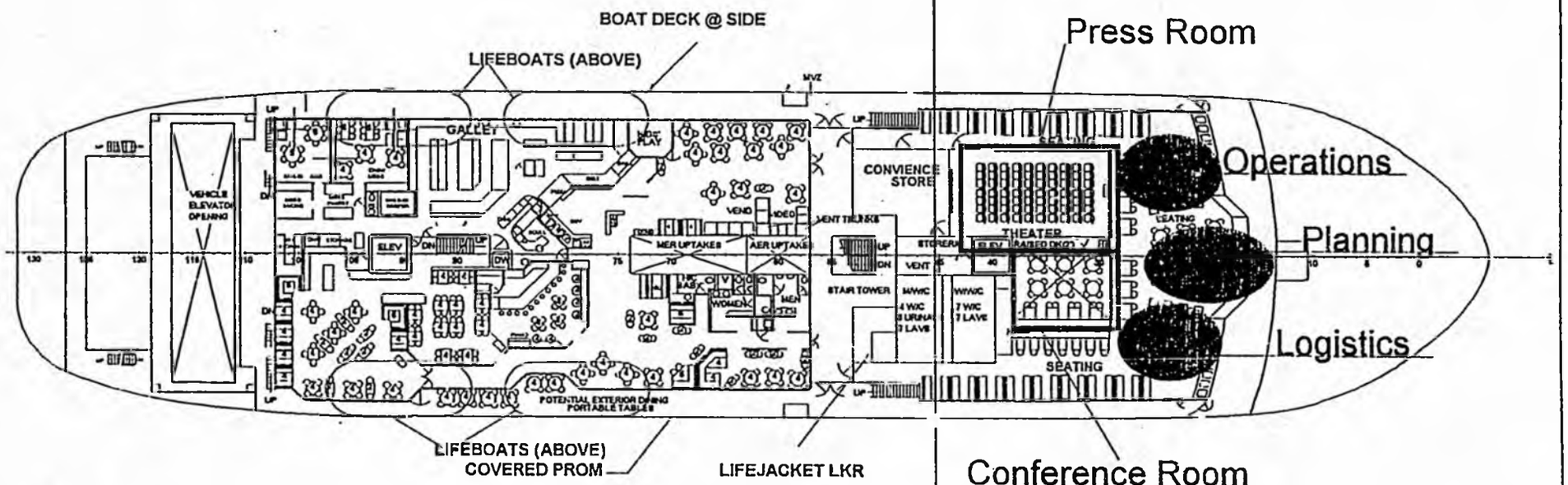
APPENDIX A

DRAWINGS

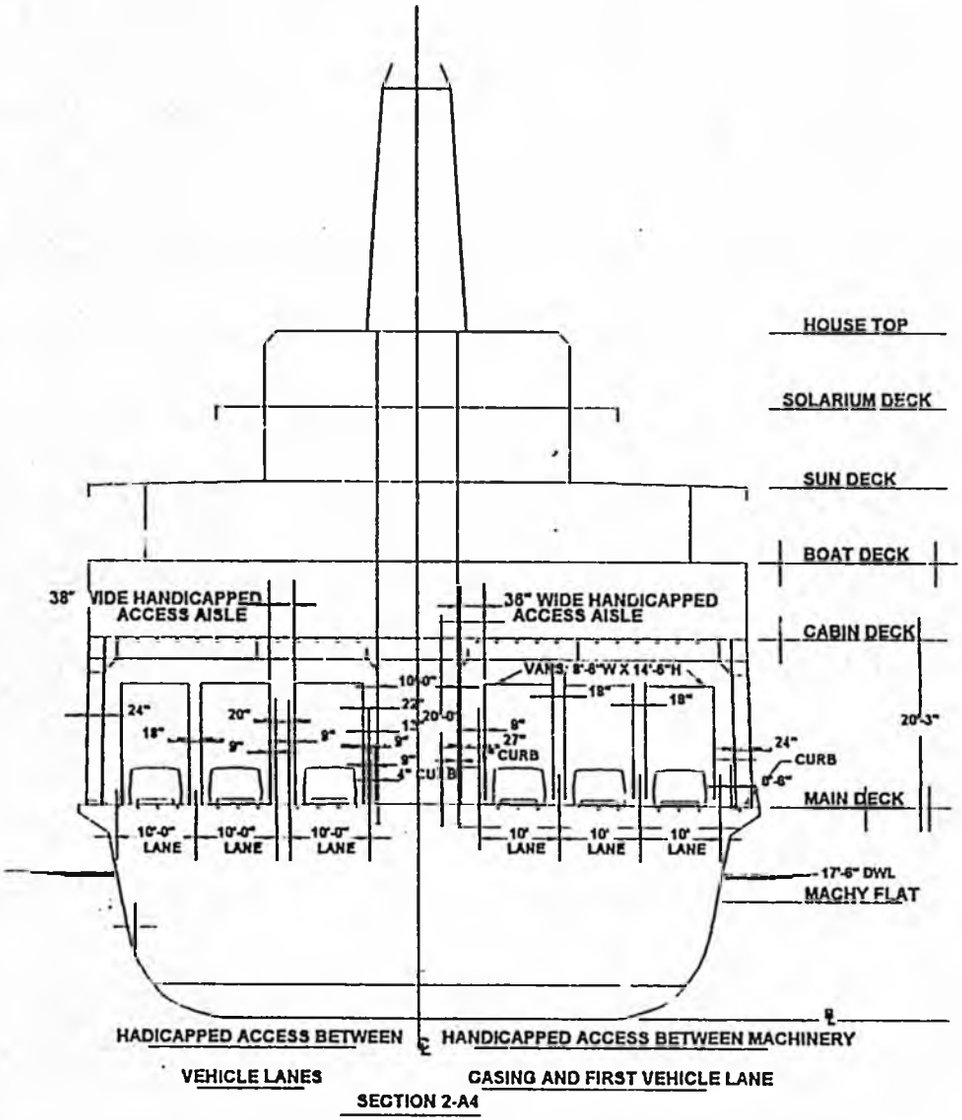


EMERGENCY RESPONSE COMMAND POST

UNIFIED COMMAND CENTER



BOAT DECK



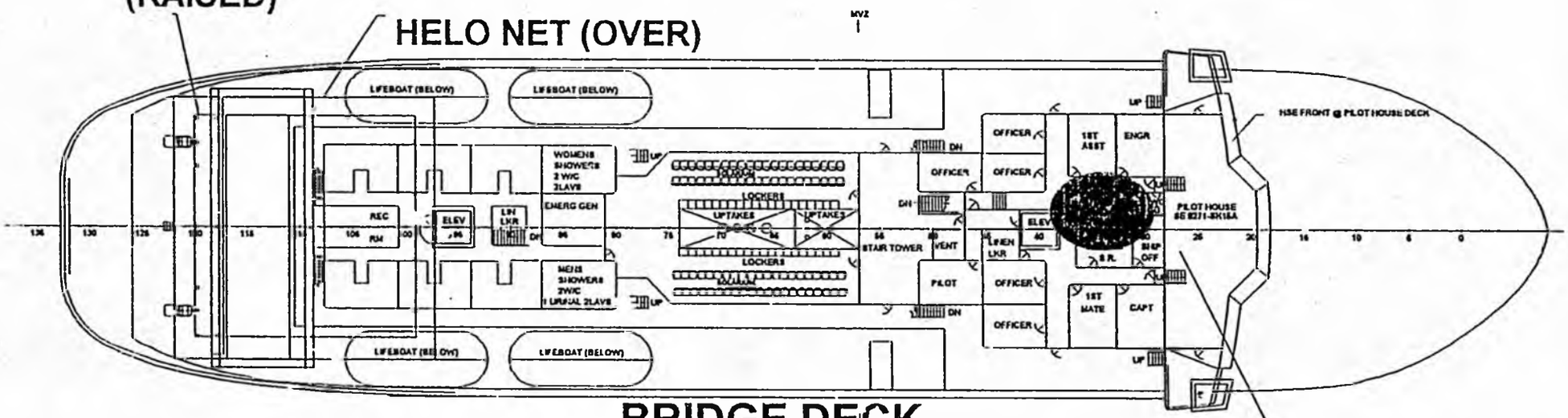
CAR DECK

- Decontamination
- Laundry
- Support Vessel Replenishment
- Diving Station
- Floating Dock
- Modular Response Units
- Wildlife Recovery
- Work & Repair Areas
- Electrical Connections

HELICOPTER DECK (OVER)

(RAISED)

HELO NET (OVER)

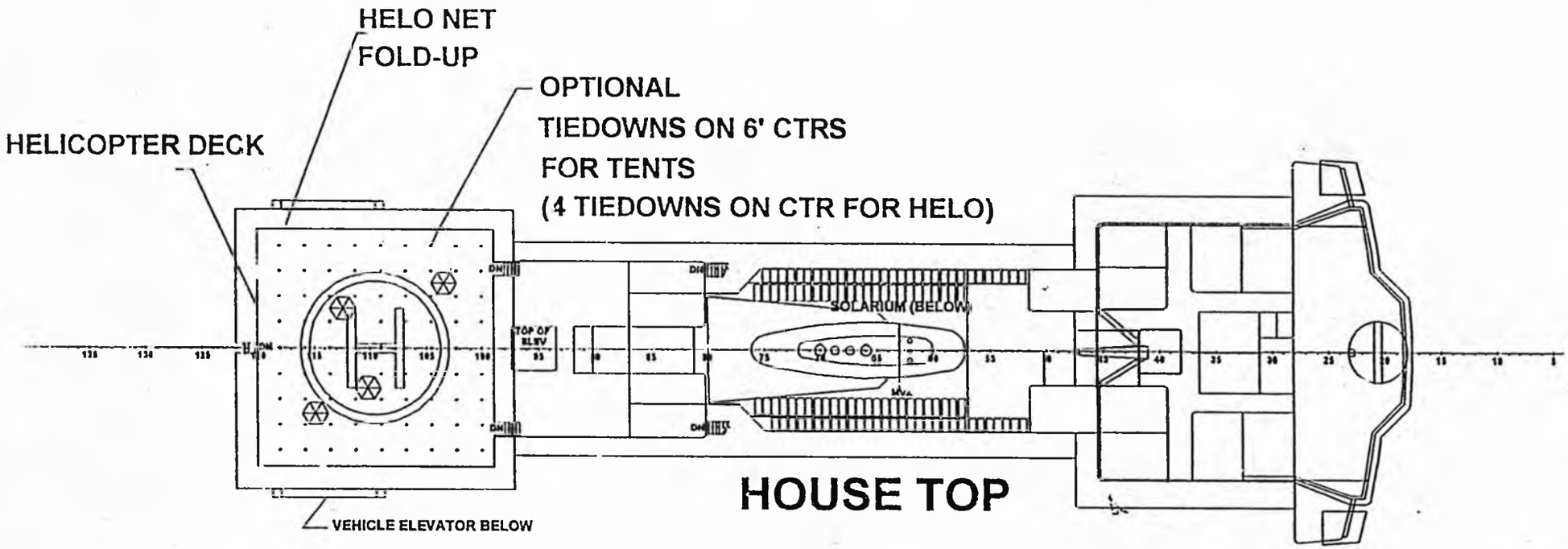


BRIDGE DECK

Navigation

and

Spill Tracking


HELO NET
FOLD-UP
OPTIONAL
TIEDOWNS ON 6' CTRS
FOR TENTS
(4 TIEDOWNS ON CTR FOR HELO)
HELICOPTER DECK
SOLARIUM (BELOW)
HOUSE TOP
VEHICLE ELEVATOR BELOW

APPENDIX B

RESPONSE FUND PROVISIONS

Sec. 46.07.070. Economy of administration. In order to prevent duplication of effort and to promote economy of administration, the commissioner shall, to the maximum extent feasible, utilize the facilities of appropriate public agencies in the administration of the provisions of this chapter. (§ 1 ch 186 SLA 1970)

Sec. 46.07.080. Definitions. In this chapter

(1) "commissioner" means the commissioner of environmental conservation;

(2) "village" means an unincorporated community which has between 25 and 600 people residing within a two-mile radius, or a second class city. (§ 1 ch 186 SLA 1970; am § 6 ch 104 SLA 1971; am § 53 ch 53 SLA 1973; am § 28 ch 208 SLA 1975)

Chapter 08. Oil and Hazardous Substance Releases.

Article
1. Release Response Fund (§§ 46.08.005 — 46.08.080)
2. Oil and Hazardous Substance Response Office (§§ 46.08.100 — 46.08.190)
3. General Provisions (§ 46.08.900)

Cross references. — For other provisions related to oil pollution control, see AS 46.04; for other provisions related to hazardous substance release control, see AS 46.09; for authority of municipalities to implement this chapter, see AS 46.09.060(b).

Article 1. Release Response Fund.

Section
05. Purpose
10. Fund established
20. Financing of the fund
30. Financing the abatement of oil or hazardous substance releases
40. Purposes of the fund
50. Records of the fund
60. Report to the legislature
70. Reimbursement for containment and cleanup
75. Liens against property as security for state expenditures
80. Regulations

Sec. 46.08.005. Purpose. The legislature finds and declares that the release of oil or hazardous substances into the environment presents a real and substantial threat to the public health and welfare, to the environment, and to the economy of the state. The legislature therefore concludes that it is in the best interest of the state and its citizens to provide a readily available fund for the payment of the expenses incurred by the Department of Environmental Conservation and the Department of Transportation and Public Facilities in the protection of the environment of the state from the release of oil or hazardous substances. (§ 1 ch 59 SLA 1986; am § 2 ch 48 SLA 1991)

(7) restore the environment by addressing the effects of an oil or hazardous substance release.

(b) When the governor declares a disaster related to an oil or hazardous substance discharge emergency under AS 26.23.020(c), the governor may, during the effective period of the disaster emergency, use money from the fund to respond to the disaster emergency.

(c) Notwithstanding other provisions of this section, money from the fund may not be used for a purpose specified in (a)(2) — (7) and (d)(2) of this section unless money is available from an appropriation made specifically for that purpose.

(d) Upon a request from

(1) the Alaska Legislative Council, the commissioner shall use money from the fund to reimburse the Alaska Legislative Council for expenditures that it makes for the operation of the Citizens' Oversight Council on Oil and Other Hazardous Substances, established under AS 24.20.600: and

(2) the commissioner of transportation and public facilities, the commissioner shall transfer money from the fund to the Department of Transportation and Public Facilities to pay for the construction or refurbishment of one or more vessels of the Alaska marine highway system that have the capability to assist in responding to spills of oil and hazardous substances; in expending money in the fund whose use for vessels of the marine highway system is authorized by AS 19.65.025 and this paragraph, the commissioner shall give priority to construction of one or more new vessels that have the characteristics required by this paragraph. (§ 1 ch 59 SLA 1986; am § 3 ch 90 SLA 1989; am § 2 ch 113 SLA 1989; am §§ 14, 15 ch 190 SLA 1990; am § 28 ch 191 SLA 1990; am § 3 ch 199 SLA 1990; am §§ 4, 5 ch 48 SLA 1991; am § 15 ch 83 SLA 1991)

Revisor's notes. — Subsection (d) was enacted as (b). Relettered in 1990.

Effect of amendments. — The first 1989 amendment, effective June 3, 1989, in paragraph (1), added "investigate and evaluate the release or threatened release of oil or a hazardous substance, and" at the beginning and substituted "and assessing, to address a release" for "assessing, investigating, and evaluating the release"; and added paragraphs (5) and (6).

The second 1989 amendment, effective June 16, 1989, added present paragraph (2) and designated former paragraphs (2) and (3) as paragraphs (3) and (4).

The first 1990 amendment, effective September 24, 1990, rewrote subsection (a) and added subsections (b) and (c).

The second 1990 amendment, effective June 27, 1990, also rewrote subsection (a).

The third 1990 amendment, effective September 25, 1990, added subsection (d).

The 1990 amendments were harmonized by the revisor.

The first 1991 amendment, effective September 13, 1991, in subsection (c), inserted "and (d)(2)" and substituted "money is available" for "funds are available"; and in subsection (d), added the paragraph designations, added paragraph (2), and made a related stylistic change.

The second 1991 amendment, effective June 28, 1991, in subsection (a), substituted the present introductory language for the former language which read "The commissioner may use money from the fund to" and, in paragraph (5), substituted "recover the costs to the state, a municipality, or a village" for "recover the cost to the state or to a municipality."

Editor's notes. — Section 5, ch. 90, SLA 1989 provides that the amendments to this section by that chapter do "not re-

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Sea Grant Marine Advisory Program

University of Alaska Fairbanks

School of Fisheries and Ocean Sciences

Program Offices

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April 15, 1993

The Honorable Cliff Davidson
Alaska State House
State Capitol
Juneau AK 99801-1182

Dear Representative Davidson,

Thank you for your April 13 letter asking for my review and comments on the restoration projects proposed by HB 269/SB 183. I appreciate your interest in what the people of the oil spill region feel about how these monies should best be spent.

While many of the projects proposed by the bill seem to be good ideas, the real question from a legal and policy perspective is whether they should be funded ... of the State's criminal restitution funds collected as a result of the Exxon Valdez Oil Spill.

As time goes on it becomes easier to forget the original intent of and restrictions on these funds.

Let me just provide some general comments on the context within which these funds should be considered.

First of all, we are charting new ground here. There is simply no precedent for what we are trying to do to attend to the damages caused by the world's most devastating oil spill. With that comes a tremendous opportunity and responsibility. It cannot be taken lightly.

The entire notion of collecting funds from polluters with which to restore or otherwise offset the natural resource damage caused by oil spills is unique to the United States. We happen to be, for better or for worse, at the forefront of this issue in an international arena.

Presently, there is an intense debate raging within the U.N. International Maritime Organization as to whether or not environmental damage from oil spills should be a compensable loss. They will probably make their decision based on how responsibly the Exxon settlement is spent.

Thus, the world is watching us here. What we decide to do with these funds collected from Exxon on behalf of the natural resources damaged by this spill has enormous implications. If they are spent with the sincere intention of aiding recovery of the injured

ecosystem, then it is widely felt that the international community, through the U.N. IMO, will warm up to the concept of natural resource damages. If, however, these funds are spent on projects that have little or no use in aiding ecosystem recovery, the international community will probably remain adverse to the concept.

Thus, this is not just a decision for Alaska, or even the United States, but indeed for how humanity intends to redress the environmental damage caused by technological disasters.

I am convinced that this was the genuine intent upon which Governor Hickel sought settlement of the government natural resource damage claims against Exxon. I truly believe that the Governor, the Attorney General, the U.S. Department of Justice, and even Exxon wanted to do something, whatever it might be, to help the severely damaged coastal ecosystem to recover.

As you recall, the $50 million that the State of Alaska now has before it was collected as a result of federal criminal charges brought against Exxon. The State of Alaska had nothing with which to criminally prosecute the polluter in this case--strange as it may seem.

The State of Alaska, then, should pay very close attention to the expressed intentions of the U.S. Department of Justice in obtaining these restitutionary funds for the State. Court documents show that D.O.J's overriding concern in allowing Exxon to plea bargain this case was the urgency of getting some money with which to begin attending to the environmental damages caused by the spill.

Let me call your attention to the recitations by the U.S. Department of Justice asking for approval of the criminal plea agreement in U.S. District Court:

> "...The environment, as a victim, must be aided quickly through efforts funded by restitutionary payments."
>
> "...The governments urge that there be restitution now for the areas affected by the oil spill, and it should not await years of legal battles over damages and liabilities. The plea agreement provides an immediate infusion of money needed to continue the work of restoring the Prince William Sound and the Gulf of Alaska, while the consent decree provides money over the long term."

- "...We ask that you approve the plea agreement...that will put an end to the criminal and civil complex litigation and getting the much needed money to the environment now, as opposed to years of litigation..."

  "...We believe it's in the public's best interest to settle this case in this matter to get the much needed money into the Prince William Sound and Gulf of Alaska now as opposed to years from now..."

  "...Unlike other economic crimes in which this court is well aware we can't simply pay interest twenty years down the road to make up for the losses. In environmental cases, it is crucially important that we address the consequences of the conduct immediately..."

It is obvious that the intent of the plea agreement was in "getting the much needed money to the environment now." This is the template upon which the Alaska Legislature should consider any proposed expenditure to these funds. The Legislature must be aware that the State is being closely scrutinized regarding its actions here. It is, of course, entirely possible that the State could be exposed to legal proceedings if it doesn't follow through with the expressed intent of the plea agreement.

The primary legal considerations in analyzing any appropriation of the State's share of the criminal monies have been expressed by the court as follows:

> The monies paid in restitution are to be used by the State of Alaska and the United States of America exclusively for restoration projects, within the State of Alaska, relating to the "Exxon Valdez" oil spill.

The important thing here is that we all keep in mind that this is a separate pot of money, to be used exclusively for environmental restoration purposes related to the Exxon Valdez Oil Spill.

In its deliberations, the Legislature will have to very carefully consider whether all the proposed projects in HB 269/SB 183 strictly fulfill both the legal restrictions the Court has placed on these funds and the Department of Justice's expressed intent for the use of the funds.

I would strongly recommend you seek the counsel of Attorney General Charlie Cole on such matters, as he would be the person having to defend these projects in front of Judge Holland.

Another issue I hear a lot about here in Prince William Sound is that the geographic distribution of funds should be equitable.

It is well documented that most of the injury occurred in PWS. Local citizens feel strongly that this fact be considered when setting restoration policy.

In addition to these very general comments, there is one project I feel compelled to express some reservations about--the "Alaska Sea Life Center."

First, held up against the legal constraints and expressed intent for using these restitution funds, I must tell you in all candor that I can't see how this project would survive a legal challenge. Beyond that, many people question the financial feasibility and usefulness of such a project.

I'm sure the sentiments of the people of Seward are genuine--to help visitors appreciate the marine environment and help all of us better understand it. However, there seem to be more direct ways of accomplishing these objectives. Instead of bringing the marine environment ashore for people to see and study, wouldn't it seem more appropriate to use funds to get visitors and researchers out into the real marine environment?

Similarly, the usefulness of such a facility as a wildlife rehabilitation center is questionable. My conversations with experts in the field of wildlife rehabilitation lead me to conclude that a stationary, on-shore facility is probably not the best option. If anything is needed, it is a mobile, remote capability. Also, we learned from the Exxon Valdez experience that a facility for bird and mammal rehabilitation can be built in a matter of days. We also learned that such rehabilitation efforts, as emotionally helpful as they seem to be for us, often provide little if any real help to wildlife populations, and can even be detrimental (i.e., the possibility that a herpes-like disease was transmitted from the Valdez otter center to wild populations.) Just today, one marine mammal expert told me that the notion of building an on-shore wildlife rehabilitation center in Alaska "is one of the silliest things I've ever heard."

The other point that should be mentioned here is that marine research in Alaska is much more <u>funds-limited</u> than it is <u>facility-limited</u>. We already have several marine labs scattered around the Alaska coastline that have been closed due to lack of funds.

Having said that, it seems that the first thing that should be done before moving too far on such a project would be to do an in-depth feasibility analysis and market study.

I'll leave it at that for now.

These are indeed difficult decisions, and ones that we will all have to live with for quite sometime.

The people in the oil spill region sincerely appreciate the legislature's careful consideration of these issues.

Thanks again for the opportunity to provide a few general comments. I'd be available at any time to provide a more detailed review if you need.

Sincerely,

Rick Steiner

Rick Steiner, Associate Professor

jkl

cc: Attorney General Charles Cole

HOUSE COMMITTEE REPORT

(11)

Date REREFERRED: February 2, 1994

FURTHER REFERRALS:

Died

Date of Committee Action: _____

The FINANCE Committee considered: HB 269

HOUSE BILL NO. 269 APPRO: EXXON VALDEZ RESTORATION PROJECTS

"An Act making special appropriations for restoration projects relating to the Exxon Valdez oil spill and for oil spill response projects; and providing for an effective date."

RECOMMENDATIONS: [ ] the same title

be replaced with _____ [ ] a new title

[ ] have attached amendments(s)

[ ] do pass

[ ] do not pass

[ ] no recommendations

[ ] individual recommendations

[ ] additional referral to the _____ Committee

ADOPTS: _____ letter of Intent

ATTACHES NEW FISCAL NOTE(s): (Dept)

[ ] fiscal impact _____

[ ] zero fiscal note _____

APPROVES PREVIOUS: (Dept/Date)

[ ] fiscal note(s) _____

[ ] zero fiscal note(s) _____

SIGNING DO PASS	*DP*	*OTHER RECOMMENDATIONS*	*DNP*	*NR*	*AM*

_____

CHAIRMAN'S SIGNATURE

WALTER J. HICKEL
GOVERNOR

P. O. Box 110001
Juneau, Alaska 99811-0001
(907) 465-3500

STATE OF ALASKA
OFFICE OF THE GOVERNOR
JUNEAU

HB 269

April 2, 1993

The Honorable Ramona L. Barnes
Speaker of the House
Alaska State Legislature
State Capitol
Juneau, AK 99801-1182

Dear Speaker Barnes:

Under the authority of art. III, sec. 18, of the Alaska Constitution, I am transmitting a bill that provides for special appropriations for restoration projects relating to the Exxon Valdez oil spill and for oil spill response projects.

The state and federal governments each received $50,000,000 in restitution as a result of the plea agreement and judgment entered in the criminal case filed by the United States against the Exxon defendants arising out of the Exxon Valdez oil spill. United States v. Exxon Shipping Company and Exxon Corporation, A90-015 CR. The restitution money paid to the state was placed in a separate fund, established by the Department of Revenue, named the "Exxon Valdez Oil Spill Restoration Fund." Under the terms of that final judgment, the restitution money is required to be used exclusively for "restoration projects, within the State of Alaska, relating to the Exxon Valdez oil spill." Under the judgment, "restoration" is defined as including "restoration, replacement, and enhancement of affected resources; acquisition of equivalent resources and services; and long-term environmental monitoring and research programs directed to the prevention, containment, cleanup, and amelioration of oil spills." This restitution money is in addition to the $900,000,000 civil settlement entered into between the state, the United States, and Exxon in October 1991, which established a joint trust fund for restoration and provided for certain reimbursements.

Sections 2 - 12 of the bill would appropriate a total of $50,000,000 plus interest earned on the criminal case restitution payment since it was received by the state.

HB269

Section 2 appropriates $12,500,000 to the Department of Administration for payment as a grant to the City of Seward for the development of the Alaska Sea Life Center. This center would serve as a recreation and marine mammal rehabilitation center and as a center for education and research related to the natural resources injured by the Exxon Valdez oil spill and to the prevention and amelioration of marine oil spills.

Section 3 appropriates $7,000,000 to the Department of Natural Resources (DNR) to purchase certain holdings inside the Kachemak Bay State Park. A total of $22,000,000 is needed for the purchase under the agreement entered into in March 1993 between the state, the Seldovia Native Association, Cook Inlet Region, Inc., and the Timber Trading Company. The appropriation in sec. 3 of the bill is one of three sources of funds required to finance the purchase. The state and federal trustees have committed to contribute $7,500,000 from the joint trust fund established by the Exxon Civil Settlement. Another $7,500,000 is due as a result of the settlement of the oil spill litigation between the state and federal governments and the Alyeska defendants in November 1992. This latter amount is not addressed in this bill.

Section 4 appropriates $500,000 to DNR to construct a Kachemak Bay State Park visitors center.

Section 5 appropriates $3,250,000 from the restitution payment to the Department of Fish and Game to develop a shellfish hatchery and technical center. This project will assist in the restoration of shellfish resources and subsistence services affected by the oil spill and will provide technical support to the efforts of many individuals and firms that have been attempting to develop a mariculture industry in the area impacted by the oil spill.

Section 6 appropriates $4,000,000 to the Department of Fish and Game to construct a water delivery system connecting the Anchorage Municipal Water Utility with the Fort Richardson hatchery. The integration of these facilities will enhance sport fishing services lost or diminished as a result of the Exxon Valdez oil spill.

Section 7 appropriates $4,750,000, plus interest accrued on the restitution payment, to DNR to construct or acquire recreational amenities such as cabins, trails, mooring buoys, and floating docks.

Section 8 appropriates $3,000,000 to the Department of Fish and Game to undertake restoration and enhancement projects within the Kenai River watershed to help protect commercial and sport fish species injured by the Exxon Valdez oil spill.

Section 9 appropriates $2,000,000 to the Department of Commerce and Economic Development for payment as a grant to the Prince William Sound Aquaculture Corporation to upgrade the Main Bay hatchery. Recent damage assessment information suggests that the injury to commercial salmon species in Prince William Sound may be more extensive than originally thought. This project will help to restore or replace commercial and sport fishing resources lost as a result of the Exxon Valdez oil spill.

Section 10 appropriates $3,000,000 to the University of Alaska, Fairbanks, Fishery Industrial Technology Center for design and construction of an addition to the existing research facility that would facilitate long-term environmental monitoring and restoration work in the area affected by the oil spill.

Section 11 appropriates $5,000,000 to the Department of Community and Regional Affairs for payment as grants to unincorporated rural communities to assist in restoration, replacement, and enhancement of subsistence resources or services injured or lost as a result of the Exxon Valdez oil spill. This appropriation will allow the state trustees and the local villages and communities to work together to develop local projects designed to deal with specific dislocations and injuries caused by the spill.

Section 12 appropriates $5,000,000 to the Department of Environmental Conservation to enter into contracts for research programs directed to the prevention, containment, cleanup, or amelioration of oil spills in the state.

The Exxon Civil Settlement also requires reimbursement of certain state damage assessment, response, and litigation costs incurred as a result of the Exxon Valdez oil spill. Section 13 of the bill appropriates, to the Department of Transportation and Public Facilities, $20,000,000 of the estimated reimbursements due to be paid to the state on September 1, 1993. Of the $20,000,000 appropriation, $15,000,000 is for the construction of a road to Whittier and $5,000,000 is for the design and construction of an

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oil spill response assistance ferry. The goal of these projects is to increase the ability to respond to oil spills in Prince William Sound by providing road access to Whittier, a logical staging area in the event of a future spill in Prince William Sound, and by providing a specially fitted vessel for use by the state in response actions. Although there are no legal restrictions on the use of the reimbursements made under the Exxon Civil Settlement, it is the view of this Administration, after consultation with the legislative leadership, that it would be appropriate to invest that money in oil spill preparedness and in enhancing access to Prince William Sound for recreational users of all types.

The purpose of this bill is to fund projects and programs that will assist in the restoration of resources or services lost or injured as a result of the Exxon Valdez oil spill, to support long-term environmental monitoring of such resources, and to enhance access to the recreational resources that remain abundant in the area impacted by the spill. The bill also will support projects and programs that will promote oil spill preparedness and response capability.

I believe that the projects and programs in secs. 2 - 12 of the bill are consistent with the purposes set out in the federal court's restitution order in the Exxon criminal case and that the passage of this bill would be a prudent use of the restitution money. Although the money is the subject of a special restoration charge from the court, that purpose, quite frankly, mirrors the objectives of this Administration and, I believe, of most Alaskans. We have just observed the fourth anniversary of an environmental calamity that has affected all of our lives. I believe that it is time for specific, properly focused restoration work to commence. I urge you to pass this bill this session.

Sincerely,

Walter J. Hickel
Governor